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4th Grade Packet

5th Grade Packet



# Robbinsville Public Schools Curriculum and Instruction Department

Mrs. Amanda Carpena - K-12 Supervisor of Literacy and Interventions - carpena.amandarobbinsville.k12.nj.us

June 2023

Dear Sharon School Families,

Congratulations on the completion of a successful 2022-2023 school year! We are so proud of our students' growth and progress. We appreciate your continued support and partnership within our schools. In the Robbinsville community, we believe that learning should continue over the summer months. Attached you will find English Language Arts and Mathematics activities, designed by our K-5 instructional coaches, to reinforce the most significant literacy concepts taught during this past school year. We encourage you to continue the learning at home with these suggested Summer Assignments provided by our K-5 instructional coaches. *Like last year, we are also offering optional summer learning opportunities for incoming Kindergarten students and families*.

Our incoming 1st-5th graders are strongly encouraged to complete the provided Summer English Language Arts and Mathematics Assignments, **but these are not mandated assignments**. This packet includes a summer reading log, along with the written responses. Students should hand in any completed summer assignments to their homeroom teacher by Thursday, September 15th. In addition, students will have access to Lexia, the online learning reading platform over the summer through Classlink. The Robbinsville Public Library will also have our K-5 suggested summer reading book list available. The completion of the Summer Assignments assists our teachers to get to know your child and to support their planning for differentiation. We hope that you and your child enjoy these suggested learning activities and resources.

Please read carefully through the following resources and activities. We hope that you find our Summer Assignments useful for your child's summer learning and know that you are welcomed to reach out to us if you have any questions. All Summer Assignments and related resources can be found on our district website under 'Curriculum'. If needed, printed copies of the Summer Assignments will be available for all incoming grades at the Sharon School main office.

Sincerely,

Amanda Carpena and the K-5 Instructional Coaches

#### 11 Creative Ways to Read as a Family

Research shows that children who read over the summer maintain reading development and score higher on reading assessments when they return to school in the fall.

"...children who do not read in the summer lose two to three months of reading development while kids who do read tend to gain a month of reading proficiency. This creates a three to four month gap every year. Every two or three years the kids who don't read in the summer fall a year behind the kids who do."

University of Tennessee, Knoxville, faculty member Richard Allington, who conducted a three year study showing a significantly higher level of reading achievement in students who read over the summer.

- 1. **Nourishing the Meal Time** Have your kids read recipes aloud to you while you're cooking dinner. From ingredient lists to cooking directions, this kind of family reading will help build vocabulary, fluency...and dessert!
- 2. Guess Who's Coming to Dinner? While your family is eating together, discuss what your favorite characters would have for dinner <u>Harry Potter</u> might like pumpkin juice and chocolate frogs while <u>Geronomo Silton</u> could crave some cheese! Incorporating characters of favorite stories into your eating routine is a delicious way to promote deep thinking about character traits and motivation.
- 3. **Story Charades** Choose a story your family knows well like a well-read book or fairytale and act out the beginning, middle, and end of the story. If you have more family than characters, a few could do the acting and the others can be the audience or be the narrator. This activity helps readers reexamine and understand story lines and details.
- 4. Who Am I? Choose one of your child's favorite book characters, then describe his or her personality traits, problems, and physical descriptions until she guesses the character's identity. This game is a fun way to pass time when you're stuck in traffic or at a bus stop.
- 5. **Book Nooks** Create "book nooks" with your child. Book nooks are comfy places to sit and read. They should have good lighting and containers filled with sticky notes, colorful pens, pencils, and a small dictionary. Book nooks will motivate your children not only to read, but to select favorite parts with sticky notes, or look up words they don't know.
- 6. **Marking the Spot** Making bookmarks together is a great, simple family reading activity. Just cut bookmark-sized cardboard from cereal or shoe boxes, then get crafty! Use brightly-colored markers to write titles, authors, and favorite quotes. Younger readers can draw or cut and paste pictures from old magazines.
- 7. **Reach Out and Read** Boost family reading by involving loved-ones who live far away. Using Skype or another video conferencing program, have your child share a book with relatives. Make

- sure the book is one that your reader has read a few times already; repetition is a fantastic way to enhance reading skills. Younger readers love to show-off their fluency, and oral reading builds confidence. Grandma will be pretty thrilled as well.
- 8. **Kid Karaoke** Download songs and their lyrics for a family karaoke night. Seeing words and singing them at the same time is a fun way to develop vocabulary...and practice your Elvis impersonations!
- 9. **Family Reading Web pages** Using simple and free online programs, create a family reading Web page. Include sections for each family member's book reviews, favorite book lists, "authors I'd like to lunch with" lists, pictures of famous authors, links to local libraries, kid-safe fan pages, and reading games.
- 10. Visit the Robbinsville Public Library We are grateful for our partnership with the Robbinsville Branch of the Mercer County Library System. The Library is currently open for public browsing and curbside pick up. Students can search for ebooks in their catalog and download them through Hoopla and elibraryNJ. The Mercer County Library System is temporarily allowing online library card registrations. Robbinsville families can fill out a form on the library's website (https://mcl.org/catalog/library-card-application).
- 11. Visit the Robbinsville Public Schools Website Here you will find all of the assignments and additional resources. If you need assistance with reading materials or printed copies please call the Sharon School Main Office.

**Source: Scholastic** 

Name
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#### **SUMMER READING LOG**

Select a book to read. Record the title, author, and date completed. Note whether the book was easy (E), just right (JR), or challenging (C)

Title	Author	Date Completed	E, JR, C

Grades 1-5 Recommended Reading Choices						
Incoming 1 <sup>st</sup> grade	Incoming 2 <sup>nd</sup> Grade	Incoming 3 <sup>rd</sup> Grade	Incoming 4 <sup>th</sup> Grade	Incoming 5 <sup>th</sup> Grade		
Biscuit Series by Alyssa Satin Capucilli Brown Bear, Brown Bear What Do You See by Bill Martin Footprints in the Snow by Cynthia	The Fly Guy Series by Ted Arnold Leo the Late Bloomer by Robert Kraus Noisy Nora by Rosemary Wells The Napping House	Pinky and Rex series by James Howe Judy Moody series by Megan McDonald Black Lagoon series by Mike Thaler Nate the Great series by Marjorie Weinman	Aliens Ate my Homework by Bruce Coville Superfudge by Judy Blume Tales of a Fourth Grade Nothing by Judy Blume	Sarah, Plain and Tall by Patricia MacLachlan Every Living Thing by Cynthia Rylant The Miraculous Journey of Edward Tulane by Kate		
Benjamin  I Went Walking by Sue Williams Rain by Robert Kalan Rainbow of my Own by Don Freeman Sleepy Dog by Harriet Ziefert	by Audrey Wood The Littles series by John Peterson Bear Shadow by Frank Asch Charlie Needs a Cloak by	Sharmat Horrible Harry series by Suzy Kline Junie B. Jones series by Barbara Park Magic Tree House series by Mary Pope	There's a Boy in the Girls' Bathroom by Louis Sachar The Field Guide by Tony DiTerlizzi Holly Black The Magician's Boy by Susan Cooper	DiCamillo From The Mixed Up Files of Mrs. Basil E. Frankweiler by E. L. Konigsburg The Lemonade War by Jacqueline Davies		
Bears, Bears Everywhere by Luella Connelly I am Water by Jean Marzollo Here are My Hands by Bill Martin	Tomie DePaola  Danny and the  Dinosaur  by Syd Hoff  Curious George by  Margaret Rey  (various authors)	Osborne Arthur series by Marc Tolonn Brown Polk Street series by Patricia Reilly Giff A-Z Mysteries by Ron Roy Amber Brown series	The Stonekeeper by Kazu Kibuishi Because of Winn Dixie by Kate DiCamillo Hank Zipper series by Henry Winkler	Flying Solo by Ralph Fletcher The Family Under the Bridge by Natalie Savage Carlson In the Year of the Boar and Jackie Robinson by Bette		
The Foot Book by Dr. Seuss Hop on Pop by Dr. Seuss Wheels by Annie Cobb	Addie's Bad Day by Joan Robins Jamberry by Bruce Degen The Doorbell Rang by Pat Hutchins	by Paula Danziger How to be Cool in Third Grade by Betsy Duffey Calendar Mysteries	The Basket Counts by Matt Christopher The Jacket by Andrew Clements The Landry News by Andrew Clements	Bao Lord The Percy Jackson series by Rick Riordan The Borrowers by Mary Norton		
Bears on Wheels by Stan and Jan Berenstain Step into Reading Book Series: A Step	Peter's Chair by Ezra Keats The Grandma Mix-up by Emily McCully	by Ron Roy  My Weird School series by Dan Gutman	Poppy by Avi The Doll People by Ann M. Martin and Laura Godwin Eleven Birthdays by Wendy Mass	How the Stars Fell into the Sky by Jerrie Oughton The Janitor's Boy by Andrew Clements		

Wendy Mass

1 Book

Level 1 series - Sam by Mary LaBatt Various titles by Eric Carle Buzz Beaker series by Cari Meister *Tiny* series by Cari Meister Yoko series by Rosemary Wells The Little Red Hen. The Three Bears, and other titles by Byron Barton Kitten's First Full Moon by Kevin Henkes Old Bear by Kevin Henkes *Little White Rabbit* by Kevin Henkes Waiting by Kevin Henkes Various titles by Bill Martin Various titles by Karma Wilson Fancy Nancy easy reader series by Jane O'Connor Various titles by Mo Willems The Smallest Girl in the Smallest Grade bv Justin Roberts *The Big Umbrella* by Amy June Bates The Rabbit Listened By Cori Doerrfeld *Grumpy Goat* by **Brett Helquist** 

The Blind Men and *the Elephant* by Karen Backstein Bedtime for Francis by Russell Hoban Pocket for Corduroy by Don Freeman Stick and Stone by Beth Ferry The Trotters of Tweeville Series by local author Shirin Zarqa-Lederman Katie Woo series by Fran Manushkin Various Titles by Kevin Henkes Stand Tall Molly Lou Melon by Patty Lovell Stink series by Megan McDonald Ready Freddy series by Abby Klein Annie & Snowball series by Cynthia Rylant Nancy Clancy series by Jane O'Connor *Frog and Toad* by Arnold Lobel Bear series by Bonny Becker Various titles by Ame Dyckman local author Bad Kitty series by Nick Bruel Young Cam Jansen by David Adler Various titles by Doreen Cronin Ivy & Bean series by

Annie Barrows

Baseball Card Adventures by Dan Gutman Genius Files by Dan Gutman The Year of Billy Miller by Kevin Henkes Shredderman series by Wendelin Van Draanen *Melonhead* series by Katy Kelly Nerdy Birdy by Aaron Reynolds A Chair for My Mother By Vera B. Williams Dragon was Terrible by Kelly DiPucchio Most People by Michael Leannah A Hat for Mrs. Goldman by Michelle Edwards & G. Brian Karas Extra Yarn by Mac Barnett & Jon Klassen Last Stop on Market Street by Matt de la Pena

Clementine series by Sarah Pennybacker Bud, Not Buddy by Christopher Paul Curtis Doll People by Ann M. Martin (is now a series) So Be It by Sarah Weeks and other various titles Various titles by Wendy Massi Nory Ryan's Song by Patricia Reilly Giff The Pictures of Hollis Woods by Patricia Reilly Giff Eleven by Patricia Reilly Giff The One and Only *Ivan* by Katherine **Applegate** Various titles by Mike Lupica

Chasing Vermeer by Blue Balliett *Long Shot* by Mike Lupica Joey Pigza *Swallowed the Key* by Jack Gantos *Love That Dog* by Sharon Creech Yellow Bird and Me by Joyce Hansen The Penderwicks: A Summer Tale Of Four Sisters, Two Rabbits, and a very *Interesting-Boy* by Jeanne Birdsall Save Me a Seat by Sarah Weeks and Gita Varadarajan Pax by Sara Pennypacker *Fish in a Tree* by Lynda Lulally Hunt Wishtree by Katherine Applegate

Sammy Keyes series Preacher's Boy by Katherine Patterson May Bird and the Ever After by Jodi Lynn Anderson Wonder by R. J. Palacio Holes by Louis Sachar

Front Desk by Kelly Yang

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Horrible Bear by	Strictly No Elephants			
Ame Dyckman	By Lisa Mantchev			
Plant a Kiss by	A Sick Day for Amos			
Amy Krause	McGee			
Rosenthal	By Philip Stead			
	Good People			
	Everywhere			
	By Lynea Gillen &			
	Kristina Swarner			
Nonfiction	Nonfiction	Nonfiction	Nonfiction	Nonfiction
<i>Flying</i> by Donald	How Mountains Are	The Bravest Dog	Great Migration by	Any nonfiction by
Crews	Made by Kathleen	Ever: The True Story	Jacob Lawrence	Mike Venezia
Who Lives Here? by	Weidener Zoehfeld	of Balto by Natalie	Everything Reptile:	Mummies Made in
Rozanne L. Williams	Germs Make Me Sick	Standiford	What Kids Really	Egypt by Aliki
Me and My Amazing	by Melvin Berger	Bug Out! The World's	Want to Know about	The Amazing
Body by Joan	Volcanoes by	Creepiest, Crawliest	Reptiles by Cherie	Impossible Erie
Sweeney	Franklyn Branley	Critters by Ginjer	Winner	Canal by Cheryl
My Five Senses by	The Sky is Full of	Clarke	Spectacular Sharks	Harness
Aliki	Stars by Franklyn	Happy Birthday,	by Bobbie Kalman	Eleanor by Barbara
Baby Dolphin's First	Branley	Martin Luther King	Escaping Titanic: A	Cooney
Day by Connie and	Danger! Volcanoes	by Marzollo	Young Girl's True	A More Perfect
Peter Roop	by Seymour Simon	Amazing Bats by	Story of Survival by	<i>Union</i> by Betsy
Dolphins by Melissa	Abigail Adams by	Seymour Simon	M. Lorbiecki	Maestro
Stewart	Alexandra Wallner	Animals Finding	Owen and Mazee:	Desert Animals by
A is for Autumns by	A Picture Book of	Food by Wendy	The Story of	Connor Dayton
Robert Maass	Eleanor Roosevelt by	Perkins	Remarkable	How Dogs Came
It's Snowing by Gail	David Adler	Kate Shelley and the	Friendship by	From Wolves by Jack
Gibbons <i>The Moon</i>	Sharks by Gail	Midnight Express by	Hatkoff, Kahumbu,	Myers
Book by Gail	Gibbons	Margaret K. Wetterer	and Greste	Blizzards by Jim
Gibbons	The Pumpkin Book by	Magic Tree House	I Survivedseries by	Murphy
What is the Story of	Gail Gibbons	Research Guide	Lauren Tarshis	Any nonfiction by
Our Flag? By Janice	Gorillas Gentle	Series by Mary Pope	<i>Marsupials</i> by Nic	Seymour Simon
Behrens	Giants of the Forest	Osborne and Will	Bishop or any other	
Animal Babies by	by Joyce Milton	Pope	Bishop nonfiction	
Andrea Pinington	Diving Dolphins by	Magic School Bus	topic	
See Me Grow by	Karen Wallace	Chapter Book Series	Who was series by	
Arlon Penelope		by Joanna Cole Super	various authors	
Starfish by Edith		Storms by Simon		
Thacher Hurd		Semour		
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	26 Fairmount Avenue by Tomi dePaola Who was series by various authors Geography for A to Z	
	by Jack Knowlton	



#### Optional Incoming <u>Kindergarten</u> Summer Review Below are a list of skills that would be beneficial to review over the summer through practice and play.

	Monday	Tuesday	Wednesday	Thursday
Math	Number Match Cut and paste to match the different ways to represent the numbers. Pg. 3	Count & Color Count and color, then paste the corresponding digit. Pg. 4	Color by Number Practice number recognition by coloring by number. Pg. 5	Shape Hunt Search your home or the outdoors to find objects of all shapes. Sort by their shape or attributes.
Literacy	Beginning Sounds Look at each picture, say the name of the picture aloud. Identify the first sound you hear. Pg. 9	Rhyme Time Search your home or the outdoors to find pairs of words or names of objects that rhyme.	Uppercase & Lowercase Letter Practice Trace the uppercase and lowercase letters. Circle or star your best 3! Pg. 10	Vooks Brings books to life with no ads. (Free for 1 month) Scan the code below with your phone or tablet to visit the Vooks website.
Fine Motor	Tracing Trace the dotted lines from one picture to the matching picture. Pg. 12	Cutting Color the picture then cut on the dashed lines using scissors. Pg. 13	Glue Dots Color the apple. Squeeze a dot of glue inside each circle using a bottle of glue. Pg. 14	PlayDoh Using playdoh, create letters to spell your first and last name.
Movement & Mindfulness	Cosmic Yoga Kids Scan the code below with your phone or tablet to visit the Cosmic Yoga Kids YouTube channel.	GoNoodle  Dance and sing alongs, yoga, and more! Scan the code below with your phone or tablet to visit the GoNoodle website.	PBS Kids  Songs, activities and videos that teach. Scan the code below with your phone or tablet to visit the PBS Kids website.	Jack Hartmann Fun movement songs that teach. Scan the code below with your phone or tablet to visit the Jack Hartmann YouTube channel.



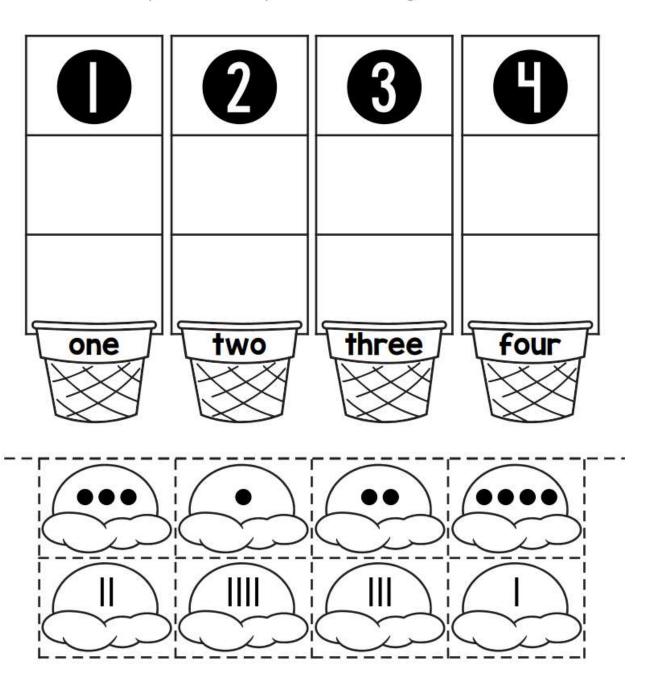
Optional Incoming Kindergarten Summer Review
Below are a list of skills that would be beneficial to review over the summer through practice and play.

	Monday	Tuesday	Wednesday	Thursday
Math	Patterns Cut and paste to complete the picture patterns. Pg. 6	Number Match Draw a line to match the digit with the number word. Pg. 7	Counting & Number Words Practice subitizing by counting the dots and matching it to the digit. Pg. 8	Measurement Fun Line up your stuffed animals from shortest to tallest.
Literacy	Raz Kids Mini-readers at various levels. (Free for 30 days) Scan the code below with your phone or tablet to visit the RazKids website.	Color by Sight Words Read and color by sight word. Pg. 11	Muli-sensory Letter Formation Pour sand, shaving cream, salt, or rice on a tray or plate. Practice writing uppercase and lowercase letters.	Letter & Sound Hunt Find objects or names that start with the letter /b/ or sound /b/. Try different letters/sounds.
Fine Motor	What's Different? Look at the picture in each row, circle the picture that's different. pg. 15	Tracing Trace the lines from one picture to the matching one. Pg. 16 & 17	Cutting Cut on the dashed lines using scissors. Pg. 18	Sensory Bins Using sand, rice or other sensory objects, create a sensory bin for students to dig, pour, search for things, etc. Scan the QR code for sensory bin inspiration.
Movement & Mindfulness	Cosmic Yoga Kids Scan the code below with your phone or tablet to visit the Cosmic Yoga Kids YouTube channel.	GoNoodle  Dance and sing alongs, yoga, and more! Scan the code below with your phone or tablet to visit the GoNoodle website.	PBS Kids  Songs, activities and videos that teach.  Scan the code below with your phone or tablet to visit the PBS Kids website.	Jack Hartmann  Fun movement songs that teach. Scan the code below with your phone or tablet to visit the Jack Hartmann YouTube channel.

Name:

## Number Match

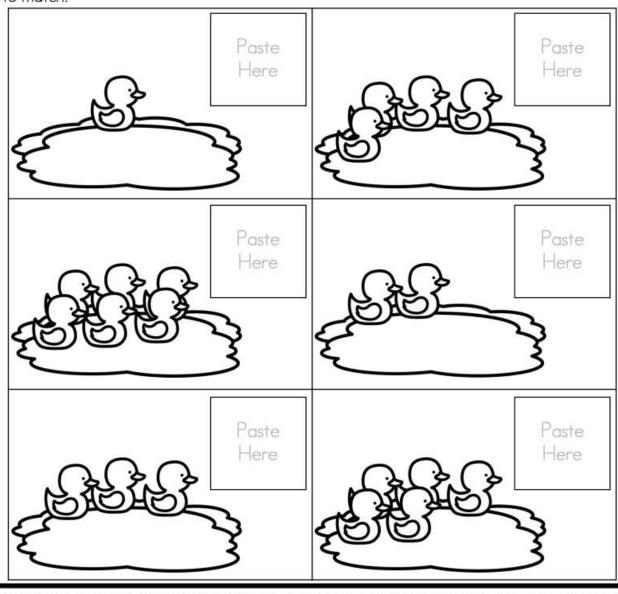
Cut and paste the scoops on the matching ice cream cone.



Name:			

#### Count & Color

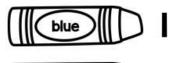
<u>Directions</u>: Count and color the ducks in each pond. Cut and paste the correct number to match.

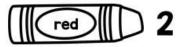


1 2 3 4 5 6

Name: \_\_\_\_\_

# Color by Number



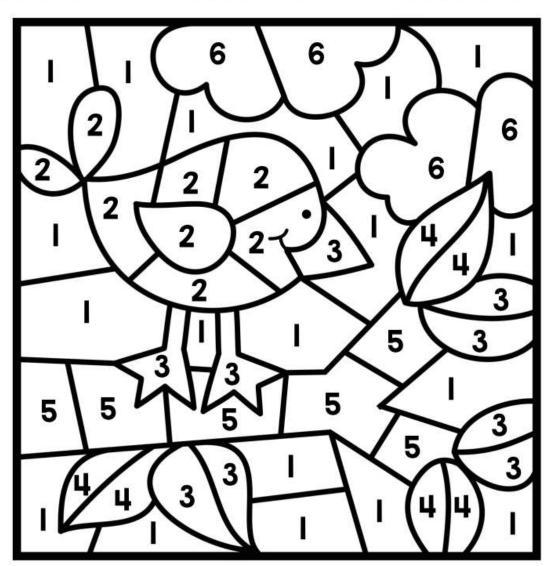








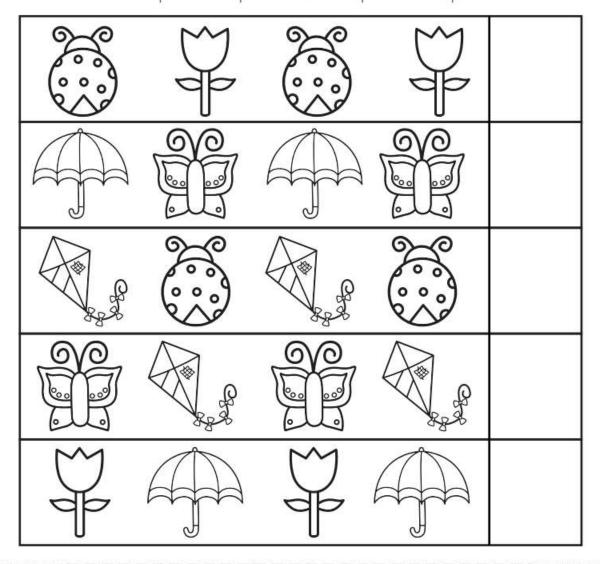


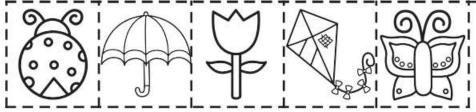


Name:

### Patterns

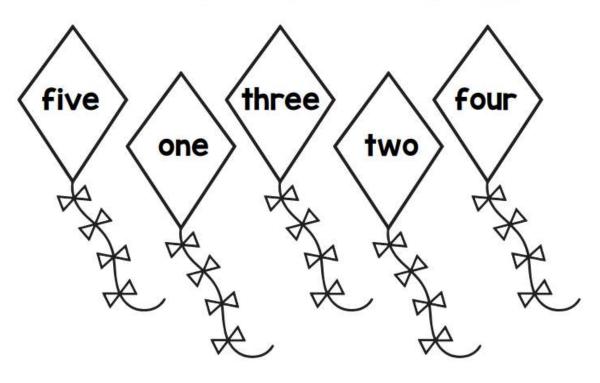
Cut and paste the pictures to complete each pattern.

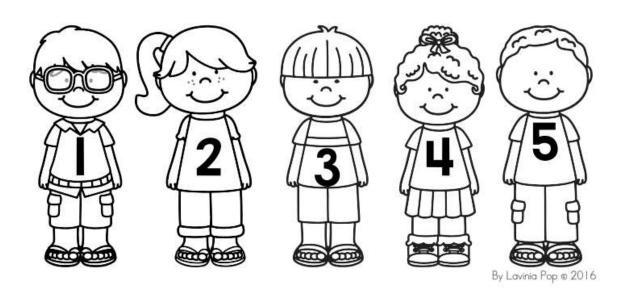




## Number Match

Draw a line to match the number words to the numbers.



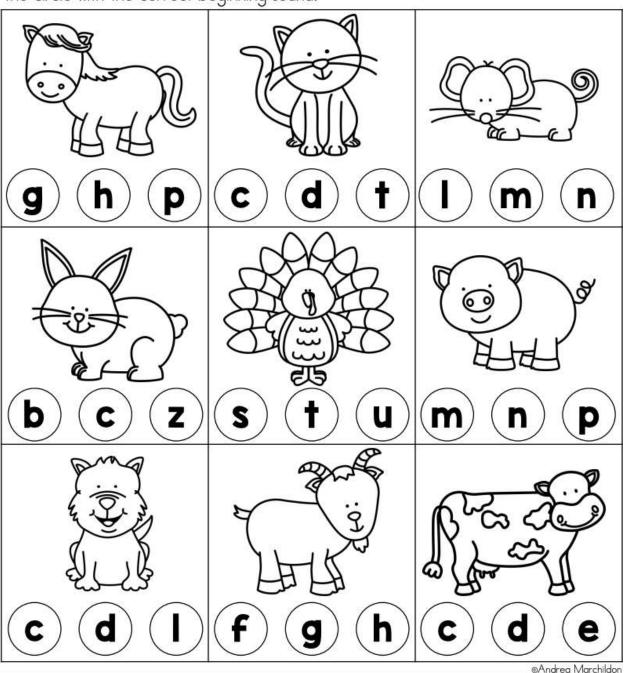


Name:		
Cut and paste the dots next to the word.	e correct number	
three		
FOUR		
Five		

N 1		
Namo:		
Name:		

# **Beginning Sounds**

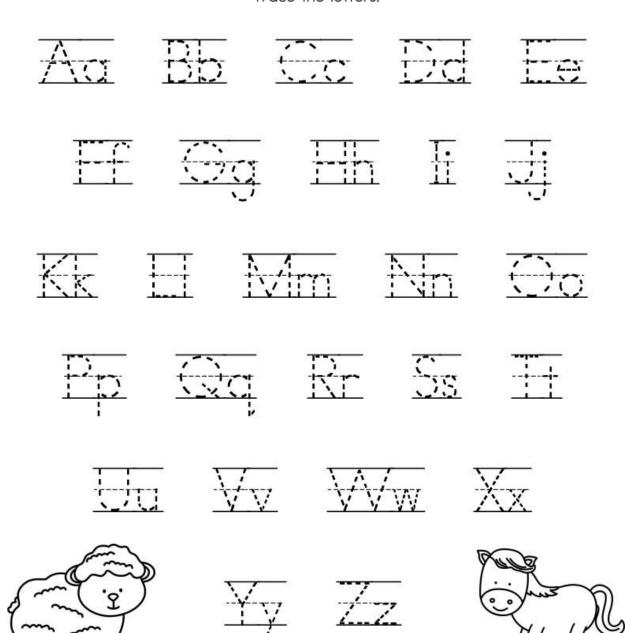
<u>Directions:</u> Look at each picture. Say the name of the picture aloud. Color the circle with the correct beginning sound.



Name: \_\_\_\_\_

### Uppercase & Lowercase

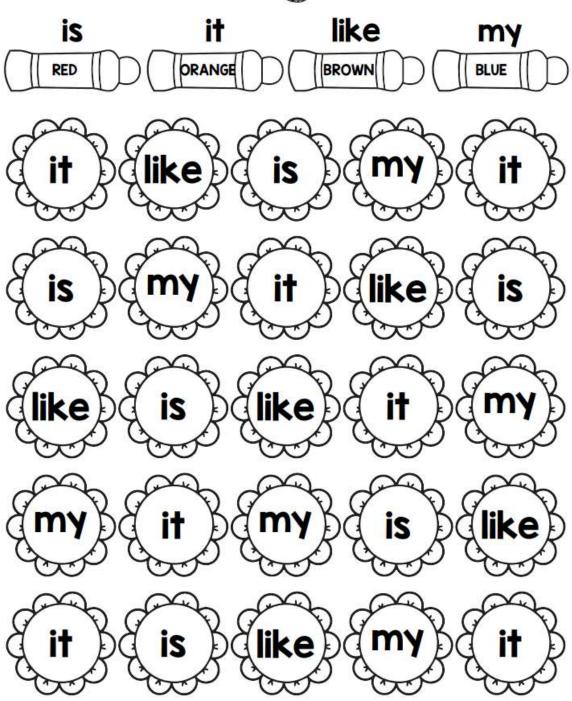
Trace the letters.



@Andrea Marchildon

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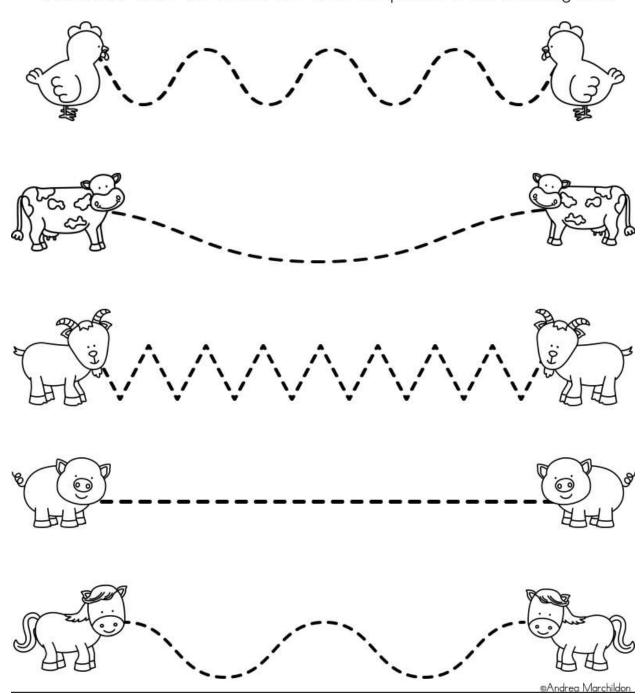
## Dab the Sight Words



Name:						

#### Let's Trace

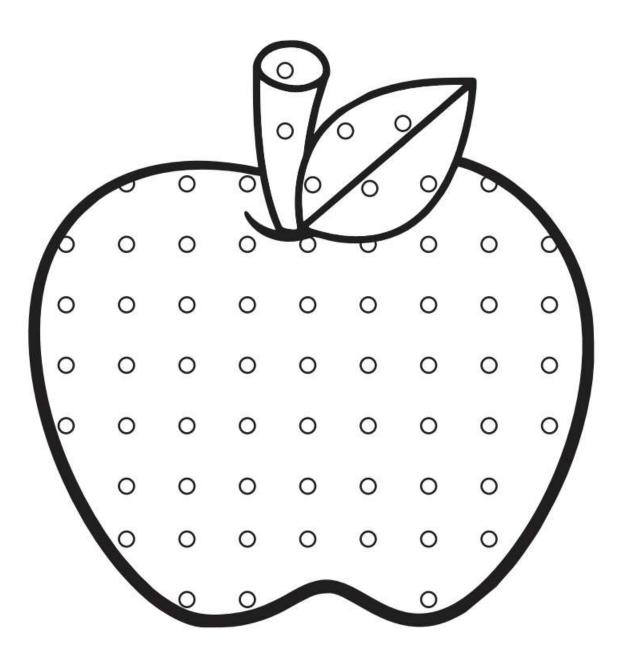
<u>Directions</u>: Trace the dotted lines from one picture to the matching one.



Name:				
Color the p	icture, then cut	along the dash	ed lines.	
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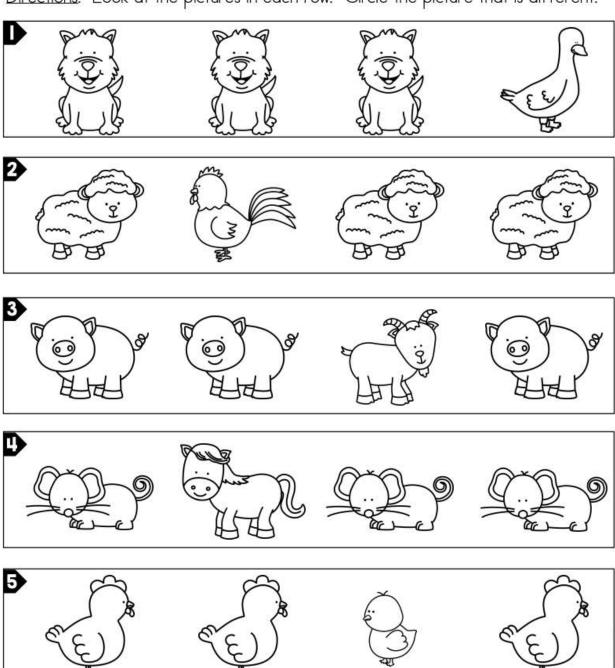
Color the apple. Squeeze a dot of glue inside each circle.



Name: \_\_\_\_\_

#### What's Different?

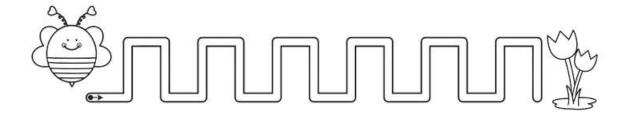
<u>Directions</u>: Look at the pictures in each row. Circle the picture that is different.

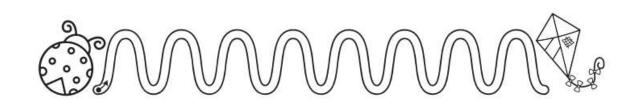


Name:

# Pre-Writing Fun







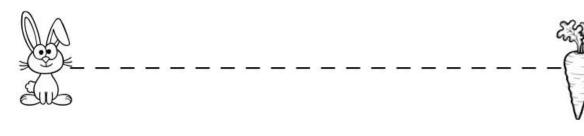


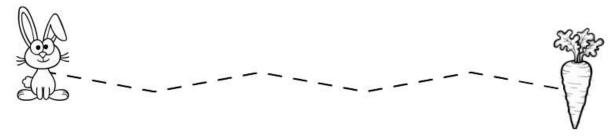


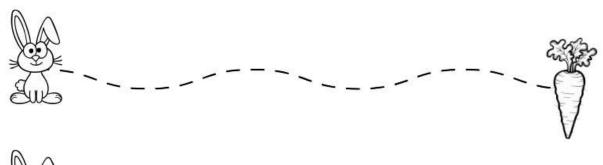
Name:	
T varie.	
Trace the lines.	
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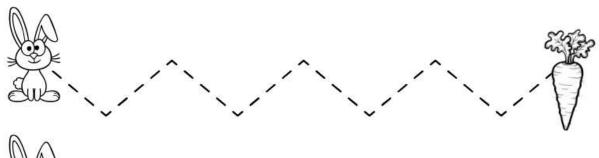
Name: \_\_\_\_\_

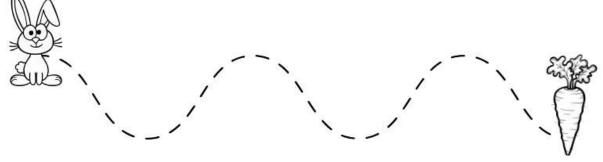
**Cutting Practice I** 













Incoming First Grade ELA Summer Review

Below are a list of skills that would be beneficial to review over the summer through practice and play.

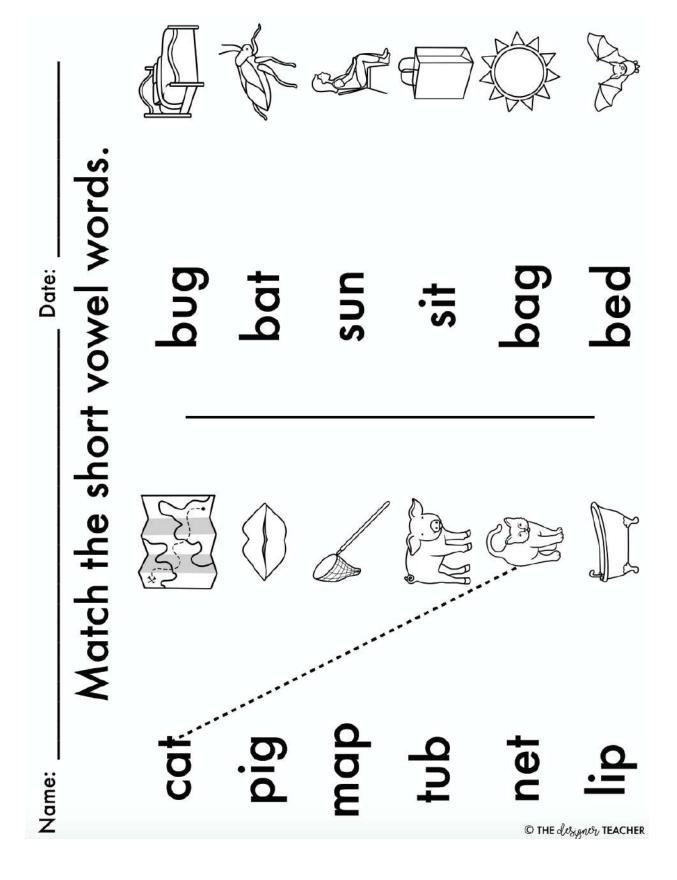
	Monday	Tuesday	Wednesday	Thursday
Week 1	Short Vowel Sounds Match the short vowel words with the picture. Pg. 3	Letter Match Find a fun way to practice matching uppercase and lowercase letters! Ex. magnet letter, letters written on paper or index cards, build letters in play doh)	Phonological Awareness Match the picture to the correct spelling. Pg. 4	Lexia  Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.
Week 2	Decoding/Fluency Be a word detective! Find the consonants and vowels. Read the words. Word List A Pg. 26	Muli-sensory Letter Formation Pour sand, shaving cream, salt, or rice on a tray or plate. Practice writing uppercase and lowercase letters.	RED Words Find a fun place to practice spelling RED words from the Kindergarten Review List. Ex. outside with chalk. Look for the tricky parts to remember by heart. Pg. 25	Lexia  Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.
Week 3	Short Vowel Sounds Match the short vowel words with the picture. Pg. 5	Letter Formation Trace the uppercase and lowercase letters. Circle or star your best 3! Pg. 6	Phonological Awareness Rhyme Bingo Use the picture cards and bingo boards below to play. See directions. Pages 12-20	Lexia  Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.
Week 4	Decoding/Fluency Be a word detective! Find the consonants, vowels and digraphs. Read the words. Word List B Pg. 27	Decoding/Encoding Read the CVC words, then map the letter to the sounds for each picture. Pg. 8	RED Words Find a fun place to practice spelling RED words from the Kindergarten Review List. Ex. outside with chalk. Look for the tricky parts to remember by heart. Pg. 25.	Lexia  Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.



Incoming First Grade ELA Summer Review

Below are a list of skills that would be beneficial to review over the summer through practice and play.

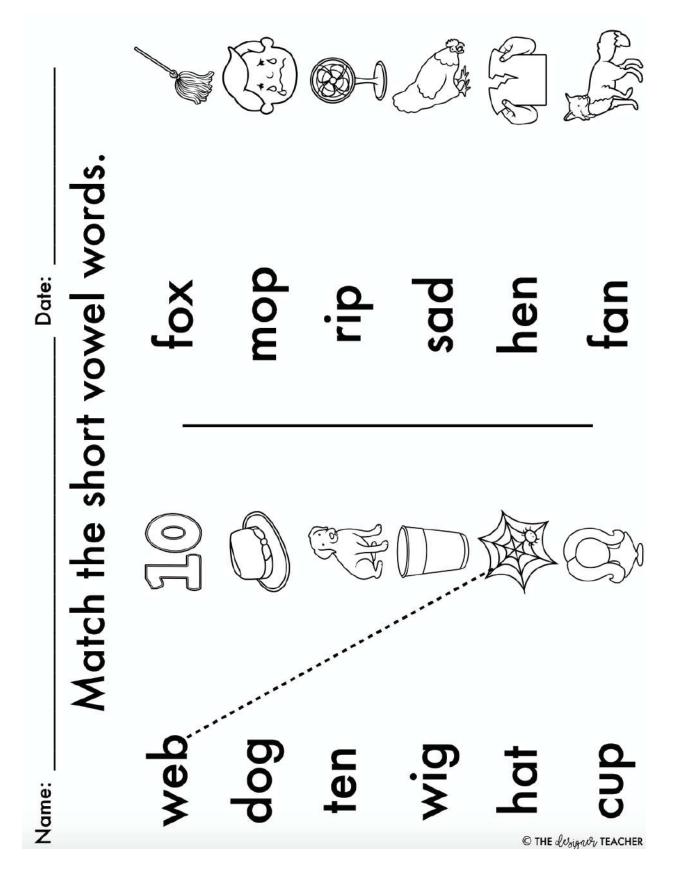
	Monday	Tuesday	Wednesday	Thursday
Week 1	Fluency Roll and read the words. Pg. 9	Sentence Fun Read the sentences and fill in the missing words. Pg. 10	Reading Read the decodable story, "Pat and Nat on the Path." Pg. 11	Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.
Week 2	Decoding/Fluency Be a word detective! Find the consonants and vowels. Read the words. Word List C Pg. 28	Phonological Awareness Rhyme Bingo Use the picture cards and bingo boards below to play. See directions. Pages 12-20	Reading OG Fluency Read the word ladder sentences. Pg. 21	Lexia  Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.
Week 3	Comprehension Listen to a fiction story read aloud. After, choose a reading prompt below to show your understanding of the story. Pg. 23-24	Reading OG Fluency Find and highlight the digraph (unvoiced th). After, read the sentences. Pg. 22	RED Words  Find a fun place to practice spelling RED words from the Kindergarten Review List.  Ex. outside with chalk. Look for the tricky parts to remember by heart.  Pg. 25	Lexia  Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.
Week 4	Decoding/Fluency Be a word detectivel Find the consonants and vowels. Read the words. Word List D Pg. 29	Phonological Awareness Match the picture to the correct spelling. Pg. 7	Comprehension Listen to a fiction story read aloud. After, choose a reading prompt below to show your understanding of the story. Pg. 23-24	Lexia  Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.



Name:	Date:
	4 TO A CONTROL OF

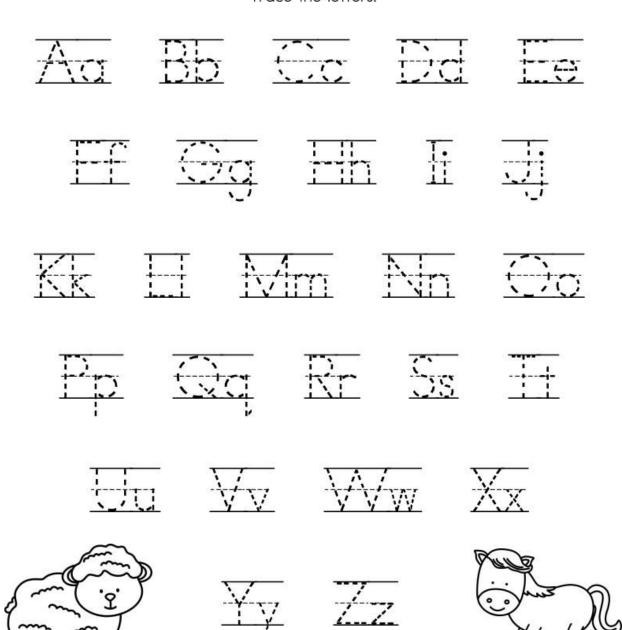
## Circle the correct spelling.

	bad	bid	(bed)
المنافع المناف	sad	sed	sod
	weg	wag	wig
	dog	bog	dug
	son	sun	san
10	den	tin	ten
	bat	dat	bet
	big	bug	dug © THE designer TEACHER



### Uppercase & Lowercase

Trace the letters.



@Andrea Marchildon

Name:	Date:
rvaine.	Dale.

# Circle the correct spelling.

chop	shop	cop
soc	sok	sock
bath	baf	bash
chip	ship	sip
mof	math	moth
shick	chick	cick
whip	wip	whep
fich	fesh	fish © the disgrey teacher

N	ame:		
	GIII C		

\_ad \_ag \_at

 $\bigcirc$  Tap the phonemes for each word, then read the word.

wag	rat	pad	paà
dad	hat	bat	mad



Say the picture name, map the word, then read the word.

ody the plotare flame, map the word, men read the word.							
	2.	3.					
4.	5.	6.					
7.	8. \(\text{D}\)=\(\text{\frac{\times}{2}}\)=\(\text{O}\)	q.					



#### Roll and Read

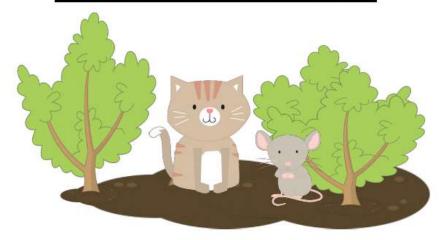


1	2	3	4	5	6
bet	path	leg	sob	kid	jet
pun	ship	chat	bat	fun	den
thin	sat	shop	wish	sip	shin
with	mash	wig	pot	chin	bud

Nan	ne _			
n:		Sentence		
		is: Read the sentence and fill in bank.	the missing word us	sing
		log mud su bed cot pe	1	ip 3
	1.	My pig is in the	5720	
	2.	I go to the park in a		•
	3.	My dad has a red _		P
	4.	I take a nap on my _		
	5.	I can take a bath in t	ne	
	6.	The frog is on the		
	7.	My ball is in the	<u> </u>	
	8.	The dog is on my		
	9.	My job is to	·	
3	10.	I see the hot	Smarts	

## Decodable Story

## Pat and Nat on the Path



Pat the rat has a pal, Nat the cat.

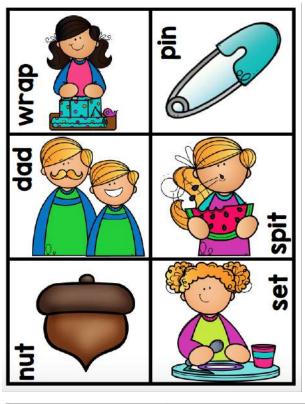
Nat did run on a path.

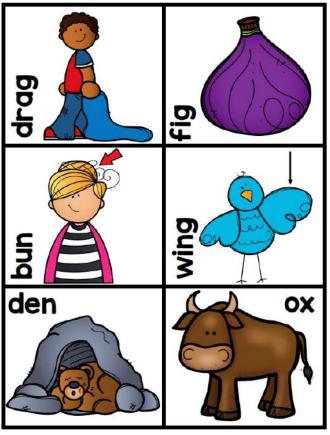
Pat did jog with his bud.

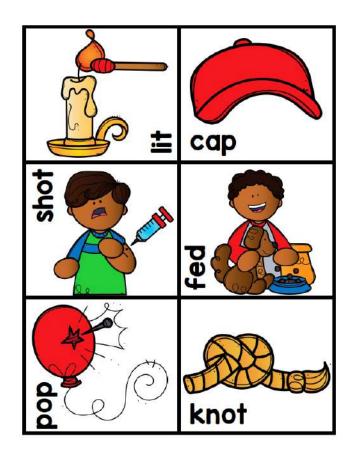
The path was wet and had a lot of mud.

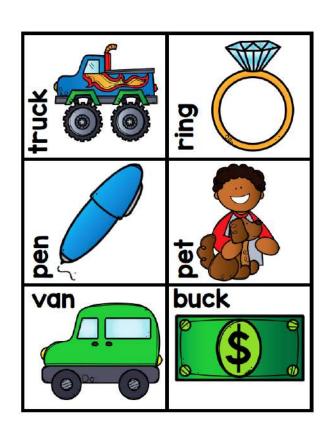
Pat and Nat did get mud on them.

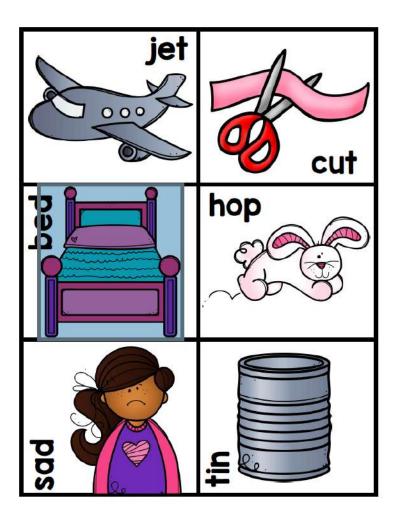
Then, Pat and Nat had a bath to get the mud off.





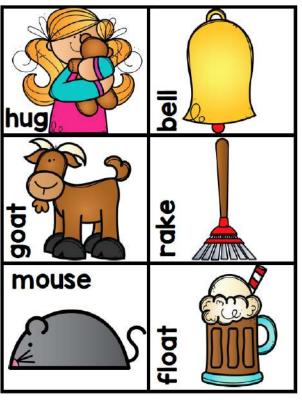






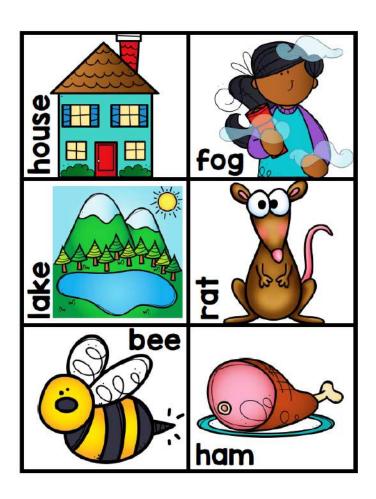


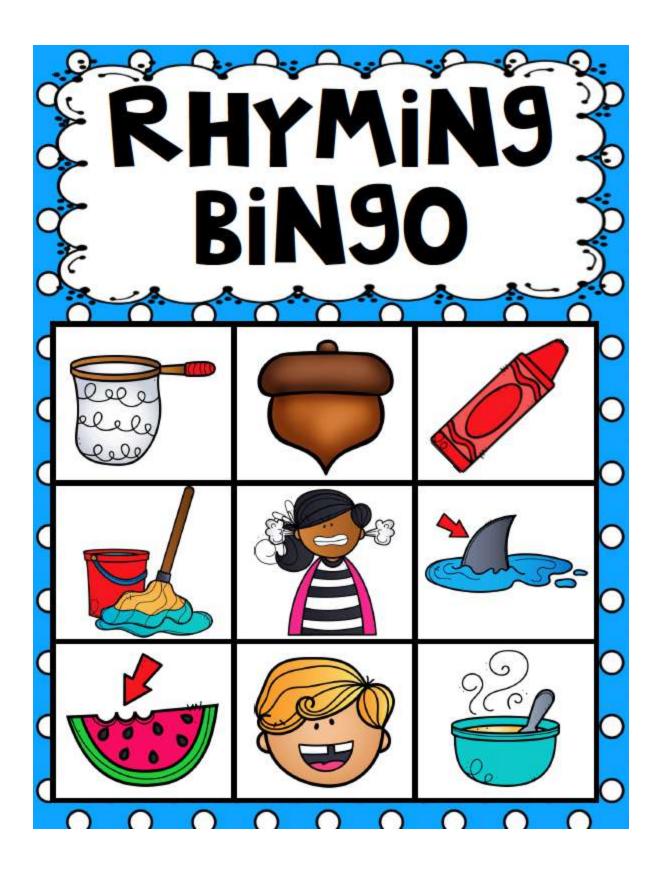




## **RHYMIN9 BIN90**

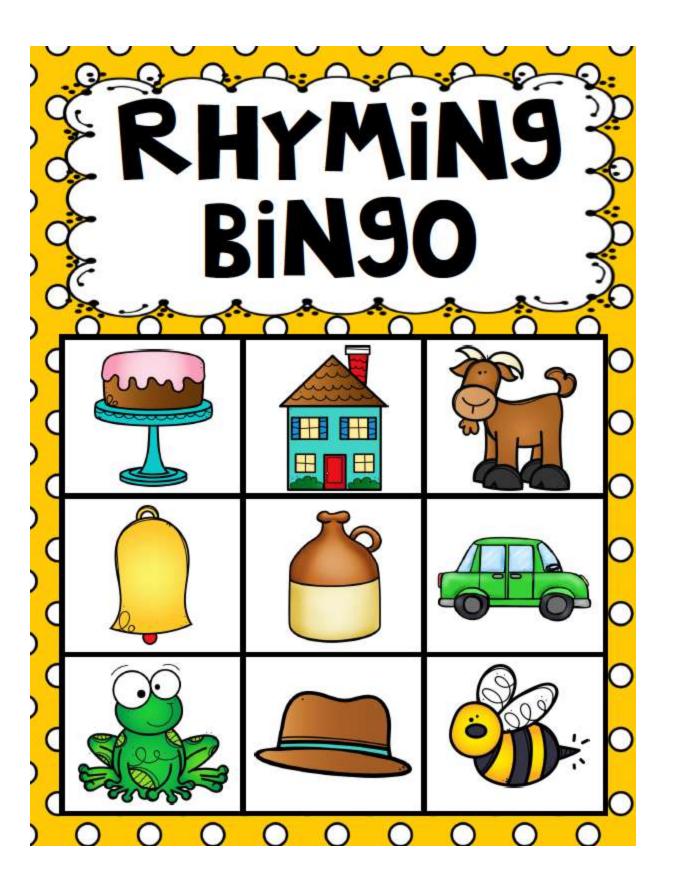
2-or more players. Use items like beans or pennies for markers. Students have to get 3 in a row which can be horizontal, diagonal, top to bottom, and left to right. Students can also play a coverall version as well. The first one to get bingo is the winner!





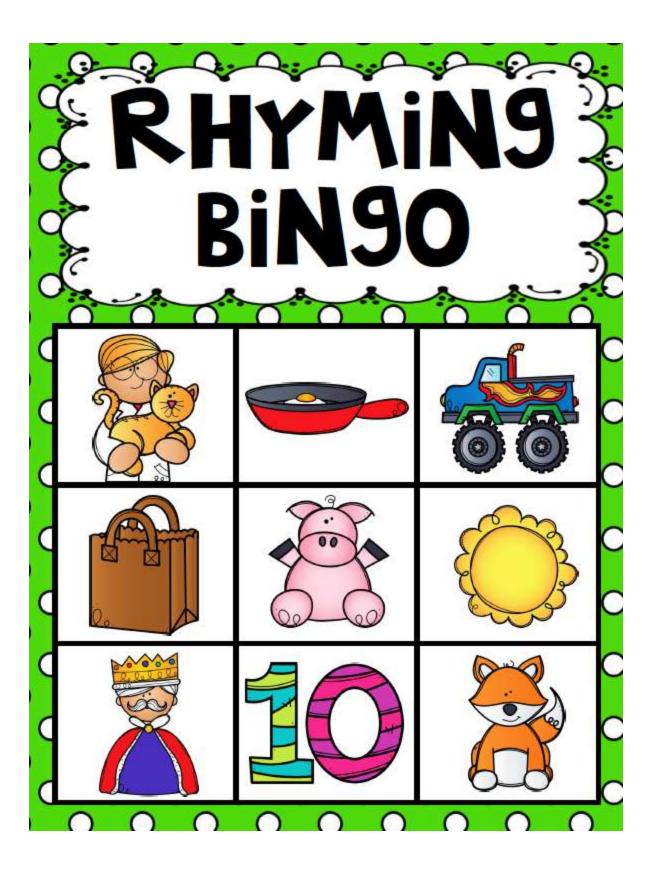
# Picture Word List Blue Card

net	nut	red
mop	mad	fin
bit	gap	hot



# Picture Word List Yellow Card

cake	house	goat
bell	jug	car
frog	hat	bee



# Picture Word List Green Card

vet	pan	truck
bag	pig	sun
king	ten	fox

# OG Fluency Green Words 1 Minute Reads

Name	•		

## Read each line to build fluency.

sh
The
The fish
The fish in
The fish in the
The fish in the red
The fish in the red sash
The fish in the red sash is at
The fish in the red sash is at the
The fish in the red sash is at the shop.

# OG Fluency Green Words 7 Minute Reads

Mars s.		
	ame:	

Monday - Read for 1 minute and color the square red.

Tuesday - Read for 1 minute and color the square blue.

Wednesday - Read for 1 minute and color the square purple.

Thursday - Read for 1 minute and color the square orange.

Friday - Read for 1 minute and color the square GREEN!

#### th (unvoiced)

SECURE OF THE SE
Beth in a bath.
The thin cat had a bath.
The thug ran with a bag of cash.
Seth did the math.
Seth on the path.
The as hit the box with a thud.
The dog led the man up the path.
A thin man ran to the bath.
Beth and Seth have fun in math.

#### Fiction - Summarize

**<u>Directions:</u>** Read a story, then answer the question.

What are the 3 most important things that happened in your story?

#### Fiction - Characters

<u>**Directions:**</u> Read a story, then answer the question.

Who is the main character in your story? What is one word you would use to describe this character?

## **RED Word List**

### Kindergarten Review

the	five
а	six
is	seven
and	eight
to	nine
I	ten
you	red
me	pink
we	white
no	yellow
like	brown
of	purple
go	green
said	blue
see	black
he	orange
do	ball
my	all
so	will
for	be
from	as
what	by
does	are
they	went
come	eat
look	play
with	jump
zero	was
one	or
two	she
three	has
four	put

### Word List A

a	b	C	d
ad	had	am	cat
hag	tag	at	cam
gam	mat	Tam	cad
Tod	dot	got	Mag
cod	cog	mom	Tom
log	lot	lam	dog
dad	cot	hog	Dom
mad	hat	lad	ham
mam	gag	hod	tad
dod	dam	hot	tot

- 1. Tom got hot.
- 2. The cod got hot.
- 3. The cad is mad at Dad.
- 4. Dad is mad at Tad.
- 5. The dog is at the dam.
- 6. Dad got mad at the lad.

- 7. Mom got mad at the cat.
- 8. The ham is hot.
- 9. <u>Is</u> mom mad at <u>the</u> cat?
- 10. The lad had a cot.
- II. Mom got <u>a</u> hat.
- 12. The cat and the lad had cod.

## **Word List B**

a	b	C	d
hit	pig	Kip	ram
dip	jut	pod	Kim
jog	fob	dub	much
big	cud	mid	pom
kid	tab	jag	such
chap	kit	rut	bag
did	pup	chip	fat
tub	chat	сар	jam
	lop	jab	fog
jot rich	rim	mid	hut

- 1. The cop got hot.
- 2. Tim hid the pig.
- 3. Mom had <u>a</u> lot <u>of jam</u>.
- 4. Did Kim hit the bug?
- 5. The chap had  $\underline{a}$  cap.
- 6. Jud dug <u>a</u> mud hut.

- 7. Tom got <u>a</u> big top.
- 8. Did the ram rip the rag?
- 9. Jim bit the big fig.
- 10. The jug is in the hut.
- II. A kid did jig.
- 12. The hat fit Dot.

#### Word List C

a	b	C	d
Don	den	sop	ship
get	sit	shim	thus
sag	shot	than	wit
shad	then	with	when
that	wed	whip	yam
win	whop	yap	vet
whim	you	vat	fin
yes	vim	can	men
van	can	ten	sad
not	fed	sun	cash

- I. Pin the tag on Jan.
- 2. Did Tom let the pet beg?
- 3. Sid is a sad man.
- 4. The gash on the ship is big.
- 5. Sam shut the shop.
- 6. It is fun to win.

- 7. Whop that big bug!
- 8. Tom had <u>a</u> yen <u>to</u> run.
- 9. The cat sat on the van.
- 10. The pup can nip Don.
- 11. Jed did not get fed.
- 12. Sal sat in the sun.

## **Word List D**

a	b	C	d
ax	va	zed	hippo
hotel	zo	so	tax
thin	math	Jello	Seth
me	thud	hi	raven
Beth	he	mix	open
quit	even	unit	Rex
	thug	polo	quag
go <b>fa</b>	quid	Max	with
lox	jumbo	bath	limbo
ego	zip	quip	relax

- I. The ax can go into the shed.
- 2. He had lox with the thug.
- 3. She will mix the Jello in the tub.
- 4. Can you open the can of gumbo?
- 5. Did you get into the bath and relax?
- 6. The raven had <u>a</u> chip.

- 7. The alto had an even tempo.
- 8. The math ditto was basic.
- 9. The robot can see the hotel.
- 10. Beth is a cupid with a halo.
- II.  $\underline{I}$  got  $\underline{a}$  bonus item at  $\underline{the}$  shop.
- 12. The hippo was in the mud.



Incoming Second Grade ELA Summer Review

Below are a list of skills that would be beneficial to review over the summer through practice and play.

	Monday	Tuesday	Wednesday	Thursday
Week 1	Phonological Awareness Circle the correct spelling. Pg. 3	Muli-sensory Letter Formation  Pour sand, shaving cream, salt, or rice on a tray or plate. Practice writing uppercase and lowercase letters	Reading OG Fluency Highlight the words with -nk and -ng endings. Read the sentences. Pg. 4	Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.
Week 2	Decoding/Fluency Be a word detective! Find the consonants and vowels. Read the words. Word List A Pg. 20	Comprehension Listen to a fiction story read aloud. After, choose a reading prompt below to show your understanding of the story.  Pages 15-18	RED Words Find a fun place to practice spelling RED words from the Kindergarten Review List. Ex. outside with chalk. Look for the tricky parts to remember by heart. Pg. 19	Lexia  Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.
Week 3	Reading Read the decodable story, "Gale's Home." Pg. 5	Phonological Awareness Match the picture to the correct spelling. Pg. 6	Fluency OG Fluency Highlight the words with -ind, -olt, -ild, -ost and -old endings. Read the sentences. Pg. 7	Lexia  Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.
Week 4	Decoding/Fluency Be a word detective! Find the consonants, vowels and digraphs. Read the words. Word List B Pg. 21	Encoding Look at the picture, tap the beginning, middle and ending sounds, then write the word. Pg. 8	RED Words Find a fun place to practice spelling RED words from the Kindergarten Review List. Ex. outside with chalk. Look for the tricky parts to remember by heart. Pg. 19	Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.



Incoming First Grade ELA Summer Review
Below are a list of skills that would be beneficial to review over the summer through practice and play.

	Monday	Tuesday	Wednesday	Thursday
Week 1	Phonological Awareness Match the picture to the correct spelling. Pg. 9	Comprehension Listen to a nonfiction story read aloud. After, choose a reading prompt below to show your understanding of the story. Pages 15-18	Reading Read the decodable story, "Gale's Home." Pg. 10	Lexia  Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.
Week 2	RED Words Find a fun place to practice spelling RED words from the Kindergarten Review List. Ex. outside with chalk. Look for the tricky parts to remember by heart. Pg. 19	Decoding/Fluency Be a word detective! Find the consonants and vowels. Read the words. Word List C Pg. 22	Phonological Awareness Look at the picture, tap the beginning, middle and ending sounds, then write the letters that match the sounds. Pg. 11	Lexia  Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.
Week 3	Comprehension Listen to a fiction story read aloud. After, choose a reading prompt below to show your understanding of the story.  Pages 15-18	Reading OG Fluency Highlight the words with suffix -ed Read the sentences. Pg. 12	RED Words Find a fun place to practice spelling RED words from the Kindergarten Review List. Ex outside with chalk. Look for the tricky parts to remember by heart. Pg. 19	Lexia  Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.
Week 4	Reading OG Fluency Highlight the words with suffix -ed Read the sentences. Pg. 13	Phonological Awareness Look at the picture, tap the beginning, middle and ending sounds, then write the letters that match the sounds. Pg. 14	Comprehension Listen to a fiction story read aloud. After, choose a reading prompt below to show your understanding of the story. Pages 15-18	Lexia  Using your child's account from last year, login to ClassLink to access Lexia. Scan the code below with your phone or tablet if you want to access the ClassLink website.

Name:	Date:

# Circle the correct spelling.

flog	(frog)	fog
swem	slim	swim
slug	swug	snug
stop	sop	swop
smap	snap	stap
trick	stuck	truck
crock	clock	click
crab	clab	crib © the dosgnor teacher

# OG Fluency Green Words 1 Minute Reads

Name:	

Monday - Read for 1 minute and color the square red. Tuesday - Read for 1 minute and color the square blue. Wednesday - Read for 1 minute and color the square purple. Thursday - Read for 1 minute and color the square orange. Friday - Read for 1 minute and color the square GREEN!

#### ng & nk

A frog will sing in the spring. A lot of junk is in the trunk. Frank sank the big plank. Hang the bell and it will clang. The gong rang for the throng. The skunk stunk up the bunk. The bell was hung, and a song was sung. Honk at the possum.

The bug stung the king.

# Magic e

Name:	
-------	--

#### Gale's Home

Fluency Passage

Gale the mole lived in a hole. The hole was wet and sad. She began to dislike her home. She hoped for a new home. She went to look for a better home. Gale looked at a slide, but it was too big. Gale looked at a tube in the grass, but it was too thin. Gale went back to her hole. A hole can be a fine home.

Name:

Match the words with digraphs. Date:

math

<u>ic</u> shel

neck

whisk

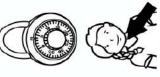
whale

moth lock

chip

cash



















# OG Fluency Green Mords I Minute Reads

TEMPERATURE OF THE PARTY OF THE	
Name:	
Nume.	

Monday - Read for 1 minute and color the square red.

Tuesday - Read for 1 minute and color the square blue.

Wednesday - Read for 1 minute and color the square purple.

Thursday - Read for 1 minute and color the square obolde.

Friday - Read for 1 minute and color the square GREEN!

#### ild, old, ind, olt, ost

The bold old man sold the gold.

A colt may bolt if you scold him.

The host and hostess were almost late.

This snappy poster will brighten her day.

A wild child is not mild, but she may be kind.

The volt gave the man a jolt.

I will find gold in the wild.

The mild child was wild.

	Write It		
	Tap It		
Name	Code Word	Contract of the second of the	

brush

blug

snap

truck

Name:

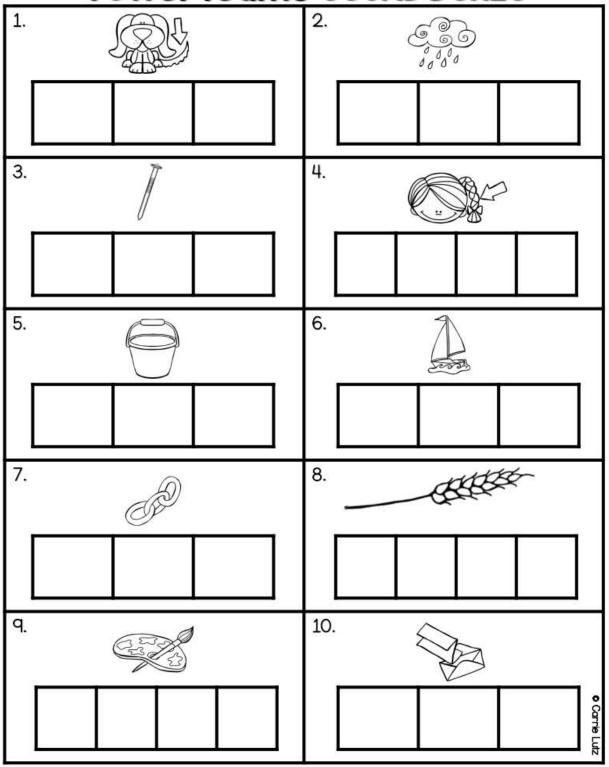


#### A Wild WEST STORY

"Look! It is gold sand," Oz did say as he led his colt Buzz by a cactus. "I think it is the sunset that gets it to look gold.' Oz was looking at the sunset and did not see the big patch of cactuses to the left of Buzz. Buzz did not see them himself, but he felt them! They got Buzz on the rump. Buzz did jolt and ran as fast as his legs were apt to go. "Buzz! Buzz!" Oz did call to his colt, but Buzz just kept on running. "What got into him?" Oz did think. Buzz was still bucking and kicking in the sand. At last, Buzz did stop. Oz was very glad, and he did not walk but ran fast to his colt. When Oz got to Buzz, he spent a bit checking his legs, brushing his back, and undoing his tack. Still, Oz did not see what got Buzz to bolt. He did look swell. Oz did want to get going, but Buzz did not budge. Then, Oz saw the cactuses. "Buzz, I get it! We will go here then," Oz did say as he saw what had got Buzz to bolt. Bless you Buzz! Those cactuses will get us all to bolt!"

Answer Each Question Below:  What time was it in the story?	How long did it take you to read the passages each day?
	O Mon:
What did Buzz do when the cactuses got him?	O Tues:
	O Wed:
Have you ever felt a cactus before?	0 Thurs:
	o Fri: (review)

# **Vowel Teams SOUND BOXES**



# OG Fluency Green Mordes I Minute Rende

N	am	Θ.	
	-	<b>.</b>	

Monday - Read for 1 minute and color the square red.

Tuesday - Read for 1 minute and color the square blue.

Wednesday - Read for 1 minute and color the square purple.

Thursday - Read for 1 minute and color the square orange.

Friday - Read for 1 minute and color the square GREEN!

/d/, /t/, /id/ - Suffix -ed

I jumped when Pat stamped.

Brad helped his mom scrub the tub.

Van winked at the cat that jumped on the bed.

Frank and Tim rushed to get a picnic on the grass.

What happened when Jen filled the glass with plum pits?

I asked Stan to jump on the bed.

The dog pinched the cat on the neck.

# OG Fluency

Green Words 1 Ninute Reads

NOME:	Name:	
-------	-------	--

Monday - Read for 1 minute and color the square red.

Tuesday - Read for 1 minute and color the square blue.

Wednesday - Read for 1 minute and color the square purple.

Thursday - Read for 1 minute and color the square orange.

Friday - Read for 1 minute and color the square GREEN!

#### ph

A prophet can tell what will happen.

Did you fix the phone to make it ring?

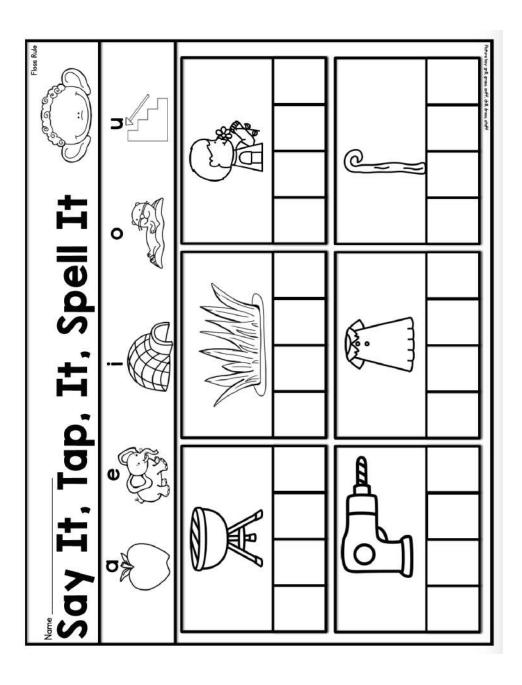
Take a photograph of the phlox.

Ralph sent a pamphlet to the entire class.

Can you compare the size of lakes on a graph?

Phil did not like the dolphin to be inside that tank.

Ralph gave Phil the elephant a phone, a pamphlet, and a graph.



## Fiction- Retelling

**Prompt:** Retell a fiction book that you read. Make sure to include the beginning, middle and end.


## Fiction-Setting

<b>Prompt:</b> Describe the setting (when and where the story takes place) of a fiction book that you read.

### Fiction- Problem/ Solution

**Prompt:** Write about the problem of a fiction book that you read and how it is solved.

### Nonfiction- New Facts

**Prompt:** Write about a fact you learned in your nonfiction book that surprised you. Why was this fact surprising?

 	 	<del></del>

# **RED Word List**

# Second Grade Review

would	cool
could	know
should	I'm
where	also
who	both
give	says
any	out
first	little
friend	girl
very	boy
can't	put
feet	her
said	his
come	puppy
what	love
where	won't
when	too
why	door
because	some
your	brother
good	mother
goes	sister
road	father
were	before
you're	after
almost	become
say	use
walked	able
been	over
about	something
here	anything
they	your
today	hour
want	away
went	knew

#### Word List A

a	b	C	d
pigpen	jazz	brat	splash
still	strum	plum	swim
grub	clan	snaq	nest
split	scam	next	mask
skillet	invest	wisp	bedbug
swift	hundred	suntan	dress
lunch	catfish	smitten	fizz
catnip	stuff	problem	plastic
spell	shrub	classic	skeptic
presto	splendid	dwell	suspect

#### Sentences:

1. Will you split the catfish in the skille	1	\\/:II	VOL	split	the	catfish	in	the	skille.
---	---	--------	-----	-------	-----	---------	----	-----	---------

- 2. The bedbug will nest with his clan.
- 3. Jim will invest in the suspect.
- 4. Help splash the next catfish.
- 5. The contest was at  $\underline{a}$  standstill.
- 6. Can you print with your left hand?

- 7. <u>Do</u> not <u>be</u> <u>a</u> skeptic.
- 8. I will listen to the jazz classic.
- 9. Mike had <u>a</u> tantrum at lunch.
- 10. The pumpkin was in the basket.
- II. I <u>have</u> <u>a</u> complex problem.
- 12.Can you subtract a hundred from the total?

#### Word List B

a	b	C	d
spring	yelled	long	acted
crusted	plank	swished	conk
hang	strive	lung	froze
brave	chunk	stove	junk
sink	sang	trunk	stung
happened	commented	insulted	stumped
yank	gong	swing	brink
blaze	slide	frame	grove
bathrobe	trombone	complete	concrete
kingfish	invite	ringlet	songfest

#### Sentences:

- 1. The grass blade will go in the vase.
- 2. The drink will make him shrink.
- 3. Spring did not last long.
- 4. He <u>was</u> disgusted at <u>the</u> reptile project.
- 5. The sink was filled with a film of scum.
- 6. Hank will tell <u>a</u> hopeless tale.

- 7. It happened  $\underline{to}$  be  $\underline{the}$  trunk that  $\underline{was}$  rusted.
- 8. The elk is hunted in the springtime.
- 9. She went with Frank to the trombone contest.
- 10. <u>The</u> game lasted <u>a</u> long time.
- 11. The duck picked the spot to consume the fish.
- 12. He commented on the pink bathrobe.

#### Word List C

a	b	C	d
graph	slack	bleak	croak
stain	phone	click	treat
float	braid	phase	trick
beach	groan	grain	photo
smack	squeak	toast	sprain
phoneme	backlash	steamboat	coastline
contain	photograph	backlog	mealtime
toadstone	retain	teapot	oatmeal
mainstream	leaflet	busload	tailgate
squeamish	peacoat	sustain	impeach

#### Sentences:

- I. We will <u>see you</u> at <u>the</u> fifth phase <u>of the</u> retreat.
- 2. Please unload the busload back by the tailgate.
- 3. The phone will ring and click.
- 4. The graph will show the main phoneme to use.
- 5. I hope she will be able to explain the complaint.
- 6. The clock will ring at nine for mealtime.

- 7. Will you see the coastline on the boat?
- 8. The leaflet will dictate the lesson.
- 9. The sailboat will sustain the wave.
- 10. Bob will bring the cloak and take a photo.
- 11. Help me take the peacock to the beach.
- 12. I would like  $\underline{to}$  get  $\underline{a}$  note in  $\underline{my}$  mailbox.

### Incoming Third Grade Summer Reading Packet

Choose at least one fiction and one nonfiction reading response to complete this summer.

Prompt Topic	Genre	Page Numbers
Retelling	Fiction	1
Character Changes	Fiction	2
Lesson Learned	Fiction	3
Author's Craft	Fiction	4
Text Features	Nonfiction	5
Author's Purpose	Nonfiction	6
New Information	Nonfiction	7
Text Organization	Nonfiction	8

# Fiction - Retelling

**Prompt:** Write a retelling of your book. Be sure to include the beginning, middle, and end.

# <u>Fiction - Character Changes</u>

<b>Prompt:</b> Write about now the main character changes in this story.  What causes the character to change?						

# <u>Fiction - Lesson Learned</u>

	nariesson					
loes the m	nessage of	this book	make you	u think ab	out your o	wn lite?

# Fiction - Author's Craft

<b>Prompt</b> : What does the writer of your book do to keep you interested? Provide at least one example.						

# Nonfiction - Text Features

<b>Prompt:</b> What nonfiction text teatures are in your book? How do they help you understand the topic better?						

### Nonfiction - Author's Purpose

**Prompt:** Why do you think the author wrote about this topic? What is he or she trying to teach readers?

# Nonfiction - New Information

<b>Prompt:</b> What new information did you learn from reading this book? How does the information in the book connect to your own life?						

# Nonfiction - Text Organization

<b>Prompt:</b> How is you presents the infor		you think th	e writer

#### Incoming Fourth Grade Summer ELA Packet

Choose at least one fiction prompt and one nonfiction to complete.

Response Topic	Genre	Page Number
Characters	Fiction	1
Problem & Solution	Fiction	2
Big Ideas & Messages	Fiction	3
Summarize	Fiction	4
Text Features	Nonfiction	5
Author Study	Nonfiction	6
Main Idea & Supporting Details	Nonfiction	7
Author's Purpose	Nonfiction	8

#### Fiction- Characters

<u>Prompt:</u> How do this character ch	aracter change	e in this story?	Why does

### Fiction- Problem & Solution

<u>Prompt:</u> Write about the problem of the story and how it is resolved. O the back of this page, you can draw a sketch to go with your writing.
The back of this page, you can araw a skelen to go will your writing.

### Fiction- Central Message

<u><b>Prompt:</b></u> What lesson does your character learn in this story? How does this lesson help you think about your own life?

#### Fiction-Summarize

<u>Prompt:</u> Summarize the important events in the story. Remember that summaries should be written in order and should include the
important details.

### Nonfiction- Text Features

<u>Prompt:</u> What is a text feature the author included? What did it teach
you? How did it connect to the text?

### Nonfiction- Author Study

<u><b>Prompt:</b></u> What does the author do to make sure you understand the content of the book/text?

### Nonfiction- Main Idea & Supporting Details

<u>Prompt:</u> What is the main idea of this book? How do you know?

### Nonfiction- Author's Purpose

ompt: Why do you think the author wrote this book? Think: to persua	ade,
inform, to inspire, to entertain.	

### Incoming Fifth Grade Summer Reading Packet

Choose at least one fiction prompt and one nonfiction to complete.

Prompt Topic	Genre	Page Number
Setting	Fiction	1
Author Study	Fiction	2
Big Ideas & Messages	Fiction	3
Summarize	Fiction	4
New and Surprising Facts	Nonfiction	5
Author Study	Nonfiction	6
Important Ideas	Nonfiction	7
Text Features	Nonfiction	8

#### Fiction - Setting

<b><u>Prompt:</u></b> What is the setting of your book, and why is the setting important to the plot? How might your book be different if the setting took place elsewhere? Use text evidence to support your thinking.

### <u>Fiction - Author Study</u>

<u>Prompt:</u> What does the writer do to keep the reader interested in the story Provide examples from the text, and write how it kept you interested.	/?

# <u>Fiction - Big Ideas & Messages</u>

<u><b>Prompt:</b></u> What are the big ideas, or messages, in this story? Use details from the text to support your thinking. How do you find the message?

#### <u>Fiction - Summarize</u>

<u>Prompt:</u> Summarize the important events in the story. Remember that summaries should be written in order and should include the important details.

### Nonfiction - Surprising Facts

<u>Prompt:</u> What information do you find the most surprising in your nonfiction text? Discuss a few examples and explain why they were surprising?

## Nonfiction - Author Study

<u>Directions:</u> Use the nonfiction text you are currently reading to respond to the optional prompt below. Please write in paragraph format, think deeply about the question, and use text evidence to support your answer.

<b>Prompt:</b> How does the writer organize the information written in this book? How else could the author have organized this information? <i>Think: text structures, text features, categories, etc.</i>

### Nonfiction-Important Ideas

<u>Prompt:</u> What is the main idea in this nonfiction text? Provide text evidence to support the message. How do you find the main idea? Check this out!	е

### Nonfiction - Text Features

<u>Directions:</u> Use the nonfiction text you are currently reading to respond to the optional prompt below. Please write in paragraph format, think deeply about the question, and use text evidence to support your answer.

<u>Prompt:</u> How are the text features in this book helpful? Provide examples. Then, on the back of this page, draw a text feature you think should be included in the text you read.

#### Robbinsville Public Schools Incoming 6<sup>th</sup> Grade Summer Reading 2023



Studies show that children who read over the summer **maintain reading development** and score higher on reading assessments when they return to school in the Fall. Summer reading also helps bridge the gap from one year to the next and allows teachers an opportunity to hit the ground running knowing that students have had some exposure to the content. This summer we are asking students to read *at least TWO books - one assigned and one of their choice*.

Students may complete the summer reading assignments **digitally**, or they may **print out** this packet. Either way, they should be prepared to submit their work during the first week of school. **This assignment will count for a grade**. All parts of the assignment must be completed in order to receive full credit.

#### **Teenagers and Reading**

Perhaps the teenagers in your family were once avid readers but now hardly ever open a book, or perhaps they never liked reading in the first place. As an adult, you know that reading is important and you obviously want to make sure that the teenagers in your life grow into adulthood with all the skills they need to succeed.

#### Ways to encourage teens to read...

- **Set an example.** Let teens see you reading for pleasure.
- **Furnish your home with a variety of reading materials.** Leave books, magazines, and newspapers around. Check to see what disappears for a clue to what interests your teenager.
- **Give teens an opportunity to choose their own books.** When you and your teen are out together, browse in a bookstore or library. Go your separate ways and make your own selections. A bookstore gift certificate is a nice way of saying, "You choose."
- **Build on your teen's interests.** Look for books and articles that feature their favorite sports teams, rock stars, hobbies, or television shows. Give a gift subscription to a special interest magazine.
- **View pleasure reading as a value in itself.** Almost anything your youngsters read—including the Sunday comics—helps build reading skills.
- **Read some books written for teens.** Young adult novels can give you valuable insights into the concerns and pressures felt by teenagers. You may find that these books provide a neutral ground on which to talk about sensitive subjects.
- **Make reading aloud a natural part of family life.** Share an article you clipped from the paper, a poem, a letter, or a random page from an encyclopedia—without turning it into a lesson.
- **Acknowledge your teen's mature interests.** Look for ways to acknowledge the emerging adult in your teens by suggesting some adult reading you think they can handle.
- **Keep the big picture in mind.** For all sorts of reasons, some teenagers go through periods without showing much interest in reading. Don't panic! Time, and a few tips from this article, may help rekindle their interest.

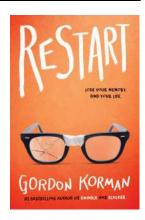
Source: Reading is Fundamental

#### Part I: One Grade, One Book Text

All incoming sixth graders are **required** to read **Restart** by **Gordon Korman.** 

Students also need to complete <u>FOUR</u> jots that demonstrate their understanding of the assigned book. They will then turn one of their jots into an expanded 1 page response (see the following pages for the jots and response templates). Students should complete the jots as they read the book and then complete the response after finishing reading.

\* Audio of each chapter read aloud can be found on YouTube <u>HERE</u>. (You may listen to the audiobook; however, be sure to follow along with the text as you listen.)



#### **Part II: Choice Reading**

In addition to the assigned grade-level text, students will read **a second fiction book of their choice**.

If your sixth grader is not sure what to read, please see the box below for some popular titles. Students **DO NOT** have to choose from the following list of recommendations.

In order to share what they read with their teacher(s) and peers, students should come to school in September prepared to give a **book talk** on their choice book. A book talk includes: the title, author, genre, a brief overview of the story (without spoilers), a verbal review of the book, and recommended audience that may enjoy the book.

#### Optional but recommended titles for incoming 6th Graders:

39 Clues by Rick Riordan

Always, Abigail by Nancy J. Cavanaugh

Amina's Voice by Hena Khan

Amulet by Kazu Kibuishi (graphic novel)

The Best Man by Richard Peck

Aru Shah and the End of Time by Roshani Chokshi

Counting by Sevens by Holly Goldberg Sloan

Front Desk by Kelly Yang

Gracefully Grayson by Ami Polonsky

Hatchet by Gary Paulsen

Home of the Brave by Katherine Applegate

How to Speak Dolphin by Ginny Rorby

The Land of Stories by Chris Colfer

Middle School: The Worst Years of My Life by James Patterson

Roller Girl by Victoria Jamieson (graphic novel)

Stargazing by Jen Wang (graphic novel)

The Unwanteds by Lisa McMann

When You Trap a Tiger by Tae Keller

Any other books by Gordon Korman

### **Summer Reading Checklist**

Students must complete ALL of the following by the due date to receive full credit.

**Due Date: September 8th (A Day) & September 11th (B Day)** 

$\square$ I put my <b>NAME (first and last)</b> on my work (typed OR handwritten).
Part I: One Grade, One Book Text
□ I read <b>Restart</b> by <b>Gordon Korman.</b>
☐ I completed <b>FOUR jots</b> while I read the novel.
☐ I completed a <b>one-page reading response</b> after completing the book.
Part II: Choice Reading
☐ I read one <b>choice fiction</b> book.
<ul> <li>I am prepared to do a <b>book talk</b> on my choice book in September.</li> <li>✓ Book Title</li> <li>✓ Author</li> <li>✓ Genre (realistic fiction, historical fiction, fantasy, mystery, etc.)</li> <li>✓ Brief summary (no spoilers!)</li> <li>✓ Review (What did you think about it? How many stars would you give it?)</li> </ul>

# **ELA Summer Reading: Part I - One Grade, One Book Text Incoming 6th Grade**

**DIRECTIONS:** <u>AS</u> you read **Restart** by **Gordon Korman**, complete four jots on the following topics. Don't forget to include the <u>page number</u> you were on when you stopped to jot your idea.

Character Who are the characters below? What are their roles in the story? What are their traits?	Setting Where and when does this book take place? How is the setting important to the story?
Chase Ambrose:	
Shoshanna Weber:	
Brendan Espinoza:	
Joel Weber:	Page #:
Plot What are 3 important events in the book? Beginning (+ page #):	Problem/Conflict What is the main problem in the book? How does it affect the characters?
beginning (* page ").	
Middle (+ page #):	
End (+ page #):	Page #:

**DIRECTIONS:** Now, take <u>ONE</u> of your jots and write a **one page** reading response on *Restart* by **Gordon Korman**, using the questions above to further analyze one of the following: Character, Setting, Plot, or Conflict/Problem. Be sure to use good paragraph structure, specific details, and text evidence to support your thinking. [Remember to use <u>TREAT!</u> T=Topic sentence; R=Reason; E=Evidence; A=Analysis; T=Tie it all up]

## Robbinsville Public Schools Incoming 7<sup>th</sup> Grade Summer Reading 2023



Studies show that children who read over the summer **maintain reading development** and score higher on reading assessments when they return to school in the Fall. Summer reading also helps bridge the gap from one year to the next and allows teachers an opportunity to hit the ground running knowing that students have had some exposure to the content. This summer we are asking students to read *at least TWO books - one assigned and one of their choice*.

Students may complete the summer reading assignments **digitally**, or they may **print out** this packet. Either way, they should be prepared to submit their work during the first week of school. **This assignment will count for a grade**. All parts of the assignment must be completed in order to receive full credit.

## **Teenagers and Reading**

Perhaps the teenagers in your family were once avid readers but now hardly ever open a book, or perhaps they never liked reading in the first place.

As an adult, you know that reading is important and you obviously want to make sure that the teenagers in your life grow into adulthood with all the skills they need to succeed.

## Ways to encourage teens to read...

- **Set an example.** Let teens see you reading for pleasure.
- **Furnish your home with a variety of reading materials.** Leave books, magazines, and newspapers around. Check to see what disappears for a clue to what interests your teenager.
- **Give teens an opportunity to choose their own books.** When you and your teen are out together, browse in a bookstore or library. Go your separate ways and make your own selections. A bookstore gift certificate is a nice way of saying, "You choose."
- **Build on your teen's interests.** Look for books and articles that feature their favorite sports teams, rock stars, hobbies, or television shows. Give a gift subscription to a special interest magazine.
- View pleasure reading as a value in itself. Almost anything your youngsters read—including the Sunday comics—helps build reading skills.
- **Read some books written for teens.** Young adult novels can give you valuable insights into the concerns and pressures felt by teenagers. You may find that these books provide a neutral ground on which to talk about sensitive subjects.
- **Make reading aloud a natural part of family life.** Share an article you clipped from the paper, a poem, a letter, or a random page from an encyclopedia—without turning it into a lesson.
- **Acknowledge your teen's mature interests.** Look for ways to acknowledge the emerging adult in your teens by suggesting some adult reading you think they can handle.
- **Keep the big picture in mind.** For all sorts of reasons, some teenagers go through periods without showing much interest in reading. Don't panic! Time, and a few tips from this article, may help rekindle their interest.

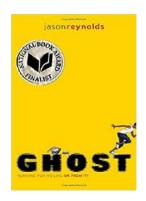
Source: Reading is Fundamental

## Part I: One Grade, One Book Text

All incoming seventh graders are **required** to read **Ghost** by **Jason Reynolds**.

Students also need to complete <u>FOUR</u> jots that demonstrate their understanding of the assigned book. They will then turn one of their jots into an expanded 1 page response (see the following pages for the jots and response templates). Students should complete the jots as they read the book and then complete the response after finishing reading.

Students should be sure to use good paragraph structure, details, and text evidence to support their thinking. [Remember to use TREAT! T=Topic sentence; R=Reason; E=Evidence; A=Analysis; T=Tie it all up].



\* Audio of each chapter read aloud can be found on YouTube <u>HERE</u>. (You may listen to the audiobook; however, be sure to follow along with the text as you listen.)

## **Part II: Choice Reading**

In addition to the assigned grade-level text, students will choose **a second fiction book of their choice**. If your seventh grader is not sure what to read, please see the box below for some popular titles. Students **DO NOT** have to choose from the following list of recommendations.

In order to share what they read with their teacher(s) and peers, students should come to school in September prepared to give a **book talk** on their choice book. A book talk includes: the title, author, genre, a brief overview of the story (without spoilers), a verbal review of the book, and recommended audience that may enjoy the book.

#### Optional but recommended titles for incoming 7th Graders:

A Place to Belong by Cynthia Kadohata

The Best At It by Maulik Pancholy

Catherine, Called Birdy by Karen Cushman

The First Rule of Punk by Celia Perez

Ghost Boys by Jewell Parker Rhodes

Harbor Me by Jacqueline Woodson

The Honest Truth by Dan Gemeinhart

The Hypnotists by Gordon Korman

Maximum Ride by James Patterson (also in graphic novel form)

The Misfits by James Howe

New Kid by Jerry Craft

Other Words for Home by Jasmine Warga

Scythe by Neal Shusterman

Stargirl by Jerry Spinelli

Tangerine by Edward Bloor

Travel Team, QB1, or Summer Ball by Mike Lupica

When You Reach Me by Rebecca Stead

The Zodiac Legacy by Stan Lee

# **Summer Reading Checklist**

Students must complete ALL of the following by the due date to receive full credit.

**Due Date: September 8th (A Day) & September 11th (B Day)** 

☐ I put my <b>NAME (first and last)</b> on my work (typed OR handwritten).
Part I: One Grade, One Book Text
☐ I read <i>Ghost</i> by <b>Jason Reynolds</b> .
☐ I completed <b>FOUR jots</b> while I read the novel.
☐ I completed a <b>one-page reading response</b> after completing the book.
Part II: Choice Reading
☐ I read one <b>choice fiction</b> book.
<ul> <li>□ I am prepared to do a <b>book talk</b> on my choice book in September.</li> <li>✓ Book Title</li> <li>✓ Author</li> <li>✓ Genre (realistic fiction, historical fiction, fantasy, mystery, etc.)</li> <li>✓ Brief summary (no spoilers!)</li> <li>✓ Review (What did you think about it? How many stars would you give it?)</li> </ul>
✓ Recommended audience (What type of reader would like this book?)

# **ELA Summer Reading: Part I - One Grade, One Book Text Incoming 7th Grade**

**DIRECTIONS:** AS you read **Ghost** by **Jason Reynolds**, complete four jots on the following topics. Don't forget to include the <u>page number</u> you were on when you stopped to jot your idea.

Character Who is the main character? What are their character traits (with evidence from the text)?	Setting Where and when does the book take place? How is the setting important to the story?
Page #:	Page #:
Conflict/Problem What is the main conflict, or problem, in the book? How does it affect the characters?	Theme What is a theme of the book? What is your evidence to support that?
Page #:	Page #:

**<u>DIRECTIONS</u>**: Now, take <u>ONE</u> of your jots and write a **one page** reading response on *Ghost* by **Jason Reynolds**, using the questions above to further analyze one of the following: Character, Setting, Conflict/Problem, or Theme. Be sure to use good paragraph structure, specific details, and text evidence to support your thinking. [Remember to use <u>TREAT!</u> T=Topic sentence; R=Reason; E=Evidence; A=Analysis; T=Tie it all up]

## Robbinsville Public Schools Incoming 8<sup>th</sup> Grade Summer Reading 2023



Studies show that children who read over the summer **maintain reading development** and score higher on reading assessments when they return to school in the Fall. Summer reading also helps bridge the gap from one year to the next and allows teachers an opportunity to hit the ground running knowing that students have had some exposure to the content. This summer we are asking students to read *at least TWO books - one assigned and one of their choice*.

Students may complete the summer reading assignments **digitally**, or they may **print out** this packet. Either way, they should be prepared to submit their work during the first week of school. **This assignment will count for a grade**. All parts of the assignment must be completed in order to receive full credit.

### **Teenagers and Reading**

Perhaps the teenagers in your family were once avid readers but now hardly ever open a book, or perhaps they never liked reading in the first place.

As an adult, you know that reading is important and you obviously want to make sure that the teenagers in your life grow into adulthood with all the skills they need to succeed.

## Ways to encourage teens to read...

- **Set an example.** Let teens see you reading for pleasure.
- **Furnish your home with a variety of reading materials.** Leave books, magazines, and newspapers around. Check to see what disappears for a clue to what interests your teenager.
- **Give teens an opportunity to choose their own books.** When you and your teen are out together, browse in a bookstore or library. Go your separate ways and make your own selections. A bookstore gift certificate is a nice way of saying, "You choose."
- **Build on your teen's interests.** Look for books and articles that feature their favorite sports teams, rock stars, hobbies, or television shows. Give a gift subscription to a special interest magazine.
- **View pleasure reading as a value in itself.** Almost anything your youngsters read—including the Sunday comics—helps build reading skills.
- **Read some books written for teens.** Young adult novels can give you valuable insights into the concerns and pressures felt by teenagers. You may find that these books provide a neutral ground on which to talk about sensitive subjects.
- Make reading aloud a natural part of family life. Share an article you clipped from the paper, a poem, a letter, or a random page from an encyclopedia—without turning it into a lesson.
- **Acknowledge your teen's mature interests.** Look for ways to acknowledge the emerging adult in your teens by suggesting some adult reading you think they can handle.
- **Keep the big picture in mind.** For all sorts of reasons, some teenagers go through periods without showing much interest in reading. Don't panic! Time, and a few tips from this article, may help rekindle their interest.

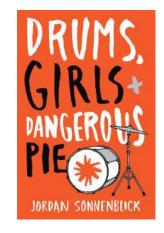
Source: Reading is Fundamental

## Part I: One Grade, One Book Text

All incoming eighth graders are <u>required</u> to read *Drums*, *Girls*, *and Dangerous Pie* by **Jordan Sonnenblick**.

Students also need to complete <u>FOUR</u> jots that demonstrate their understanding of the assigned book. They will then turn one of their jots into an expanded 1 page response (see the following pages for the jots and response templates). Students should complete the jots as they read the book and then complete the response after finishing reading.

Students should be sure to use good paragraph structure, details, and text evidence to support their thinking. [Remember to use TREAT! T=Topic sentence; R=Reason; E=Evidence; A=Analysis; T=Tie it all up].



\* Audio of each chapter read aloud can be found on YouTube <u>HERE</u>. (You may listen to the audiobook; however, be sure to follow along with the text as you listen.)

## **Part II: Choice Reading**

In addition to the assigned grade-level text, students will choose **a second fiction book of their choice**. If your eighth grader is not sure what to read, please see the box below for some popular titles. Students **DO NOT** have to choose from the following list of recommendations.

In order to share what they read with their teacher(s) and peers, students should come to school in September prepared to give a **book talk** on their choice book. A book talk includes: the title, author, genre, a brief overview of the story (without spoilers), a verbal review of the book, and recommended audience that may enjoy the book.

#### Optional but recommended titles for incoming 8th Graders:

*Ahimsa* by Supriya Kelkar

All-American Muslim Girl by Nadine Jolie Courtney

All Time by Christopher Russo

Between Shades of Gray by Ruta Sepetys

Chinese Cinderella by Adeline Yen Mah

Chains by Laurie Halse Anderson

Feed by M. T. Anderson

Game Changer by Tommy Greenwald

Gone by Michael Grant

Inside Out and Back Again by Thanhha Lai

Kira-Kira by Cynthia Kadohata

Lily and Dunkin by Donna Gephart

The Maze Runner by James Dashner

Million Dollar Throw by Mike Lupica

Nowhere Boy by Katherine Marsh

The Selection by Keira Cass

Sleeping Freshmen Never Lie by David Lubar

See You at Harry's by Jo Knowles

Starcrossed by Barbara Dee

## **Summer Reading Checklist**

Students must complete ALL of the following by the due date to receive full credit.

**Due Date: September 8th (A Day) & September 11th (B Day)** 

$\square$ I put my <b>NAME (first and last)</b> on my work (typed OR handwritten).
Part I: One Grade, One Book Text
☐ I read <i>Drums, Girls, and Dangerous Pie</i> by <b>Jordan Sonnenblick</b> .
☐ I completed <b>FOUR jots</b> while I read the novel.
$\square$ I completed a <b>one-page reading response</b> after completing the book.
Part II: Choice Reading
☐ I read one <b>choice fiction</b> book.
<ul> <li>□ I am prepared to do a book talk on my choice book in September.</li> <li>✓ Book Title</li> <li>✓ Author</li> <li>✓ Genre (realistic fiction, historical fiction, fantasy, mystery, etc.)</li> <li>✓ Brief summary (no spoilers!)</li> <li>✓ Review (What did you think about it? How many stars would you give it?)</li> </ul>
✓ Recommended audience (What type of reader would like this book?)

# **ELA Summer Reading: Part I - One Grade, One Book Text Incoming 8th Grade**

**DIRECTIONS:** <u>AS</u> you read *Drums, Girls, and Dangerous Pie* by **Jordan Sonnenblick**, complete four jots on the following topics. Don't forget to include the <u>page number</u> you were on when you stopped to jot your idea.

Character Who is the main character? What are their character traits (use evidence from the text)?	Setting Where and when does the book take place? How is the setting important to the story?
Page #: Conflict/Problem	Page #: <u>YOUR CHOICE!</u>
What is the main conflict, or problem, in the book? How does it affect the characters?	Use what you know about jotting to create your own response. (Ex: Theme, Foreshadowing, Flashback, a Signpost, etc.)
Page #:	Page #:

**Dangerous Pie** by **Jordan Sonnenblick**, using the questions above to further analyze one of the following: Character, Setting, Conflict/Problem, or Your Choice. Be sure to use good paragraph structure, specific details, and text evidence to support your thinking. [Remember to use <u>TREAT!</u> T=Topic sentence; R=Reason; E=Evidence; A=Analysis; T=Tie it all up]

**DIRECTIONS:** Now, take <u>ONE</u> of your jots and write a **one page** reading response on **Drums, Girls, and** 

# Please use the links below to access the Pond Road Middle School Summer Math Assignments

Grade Level				
6th grade	Assignment			
7th grade	Math 7 or PreAlgebra Assignment - complete parts 1-7	Pre-Algebra Accelerated Assignment - complete parts 1-11	Algebra 7 Assignment	
8th grade	Math 8 Assignment	Algebra 8 Part 1 Assignment	Algebra 8 or Algebra 8 Accelerated Assignment	Algebra 2 Assignment

## Robbinsville Public Schools 9 – 12<sup>th</sup> Grade Summer Reading 2023

#### Instructions:

This summer students will be reading **TWO TEXTS**. The upper-classmen (grades 11 and 12) are tasked with reading two books for the English Language Arts Department and the under-classmen (grades 9 and 10) will be reading one book for the English Language Arts Department and one book for the Social Studies Department.

#### What do I read?

#### 9th and 10th Grade Students:

- Select one book from the ELA Grade Level and Genre Unit Chart.
- Select one book from the History Selections Chart below.

#### 11th and 12th Grade Students:

Select TWO books from the ELA Grade Level and Genre Unit Chart.

## How do I track my reading progress?

- Complete one of the reading progress strategies listed below for each text that you read.
- Review the Choice Reading Guides on the ELA Google Classrooms by clicking on this link: https://classroom.google.com
   Codes are below.

Google Classroom Codes	
9th Grade joiduqw  10th Grade swgdlfw  11th Grade hi32hs5  12th Grade nu62owb	

## **Does this count?**

There will be an assessment <u>during the first class sessions</u> and will be **worth 5% of the first quarter grade**.

## What if I am in Advanced Placement Classes?

Locate your course and complete that coursework ONLY

- Advanced Placement English Language and Composition
- Advanced Placement English Literature and Composition

## What do I need on the first day of school?

- 1. Two books that I read
- 2. Reading progress notes

<sup>\*</sup>Transfer students must follow the expectations for non-transfer students for your grade level.

## **ELA Grade Level and Genre Unit Chart**

## **Selection Procedures**

Students entering 9th & 10th grade will choose one book from the ELA list and students entering 11th and 12th grade will choose two books from the ELA list.

9th Grade General Fiction (choose 1 from this list)	10th Grade Memoir/Biography (choose 1 from this list)	11th Grade Hero's Journey (choose 2 from this list)	12th Grade Identity/ Self Discovery (choose 2 from this list)
These Violent Delights	The Glass Castle	The Alchemist	The Other Wes Moore
by Chloe Gong	by Jeannette Walls	by Paul Coelho	by Wes Moore
In the Wild Light	I Can't Make this Up	Ready Player One	Me Talk Pretty One Day
by Jeff Zentner	by Kevin Hart	by Ernest Cline	by David Sedaris
The Ballads of	Born a Crime	Balzac and the Little	Etched in Sand
Songbirds & Snakes by Suzanne Collins	by Trevor Noah	Chinese Seamstress by Dai Sijie	by Regina Calcaterra
Children of Blood and Bone	All You Can Ever Know	The Bean Trees	Between the World and Me
by Tomi Adeyemi	by Nicole Chung	by Barbara Kingsolver	by Ta-Nehisi Coates

## **History Selections Chart (9th & 10th grade only)**

#### **Selection Procedures**

Students entering 9th & 10th grade will choose one book from the ELA list and either 1 historical fiction or 1 nonfiction selection from the list below.

9th Grade (choose 1 from either list below)		10th Grade (choose 1 from either list below)	
Historical Fiction	Nonfiction	Historical Fiction	Nonfiction
Soldier's Heart  By Gary Paulsen	The Hallowed Ground by Bruce Catton	Unbroken: A World War II Story of Survival, Resilience, and Redemption	Beyond Courage: The Untold Story of Jewish Resistance During the Holocaust
		by Laura Hillenbrand	by Doreen Rappaport

9th Grade		10th Grade		
Historical Fiction	Nonfiction	Historical Fiction	Nonfiction	
Gone with the Wind by Margaret Mitchell	For Cause and Comrades by James McPherson	The Book Thief by Markus Zusak	Farewell to Manzanar: A True Story of Japanese American Experience During	
, 3			and After the World War II Internment	
			by Jeanne Wakatsuki Houston	
Annie Between the States	The Families' Civil War: Black Soldiers and the	Resistance	The Boy on the Wooden Box: How the Impossible Became	
by L.M. Elliott	Fight for Racial Justice	by Jennifer Nielsen	Possibleon Schindler's List	
	by Holly A. Pinheiro Jr.		by Leon Leyson	
Killer Angels			In Harm's Way: The Sinking of the USS Indianapolis and	
by Michael Shaara			the Extraordinary Story of Its Survivors	
			by Doug Stanton	

# Please use the links below to access the Robbinsville High School Summer Math Assignments

СР	Honors	AP
Assignment		
<u>Assignment</u>		
Assignment	<u>Assignment</u>	
<u>Assignment</u>	Assignment	
<u>Assignment</u>	Assignment	
	Assignment	AB - Assignment
No assignment		BC - Assignment Assignment
	Assignment Assignment Assignment Assignment	Assignment

## Welcome to AP Biology 2023-2024

This summer you will delve into the world of biology! We will explore the topic of ecology to feed your appetite for the upcoming year of hard work and success.

This summer assignment has been designed for several purposes:

- 1. Introduce students to ecological principles including common vocabulary, concepts, and relationships that will be further examined in AP Biology.
- 2. Review basic population ecology mathematical calculations.

AP Biology is an exciting and rigorous college-level course that requires college quality work. There are so many topics to explore! We will cover (almost) the entire textbook. Some of the information will build on Honors Biology and other chapters will be completely new. Emphasis is placed on conceptual understanding, not just memorization of facts. This course requires a special commitment from you. Part of this commitment is the timely submission of your summer assignment. Completion of this summer assignment will allow us to get a jump start into AP Biology at the beginning of September. The summer assignment gives you the chance to demonstrate that you have the best intentions of giving this course your dedication, intelligence, and humor.

Time management is <u>KEY</u>. Starting in September, you will need to put in at least 3-5 hours of independent work each week to be successful in this course.

There will be an exam on ecology the second week of class (not the first day of class). We will be covering chapters 52-56 on this exam and you are highly encouraged to get a head start on these chapters over the summer. The summer organism project must be submitted on Google Classroom by the first day of your scheduled class. Late work will be half credit. Plagiarism, copying, and/or cheating will make it very difficult to pass your first unit exam.

Please join my google classroom with code: 515vsvc by August 15th at the latest!

If you have any questions, email me at sbarro.lauren@rvilleschools.org

Have a great summer!!!

Mrs. Sbarro

#### **How to Pick Your Organism:**

- 1. Login to Google Classroom
- 2. Pick Your Organism from the Spreadsheet (Your organism choice is aligned with your last name)
- 3. First come, first serve

#### AP Biology 2023-2024

#### DUE: 1st Day Of School (FALL)

**SUMMER ASSIGNMENT:** Organism Research Project

**Google Slides Presentation** 

Cover Slide: Organism Name, Organism Picture, Your Full Name and Block

Slides 2-8 <u>Cell</u> - <u>Responses</u> Research (Underlined titles)

Slide 9 ABSTRACT Complete This Section At The End Of The Project

Last Slide: APA Formatted Sources

#### **Cover Slide: YOUR ORGANISM**

• Scientific Name (Genus species) & Common Name

- KPCOFGS: Kingdom, Phylum, Class, Order, Family, Genus, Species
- Include a picture
- Your full name and class block

#### Cells (Structure & Organelles specific to the organism)

- Eukaryote or Prokaryote cell
  - o Include a picture of the correct cell type and explain how you know it has this type of cell
- Details on all cell structures and organelles for your cell type
  - o Choose 6 of the above organelles/structures and explain the function for each.

#### **Energy**

- Does your organism do aerobic respiration, anaerobic respiration, photosynthesis? More than one? Explain all that apply.
- Describe the <u>chemistry</u> of how it uses energy
- Trophic level on the food chain
  - o Explain the level of your organism and the type of consumer
  - o Include a diagram of the trophic pyramid with your organism on it and other organisms found in their ecosystem such as prey, predators, etc.

#### **Cell Division (Mitosis / Meiosis / Binary Fission)**

- Asexual or sexual reproduction
  - o Evolutionary benefits and disadvantages for this type of reproduction
- Number of chromosomes
- Life cycle duration
- Survivorship Curve
  - o Explain all three curves and how your organism fits into its curve
- Population Growth:
  - o Semelparity vs. Iteroparity
    - Compare both & explain which one pertains to your organism
  - K vs R Selection
    - Compare both & explain which one pertains to your organism (Note: Organism lie within a spectrum of K to R so it could make sense if your organism has some in-between characteristics)

#### **Evolutionary Advantages**

• Evolution acts upon the phenotype of an organism which can result in organism adaptations that increase their chances of survival. Identify 5 phenotypes and the <u>advantage(s)</u> for each phenotype.

#### Niche

• What purpose does the organism fulfill in its environment? What would happen if it wasn't present in its environment?

#### **Communication**

- How does it communicate with other organisms?
  - o Chemicals, pheromones, audible, physical, visual, coloration, etc...

#### Responses

- What are <u>Taxic</u> Responses (animal) or <u>Tropisms</u> (plant)?
- How does your organism respond to their environment?
  - o Identify 3 taxic or tropism responses.

ABSTRACT (Separate Slide)- Summary of Report. 1 paragraph ONLY, and this will be the LAST slide of your report.

TITLE Must be approximately 10 words long and should easily convey what your report finding(s) are.

I <u>Introduction</u>- (1-2 sentences)- Introduce your organism and its niche.

Methods (1-2 Sentences)- Method of survival.

**R** Results- (1-2 sentences)- What evidence supports its continued survival?

Example: Because of "M" then "R" occurs, which increases survival.

**D**iscussion- (1 sentence) Convince the reader of your finding(s).

Last Name	# Letters in Full Name	#	Organism	Scientific Name	Chromosome #
	1	1	Adders-tongue	Ophioglossum reticulatum	;1260 !1260
	2	2	Field Horsetail	Equisetum arvense	:216 !216
	3	3	Rattlesnake fern	Botrypus virginianus	:184 !184[2]
	4	4	Carp		:104 !104
A-B	5	5	Red viscacha rat	Tympanoctomys barrerae	:102 !102 [3]
	6	6	Kamraj (fern)	Helminthostachys zeylanica	94
	7	7	Aquatic Rat	Anotomys leander	92[5]
	8	8	Shrimp	Penaeus semisulcatus	86-92 [6]
	9	9	Crab-eating rat (semiaquatic rodent)	Ichthyomys pittieri	92[5]
	10	10	Grape fern	Sceptridium	90
	1	11	Hedgehog Genus Atelerix-African		90
	2	12	Moonworts	Botrychium	90
	3	13	Hedgehog Genus Erinaceus-Woodland		88
	4	14	Nagaho-no-natsu-no-hana-warabi	Botrypus strictus	88
C-D	5	15	Pigeon		80
	6	16	Turkey		80[7]
	7	17	African Wild Dog	Lycaon pictus	78[8]
	8	18	Chicken	Gallus gallus domesticus	78
	9	19	Coyote	Canis latrans	78[8]
	10	20	Dhole	Cuon alpinus	78
	1	21	Dingo	Canis lupus dingo	78[8]
	2	22	Dog	Canis lupus familiaris	78[9]
	3	23	Dove		78[11]
	4	24	Golden Jackal	Canis aureus	78[8]
E-F	5	25	Wolf	Canis lupus	78
	6	26	Maned Wolf	Chrysocyon brachyurus	76
	7	27	Bat-eared Fox	Otocyon megalotis	72[8]
	8	28	Black nightshade	Solanum nigrum	72[12]
	9	29	White-tailed deer	Odocoileus virginianus	70
	10	30	Elk (Wapiti)	Cervus canadensis	68
	1	31	Red Deer	Cervus elaphus	68
	2	32	Gray Fox	Urocyon cinereoargenteus	66[8]
	3	33	Raccoon Dog	Nyctereutes procyonoides	66
	4	34	Chinchilla	Chinchilla lanigera	64 [14]
G-H	5	35	Echidna		63/64
	6	36	Fennec Fox	Vulpes zerda	64[8]
	7	37	Horse	Equus ferus caballus	64
	8	38	Spotted Skunk	Spilogale x	64
	9		Mule		63

	10	40	Donkey	Equus africanus asinus	62
	1	41	Giraffe	Giraffa camelopardalis	62
	2	42	Gypsy moth		62
	3	43	Bengal Fox	Vulpes bengalensis	60
	4	44	American Bison	Bison bison	60
I-L	5	45	Cow	Bos primigenius	60
	6	46	Goat		60
	7	47	Woolly Mammoth	Mammuthus primigenius	58
	8	48	Elephant		56
	9	49	Capuchin Monkey	Cebus x	54[15]
	10	50	Hyrax	Hyracoidea	54 !54[16]
	1	51	Sheep		54
	2		Silkworm	Bombyx mori	54
	3	53	Cotton	Gossypium hirsutum	52[18]
	4	54	Platypus	Ornithorhynchus anatinus	52 [19]
М	5		Kit Fox		50
	6	56	Pineapple	Ananas comosus	50[18]
	7		Striped skunk	Mephitis mephitis	50
	8		Zebrafish	Danio rerio	50[20]
	9	59	Beaver (Eurasian)	Castor fiber	48
	10		Chimpanzee	Pan troglodytes	48[21]
	1	61	Deer Mouse	Peromyscus maniculatus	48
	2	62	Gorilla		48
	3	63	Hare[22][23]		48
	4		Orangutan	Pongo x	48
N	5		Potato	Solanum tuberosum	48[18]
	6		Tobacco	Nicotiana tabacum	48[18]
	7	67	Human	Homo sapiens	46[24]
	8		Reeves's Muntjac	Muntiacus reevesi	46
	9		Sable Antelope	Hippotragus niger	46
	10		Dolphin	Delphinidae Delphis	44
	1	71	Eurasian Badger	Meles meles	44
	2		Rabbit		44
	3		Fossa	Cryptoprocta ferox	42
	4		Oats	Avena sativa	42[18]
O-P	5		Raccoon Dog	Nyctereutes viverrinus	42
	6		Rat	,	42
	7		Rhesus Monkey		42[25]
	8		Wheat	Triticum aestivum	42[18]

	9	79	Wolverine	Gulo gulo	42
	10	-	Beaver (American)	Castor canadensis	40
	1		European Polecat	Mustela putorius	40
	2		Ferret	Mustela putorius furo	40
Q	3		Hyena		40
	4		Mango	Mangifera indica	40[18]
	5		Mouse	Mus musculus	40[26]
	6	86	American Marten	Martes americana	38
	7	87	Beech Marten	Martes foina	38
	8	88		Felis catus	38
	9	89	Coatimundi		38
	10	90	European Mink	Mustela lutreola	38
	1	91	Fisher (animal)		38
	2	92	Lion	Panthera leo	38
	3	93	Oriental Small-clawed Otter	Aonyx cinerea	38
	4	94	Pig		38
R	5		Pine Marten	Martes martes	38
	6	96	Raccoon	Procyon lotor	38[27]
	7	97	Sable	Martes zibellina	38
	8	98	Sea Otter		38
	9	99	Tanuki/Raccoon Dog	Nyctereutes procyonoides all	38
	10	100	Tiger	Panthera tigris	38
	1	101	Earthworm	Lumbricus terrestris	36
	2	102	Long-nosed Cusimanse (mongoose)		36
	3	103	Meerkat	Suricata suricatta	36
	4	104	Red Panda		36
S	5	105	Starfish		36
	6	106	Tibetan sand fox	Vulpes ferrilata	36
	7	107	Yellow Mongoose	Cynictis penicillata	36
	8	108	Porcupine	Erethizon dorsatum	34 [14]
	9	109	Red Fox	Vulpes vulpes	34[8]
	10	110	Alfalfa	Medicago sativa	32[18]
	1	111	American Badger	Taxidea taxus	32
	2	112	European honey bee	Apis mellifera	32
	3	113	Yeast	Saccharomyces cerivisiae	32
	4	114	American Mink	Neovison vison	30
Т	5	115	Pill millipede	Arthrosphaera magna attems	30
	6	116	Bittersweet nightshade	Solanum dulcamara	24[29][30]
	7	117	Husk Tomato	Physalis pubescens	24[31]

	8	118	Silverleaf nightshade	Solanum elaeagnifolium	24[32]
	9	119	Rice	Oryza sativa	24[18]
	10	120	Snail	·	24
	1	121	Bean	Phaseolus sp.	22[18]
	2	122	Virginia Opossum	Didelphis virginiana	22[33]
	3		Cannabis	Cannabis sativa	20
	4	124	Maize	Zea mays	20[18]
U	5	125	Cabbage	Brassica oleracea	18[18]
	6	126	Radish	Raphanus sativus	18[18]
	7	127	Kangaroo		16
	8	128	Barley	Hordeum vulgare	14[18]
	9	129	Pea	Pisum sativum	14[18]
	10	130	Rye	Secale cereale	14[18]
	1	131	Slime Mold	Dictyostelium discoideum	12 [35]
	2	132	Swamp Wallaby	Wallabia bicolor	
	3	133	Nematode	Caenorhabditis elegans	
	4	134	Thale Cress	Arabidopsis thaliana	10
	5	135	Fruit fly	Drosophila melanogaster	08 !8[37]
V	6	136	Hawkweed		08 !8
	7	137	Mosquito	Aedes aegypti	06 !6[38]
	8	138	Spider mite		04 !4–14[39]
	9	139	Jack jumper ant	Myrmecia pilosula	02 !2[40]
	10	140	green algae (chlorophytes)	Chlorophyta	
	1	142	green algae (desmids & stoneworts)	Charophyta	
	2	143	liverworts	Marchantiophyta	
	3	144	hornworts	Anthocerotophyta	
	4	145	mosses	Bryophyta	
W-Z	5	146	club mosses	Lycopodiophyta	
	6	148	ferns, whisk ferns & horsetails	Pteridophyta	
	7	149	cycads	Cycadophyta	
	8	150	ginkgo	Ginkgophyta	
	9	151	conifers	Pinophyta	
	10		gnetophytes	Gnetophyta	
	11	153	flowering plants	Magnoliophyta	

## Robbinsville High School

**Mathematics Department** 

155 Robbinsville-Edinburg Road Robbinsville NJ 08691

Dear Students,

Welcome to AP Calculus AB! Attached you will find a summer packet for math reinforcement for the upcoming school year. This packet should be completed and returned to school on the *first full day of school*. I will give you the answer key on the first day of school. The packet will be **collected** and **graded** as **a 10-point homework grade** based on **completion** and **effort**. Work is required for many of these problems, so unsupported answers will not receive credit.

The packet covers material from Honors PreCalc that is found in Chapters 1 and 2 and Section 3.1 in your textbook. You will probably need to use your textbook or other resources in order to complete this packet. In addition to completing the summer assignment, please review all material in Chapter 1, 2 and 3.1.

The packet itself is only a sampling of concepts and questions that are prerequisite for entering AP Calc. In addition to the packet, Khan Academy is a great place to review limits and assess your understanding. The following lessons in the AP Calc AB course might be helpful to you:

- 1. Limits and Continuity- all lessons
- 2. Differentiation: Definition and Basic Derivative Rules
  - Defining Average and Instantaneous Rates of Change at a Point
  - Defining the Derivative of a Function and Using Derivative Notation
  - Estimating Derivatives of a Function at a Point

Your first test will be sometime during the second week of school and will cover material from this packet *and* Chapters 1,2 and Section 3.1.

If you have any questions while completing the packet, please feel free to email me over the summer at <a href="mailto:ziomek.morgan@rvilleschools.org">ziomek.morgan@rvilleschools.org</a>. I check my email every couple of weeks.

Have a great summer!

Mrs. Ziomek

## PreCalc Review (Ch. 1)

1. Evaluate the following trig values without a calculator:

a) 
$$\cos \frac{\pi}{2} =$$
\_\_\_\_\_\_

b) 
$$\tan \frac{3\pi}{4} =$$
 \_\_\_\_\_\_

a) 
$$\cos \frac{\pi}{2} =$$
 \_\_\_\_\_ b)  $\tan \frac{3\pi}{4} =$  \_\_\_\_\_ c)  $\sin \left(-\frac{\pi}{3}\right) =$  \_\_\_\_\_

e) 
$$\cot \pi =$$

f) 
$$\csc \frac{11\pi}{6} =$$
\_\_\_\_\_

g) 
$$\tan \frac{5\pi}{3} =$$
 \_\_\_\_\_ h)  $\sec \frac{\pi}{4} =$  \_\_\_\_\_

h) 
$$\sec \frac{\pi}{4} =$$

i) 
$$\tan\left(-\frac{\pi}{2}\right) =$$

2. Evaluate the following without a calculator. Give all answers in radians.

c) 
$$\arctan\left(\frac{\sqrt{3}}{3}\right)$$

e) 
$$\arcsin\left(-\frac{\sqrt{2}}{2}\right)$$
 f)  $\arcsin\left(-\frac{1}{2}\right)$ 

f) 
$$\arcsin\left(-\frac{1}{2}\right)$$

h) 
$$\arccos\left(\frac{1}{2}\right)$$

i) 
$$\arccos\left(-\frac{\sqrt{3}}{2}\right)$$
\_\_\_\_\_

j) 
$$\arcsin\left(\sin\frac{2\pi}{3}\right)$$
 \_\_\_\_\_

l) 
$$\arctan\left(\tan\left(-\frac{\pi}{6}\right)\right)$$

m) 
$$\arccos\left(\cos\left(\frac{3\pi}{2}\right)\right)$$

$$n)\cos(\arccos(-5))$$
 \_\_\_\_\_

n) 
$$\cos(\arccos(-5))$$
 \_\_\_\_\_ o)  $\arctan(\tan(\frac{7\pi}{6}))$  \_\_\_\_\_

## Section 2.1: Rates of Change and Limits

Find the limits below. Be sure to show all work and give exact answers.

1) 
$$\lim_{x \to 0} \frac{x^2}{x+5} =$$

2) 
$$\lim_{x\to 5} 6 =$$

3) 
$$\lim_{x\to 3} \frac{(x-4)^2}{x+3} =$$

4) 
$$\lim_{x\to 0} 3x \cos x =$$

$$5) \lim_{x\to 0}\frac{\sin 3x}{6x} =$$

6) 
$$\lim_{x \to -2} \frac{x^2 + x - 2}{x^2 + 5x + 6} =$$

7) 
$$\lim_{x \to 7} \frac{\sqrt{2x-5} - 3}{x-7} =$$

8) 
$$\lim_{x\to 0} \frac{\frac{1}{(x+5)} - \frac{1}{5}}{x} =$$

9) 
$$\lim_{x\to 0}$$
 (  $\ln(\cos(x))$  ) =

10) 
$$\lim_{x \to \pi/2} (e^x \sin(x)) =$$

11) 
$$\lim_{x \to 1^-} \operatorname{int}(x)$$

12) 
$$\lim_{x \to 5} \frac{x^2 - 7x + 10}{x - 5} =$$

13) Use the limits  $\lim_{x\to 3} f(x) = 5$  and  $\lim_{x\to 3} g(x) = -2$  to answer the following:

a) 
$$\lim_{x\to 3} f(x) + g(x) =$$

b) 
$$\lim_{x\to 3} f(x) \cdot g(x) =$$

c) 
$$\lim_{x\to 3} 3f(x) - g(x) =$$

d) 
$$\lim_{x\to 3} \frac{f(x)-5}{g(x)} =$$

14) Use the following diagram to answer the questions:

a) 
$$f(3) =$$

b) 
$$\lim_{x \to 3^{-}} f(x) =$$

c) 
$$\lim_{x \to 3^+} f(x) =$$

$$d) \lim_{x \to 3} f(x) =$$

e) 
$$f(-2) =$$

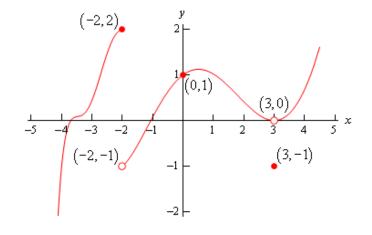
f) 
$$\lim_{x \to -2^{-}} f(x) =$$

$$h) \lim_{x \to -2} f(x) =$$

j) 
$$\lim_{x\to 0^{-}} f(x) =$$

$$\lim_{x\to 0} f(x) =$$

$$n) \lim_{x\to -\infty} f(x) =$$



$$g) \lim_{x \to -2^+} f(x) =$$

i) 
$$f(0) =$$

$$k) \lim_{x\to 0^+} f(x) =$$

$$\mathrm{m)} \ \lim_{x\to\infty} f(x) =$$

15) Given the information below, sketch a possible graph of f(x).

a) 
$$f(x) = 0 \text{ at } x = 2$$

$$\lim_{x \to 4} f(x) = DNE$$

$$crosses \ y - axis \ at \ y = -1$$

$$\lim_{x \to \infty} f(x) = \lim_{x \to -\infty} = -2$$

$$\lim_{x \to 4^+} = -\infty$$

$$f(x) \text{ DNE at } x = -1 \text{ and } x = 4$$

b) 
$$\lim_{x \to 2} f(x) = -1$$
$$\lim_{x \to 4^+} f(x) = -\infty$$
$$\lim_{x \to 4^-} f(x) = \infty$$
$$\lim_{x \to \infty} f(x) = \infty$$
$$\lim_{x \to -\infty} f(x) = 2$$

## Section 2.2: Limits Involving Infinity

Find the limits below.

$$1) \quad \lim_{x \to \infty} \ln x =$$

$$2) \quad \lim_{x \to -\infty} e^{-x} =$$

3) 
$$\lim_{x \to \infty} \frac{4x^4 - 5x^3}{7x^4 + 9x^3} =$$

4) 
$$\lim_{x \to \infty} \frac{3x^3 - x + 1}{x + 3} =$$

5) 
$$\lim_{x \to -\infty} \frac{\sqrt{x^2 - 2}}{x^2 + 6} =$$

6) 
$$\lim_{x \to -\infty} \frac{1 - 7x^2}{x + 5} =$$

$$7) \lim_{x \to 0} \frac{\sin x}{5x}$$

$$8) \lim_{x \to 0} \frac{3(1-\cos x)}{x}$$

9) 
$$\lim_{x\to 0} \frac{\cos x \tan x}{x}$$

10) 
$$\lim_{x \to 2} \frac{3x^2 - 7x + 2}{x^2 + 5x - 14}$$

11) 
$$\lim_{x \to 0} \frac{x^2 - 4}{x + 2}$$

$$12) \lim_{x \to \infty} \frac{2x + \sin x}{x}$$

13) 
$$\lim_{x \to \infty} \frac{x - 6}{x^2 + 2x - 48}$$

14) 
$$\lim_{x \to -\infty} \frac{x^3 + 6x}{\sqrt{x^2 + 5}}$$

15) 
$$\lim_{x \to -4^+} \frac{1}{x+4}$$

16) 
$$\lim_{x \to -\infty} \sqrt[3]{\frac{8+x^2}{8x(x+1)}}$$

17) 
$$\lim_{x \to 4} \frac{\sqrt{x^2 + 9} + -5}{x - 4}$$

$$18) \lim_{x \to 0} \frac{\tan x}{x}$$

## Section 2.3: Continuity

1) Find all points of discontinuity of the functions below and state the type of discontinuity. If the function has no points of discontinuity, then specify over what intervals it is continuous.

a) 
$$f(x) = \frac{x+1}{x^2 - 4}$$

b) 
$$f(x) = \frac{x^2 - 8x + 15}{x^2 - 25}$$

c) 
$$f(x) = 3x + 9$$

$$d) \qquad f(x) = \sqrt{2x - 7}$$

e) 
$$f(x) = \frac{8-2x}{x^2-16}$$

f) 
$$f(x) = \frac{x}{|x| - 3}$$

- 2) At what x-coordinate on  $f(x) = \frac{x^2 x 6}{x^2 9}$  is there a removable discontinuity?
- 3) Find a value for a so that function is continuous.

a) 
$$f(x) = \begin{cases} 4 - x^2, & x < -1 \\ ax^2 - 1, & x \ge -1 \end{cases}$$

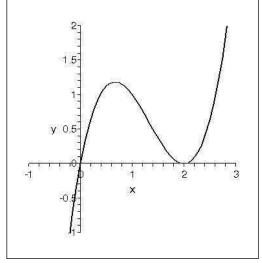
b) 
$$f(x) = \begin{cases} x^2 + x + a, & x < 1 \\ x^3, & x \ge 1 \end{cases}$$

## Section 2.4: Rates of Change and Tangent Lines

- 1) Find the average rate of change for the function  $f(x) = 5x^2 3$  over the interval [0, 2].
- 2) Find the average rate of change for the function  $f(x) = e^{2x-3} x$  over the interval [1, 2]. Leave answer in terms of e.
- 3) Find the average rate of change for the function  $f(x) = \cos x 4$  over the interval  $[0, \pi]$ .
- 4) Consider the function  $f(x) = x^2 4x$ .
  - a) Find the slope of the line tangent to f(x) at the point (1, -3).
  - b) Write the equation for the line tangent to f(x) at (1, -3).
  - c) Write the equation for the line normal f(x) at (1, -3).
- 5) Consider the function  $f(x) = \sqrt{x+4}$ .
  - a) Write the equation for the line tangent to f(x) at x = 0.
  - b) Write the equation for the line normal to f(x) at x = 0.
- 6) A coffee shop opens at 5:00 am. The number of coffee cups, f(x), sold per hour can be modeled by the function  $f(x) = 3x^3 2x^2 + 6$ , where x is the number of hours the shop has been open. Find the average rate of change between the hours of 7:00am and 11:00am and **explain** what this rate represents.

7) Explain the difference between average rate of change and instantaneous rate of change.

8) Below is a graph of the function  $f(x) = x(x-2)^2$ .



line positive or negative?

a) Draw a line tangent to the f(x) at x = 1. Is the slope of the tangent

b) Draw a secant line through the points (1, 1) and (2.8, 1.792) on f(x). Draw another secant line through the points (1, 1) and (0.6, 1.176). Which secant line is the best approximation of the line tangent to f(x) at (1, 1)? Why?

9) Determine the slope of each curve at x = a.

a) 
$$y = x^2 - x - 2$$

b) 
$$y = \frac{1}{x+2}$$

10) At what points, if any, are the tangents to the graph  $f(x) = x^2 - 3x$  horizontal?

11) Clara is hovering above the asteroid Elmy. She drops a rock, and the position (in feet) of the rock is modeled by the equation  $f(x) = -3x^2 + 800$  (x measured in seconds)

a) What is the equation for the instantaneous velocity of the rock?

b) What is the instantaneous velocity of the rock at 8 seconds?

## Section 3.1: Derivative of a Function

- 1) What are the two definitions you can use to find a derivative?
- 2) Use the definition of a derivative to find f'(x) for each function (NO SHORTCUTS)

a) 
$$f(x) = \frac{2}{x-3}$$
 at  $x = 2$ .

b) 
$$f(x) = 4x^2 + x - 5$$
 c)  $f(x) = \sqrt{x-3}$ 

c) 
$$f(x) = \sqrt{x-3}$$

3) Find the equations of the tangent and normal lines at x = 2, given the information below:

$$f(2) = 6$$
,  $f'(0) = 4$  and  $f'(2) = -3$ 

- 4) Find the left-hand and right-hand derivatives in order to determine if the derivative exists when x = 1 for the function  $f(x) = \begin{cases} 2x^2 + 1, & x < 1 \\ 3x + 6, & x \ge 1 \end{cases}$
- 5) Find the derivative of  $y = 2x^2 13x + 5$  and use it find the equation of the line tangent to the curve at x=3.

**Robbinsville High School** 

**Mathematics Department** 

155 Robbinsville-Edinburg Road Robbinsville NJ 08691

Dear Students,

Welcome to AP Calculus BC! Attached you will find a summer packet for math reinforcement for the upcoming school year. This packet should be completed and returned to school on the *first full day of school*. I will give you the answer key on the first day of school. The packet will be **collected** and **graded** as **a 10-point homework grade** based on **completion** and **effort**. Work is required for many of these problems, so unsupported answers will not receive credit.

The packet covers material from Honors PreCalc that is found in Chapters 1 and 2 and Section 3.1 in your textbook. You will probably need to use your textbook or other resources in order to complete this packet. In addition to completing the summer assignment, please review all material in Chapter 1, 2, 3.1, and 3.2.

The packet itself is only a sampling of concepts and questions that are prerequisite for entering AP Calc. In addition to the packet, Khan Academy is a great place to review limits and assess your understanding. The following lessons in the AP Calc AB course might be helpful to you:

- 1. Limits and Continuity- all lessons
- 2. Differentiation: Definition and Basic Derivative Rules
  - Defining Average and Instantaneous Rates of Change at a Point
  - Defining the Derivative of a Function and Using Derivative Notation
  - Estimating Derivatives of a Function at a Point
  - Connecting Differentiability & Continuity

Your first test will be sometime during the second week of school and will cover material from this packet *and* Chapters 1,2 and Sections 3.1 and 3.2.

If you have any questions while completing the packet, please feel free to email me over the summer at ziomek.morgan@rvilleschools.org. I check my email every couple of weeks.

Have a great summer!

Mrs. Ziomek

## PreCalc Review (Ch. 1)

1. Evaluate the following trig values without a calculator:

a) 
$$\cos \frac{\pi}{2} =$$
\_\_\_\_\_\_

b) 
$$\tan \frac{3\pi}{4} =$$
 \_\_\_\_\_\_

a) 
$$\cos \frac{\pi}{2} =$$
 \_\_\_\_\_ b)  $\tan \frac{3\pi}{4} =$  \_\_\_\_\_ c)  $\sin \left(-\frac{\pi}{3}\right) =$  \_\_\_\_\_

d) 
$$\sin \frac{3\pi}{2} =$$
 \_\_\_\_\_\_\_ e)  $\cot \pi =$  \_\_\_\_\_\_

e) 
$$\cot \pi =$$

f) 
$$\csc \frac{11\pi}{6} =$$
\_\_\_\_\_

g) 
$$\tan \frac{5\pi}{3} =$$
 \_\_\_\_\_ h)  $\sec \frac{\pi}{4} =$  \_\_\_\_\_

h) 
$$\sec \frac{\pi}{4} =$$

i) 
$$\tan\left(-\frac{\pi}{2}\right) =$$

2. Evaluate the following without a calculator. Give all answers in radians.

c) 
$$\arctan\left(\frac{\sqrt{3}}{3}\right)$$

e) 
$$\arcsin\left(-\frac{\sqrt{2}}{2}\right)$$
 f)  $\arcsin\left(-\frac{1}{2}\right)$ 

f) 
$$\arcsin\left(-\frac{1}{2}\right)$$

h) 
$$\arccos\left(\frac{1}{2}\right)$$

i) 
$$\arccos\left(-\frac{\sqrt{3}}{2}\right)$$

j) 
$$\arcsin\left(\sin\frac{2\pi}{3}\right)$$
 \_\_\_\_\_

l) 
$$\arctan\left(\tan\left(-\frac{\pi}{6}\right)\right)$$

m) 
$$\arccos\left(\cos\left(\frac{3\pi}{2}\right)\right)$$

$$n)\cos(\arccos(-5))$$

n) 
$$\cos(\arccos(-5))$$
 \_\_\_\_\_ o)  $\arctan(\tan(\frac{7\pi}{6}))$  \_\_\_\_\_

## Section 2.1: Rates of Change and Limits

Find the limits below. Be sure to show all work and give exact answers.

1) 
$$\lim_{x \to 0} \frac{x^2}{x + 5} =$$

2) 
$$\lim_{x\to 5} 6 =$$

3) 
$$\lim_{x \to 3} \frac{(x-4)^2}{x+3} =$$

4) 
$$\lim_{x\to 0} 3x \cos x =$$

$$5) \lim_{x\to 0}\frac{\sin 3x}{6x} =$$

6) 
$$\lim_{x \to -2} \frac{x^2 + x - 2}{x^2 + 5x + 6} =$$

7) 
$$\lim_{x \to 7} \frac{\sqrt{2x-5} - 3}{x-7} =$$

8) 
$$\lim_{x\to 0} \frac{\frac{1}{(x+5)} - \frac{1}{5}}{x} =$$

9) 
$$\lim_{x \to 0} (\ln(\cos(x))) =$$

10) 
$$\lim_{x \to \pi/2} (e^x \sin(x)) =$$

11) 
$$\lim_{x \to 1^-} \operatorname{int}(x)$$

12) 
$$\lim_{x \to 5} \frac{x^2 - 7x + 10}{x - 5} =$$

13) Use the limits  $\lim_{x\to 3} f(x) = 5$  and  $\lim_{x\to 3} g(x) = -2$  to answer the following:

a) 
$$\lim_{x\to 3} f(x) + g(x) =$$

b) 
$$\lim_{x\to 3} f(x) \cdot g(x) =$$

c) 
$$\lim_{x\to 3} 3f(x) - g(x) =$$

d) 
$$\lim_{x\to 3} \frac{f(x)-5}{g(x)} =$$

14) Use the following diagram to answer the questions:

a) 
$$f(3) =$$

b) 
$$\lim_{x \to 3^{-}} f(x) =$$

c) 
$$\lim_{x \to 3^+} f(x) =$$

$$d) \lim_{x \to 3} f(x) =$$

e) 
$$f(-2) =$$

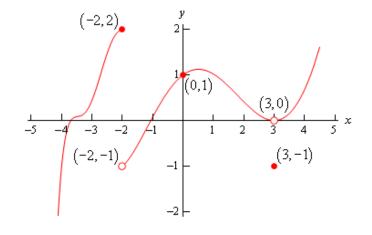
f) 
$$\lim_{x \to -2^{-}} f(x) =$$

$$h) \lim_{x \to -2} f(x) =$$

j) 
$$\lim_{x\to 0^{-}} f(x) =$$

$$\lim_{x\to 0} f(x) =$$

$$n) \lim_{x\to -\infty} f(x) =$$



$$g) \lim_{x \to -2^+} f(x) =$$

i) 
$$f(0) =$$

$$k) \lim_{x\to 0^+} f(x) =$$

$$\mathrm{m)} \ \lim_{x\to\infty} f(x) =$$

15) Given the information below, sketch a possible graph of f(x).

a) 
$$f(x) = 0 \text{ at } x = 2$$

$$\lim_{x \to 4} f(x) = DNE$$

$$crosses \ y - axis \ at \ y = -1$$

$$\lim_{x \to \infty} f(x) = \lim_{x \to -\infty} = -2$$

$$\lim_{x \to 4^+} = -\infty$$

$$f(x) \text{ DNE at } x = -1 \text{ and } x = 4$$

b) 
$$\lim_{x \to 2} f(x) = -1$$
$$\lim_{x \to 4^+} f(x) = -\infty$$
$$\lim_{x \to 4^-} f(x) = \infty$$
$$\lim_{x \to \infty} f(x) = \infty$$
$$\lim_{x \to -\infty} f(x) = 2$$

## Section 2.2: Limits Involving Infinity

Find the limits below.

$$1) \quad \lim_{x \to \infty} \ln x =$$

$$\lim_{x\to-\infty}e^{-x}=$$

3) 
$$\lim_{x \to \infty} \frac{4x^4 - 5x^3}{7x^4 + 9x^3} =$$

4) 
$$\lim_{x \to \infty} \frac{3x^3 - x + 1}{x + 3} =$$

5) 
$$\lim_{x \to -\infty} \frac{\sqrt{x^2 - 2}}{x^2 + 6} =$$

6) 
$$\lim_{x \to -\infty} \frac{1 - 7x^2}{x + 5} =$$

$$7) \lim_{x \to 0} \frac{\sin x}{5x}$$

$$8) \lim_{x \to 0} \frac{3(1-\cos x)}{x}$$

9) 
$$\lim_{x\to 0} \frac{\cos x \tan x}{x}$$

10) 
$$\lim_{x \to 2} \frac{3x^2 - 7x + 2}{x^2 + 5x - 14}$$

11) 
$$\lim_{x \to 0} \frac{x^2 - 4}{x + 2}$$

$$12) \lim_{x \to \infty} \frac{2x + \sin x}{x}$$

13) 
$$\lim_{x \to \infty} \frac{x - 6}{x^2 + 2x - 48}$$

14) 
$$\lim_{x \to -\infty} \frac{x^3 + 6x}{\sqrt{x^2 + 5}}$$

15) 
$$\lim_{x \to -4^+} \frac{1}{x+4}$$

16) 
$$\lim_{x \to -\infty} \sqrt[3]{\frac{8+x^2}{8x(x+1)}}$$

17) 
$$\lim_{x \to 4} \frac{\sqrt{x^2 + 9} + -5}{x - 4}$$

$$18) \lim_{x \to 0} \frac{\tan x}{x}$$

# Section 2.3: Continuity

1) Find all points of discontinuity of the functions below and state the type of discontinuity. If the function has no points of discontinuity, then specify over what intervals it is continuous.

a) 
$$f(x) = \frac{x+1}{x^2-4}$$

b) 
$$f(x) = \frac{x^2 - 8x + 15}{x^2 - 25}$$

c) 
$$f(x) = 3x + 9$$

$$f(x) = \sqrt{2x-7}$$

e) 
$$f(x) = \frac{8-2x}{x^2-16}$$

f) 
$$f(x) = \frac{x}{|x| - 3}$$

- 2) At what x-coordinate on  $f(x) = \frac{x^2 x 6}{x^2 9}$  is there a removable discontinuity?
- 3) Find a value for a so that function is continuous.

a) 
$$f(x) = \begin{cases} 4 - x^2, & x < -1 \\ ax^2 - 1, & x \ge -1 \end{cases}$$

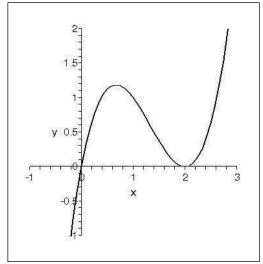
b) 
$$f(x) = \begin{cases} x^2 + x + a, & x < 1 \\ x^3, & x \ge 1 \end{cases}$$

# Section 2.4: Rates of Change and Tangent Lines

- 1) Find the average rate of change for the function  $f(x) = 5x^2 3$  over the interval [0, 2].
- 2) Find the average rate of change for the function  $f(x) = e^{2x-3} x$  over the interval [1, 2]. Leave answer in terms of e.
- 3) Find the average rate of change for the function  $f(x) = \cos x 4$  over the interval  $[0, \pi]$ .
- 4) Consider the function  $f(x) = x^2 4x$ .
  - a) Find the slope of the line tangent to f(x) at the point (1, -3).
  - b) Write the equation for the line tangent to f(x) at (1, -3).
  - c) Write the equation for the line normal f(x) at (1, -3).
- 5) Consider the function  $f(x) = \sqrt{x+4}$ .
  - a) Write the equation for the line tangent to f(x) at x = 0.
  - b) Write the equation for the line normal to f(x) at x = 0.
- 6) A coffee shop opens at 5:00 am. The number of coffee cups, f(x), sold per hour can be modeled by the function  $f(x) = 3x^3 2x^2 + 6$ , where x is the number of hours the shop has been open. Find the average rate of change between the hours of 7:00am and 11:00am and **explain** what this rate represents.

7) Explain the difference between average rate of change and instantaneous rate of change.

8) Below is a graph of the function  $f(x) = x(x-2)^2$ .



a) Draw a line tangent to the f(x) at x = 1. Is the slope of the tangent line positive or negative?

b) Draw a secant line through the points (1, 1) and (2.8, 1.792) on f(x). Draw another secant line through the points (1, 1) and (0.6, 1.176). Which secant line is the best approximation of the line tangent to f(x) at (1, 1)? Why?

9) Determine the slope of each curve at x = a.

a) 
$$y = x^2 - x - 2$$

b) 
$$y = \frac{1}{x+2}$$

10) At what points, if any, are the tangents to the graph  $f(x) = x^2 - 3x$  horizontal?

11) Clara is hovering above the asteroid Elmy. She drops a rock, and the position (in feet) of the rock is modeled by the equation  $f(x) = -3x^2 + 800$  (x measured in seconds)

a) What is the equation for the instantaneous velocity of the rock?

b) What is the instantaneous velocity of the rock at 8 seconds?

# Section 3.1: Derivative of a Function

- 1) What are the two definitions you can use to find a derivative?
- 2) Use the definition of a derivative to find f'(x) for each function (NO SHORTCUTS)

a) 
$$f(x) = \frac{2}{x-3}$$
 at  $x = 2$ .

b) 
$$f(x) = 4x^2 + x - 5$$
 c)  $f(x) = \sqrt{x-3}$ 

c) 
$$f(x) = \sqrt{x-3}$$

3) Find the equations of the tangent and normal lines at x = 2, given the information below:

$$f(2) = 6$$
,  $f'(0) = 4$  and  $f'(2) = -3$ 

- 4) Find the left-hand and right-hand derivatives in order to determine if the derivative exists when x = 1 for the function  $f(x) = \begin{cases} 2x^2 + 1, & x < 1 \\ 3x + 6, & x \ge 1 \end{cases}$
- 5) Find the derivative of  $y = 2x^2 13x + 5$  and use it find the equation of the line tangent to the curve at x=3.

# Section 3.2: Differentiability

This is NEW material! Refer to p.109-113 in your textbook to help fill in the blanks and complete the problems. Feel free to use other resource (like a friend or the internet) as well.

# How a derivative might fail to exist:

- Corner occurs if the one-sided derivatives are \_\_\_\_\_\_ numbers.
- Cusp occurs if one-side yields \_\_\_\_\_ and the other is \_\_\_\_\_
- Vertical tangents occur if BOTH one-sided limits are the same and both equal ± \_\_\_\_\_
- Discontinuity occurs at jumps or holes.
- 1) The functions below fail to be differentiable at x = 0. Tell whether the problem is a corner, a cusp, a vertical tangent, or a discontinuity. Graphs are helpful too.

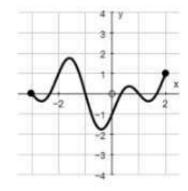
a) 
$$f(x) = x^{\frac{2}{5}}$$

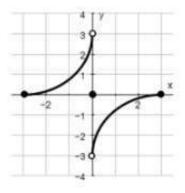
b) 
$$f(x) = 6x - 2|x| + 3$$

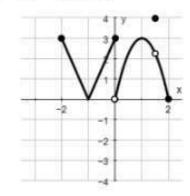
c) 
$$f(x) = 2 - \sqrt{x}$$

For #2-5, the graph of a function over a closed interval D is given. At what domain points does the function appear to be...

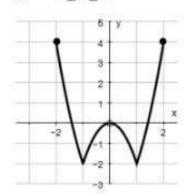
- a) Differentiable?
- b) Continuous but not differentiable?
- c) Neither continuous nor differentiable?



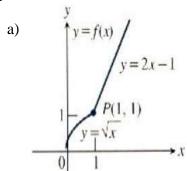


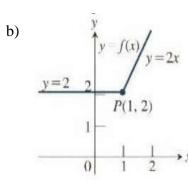


D: -2≤x≤2



6) Compare the right-hand and left-hand derivatives (no shortcuts) to show that the function is not differentiable at point P.





7) Determine all values of x for which the function is differentiable. Graphs are helpful. Remember, if it has a derivative at x = a then the graph MUST be continuous at x = a. For points at which the function is not differentiable, give a reason.

a) 
$$f(x) = |x-2| + 3$$

b) 
$$f(x) = \sqrt{x^2}$$

c) 
$$f(x) = \sqrt[3]{2x-4} + 10$$

d) 
$$f(x) = \frac{x+2}{x^2-8x+15}$$

e) 
$$f(x) = \sqrt[5]{x^2} = (x^2)^{\frac{1}{5}} = x^{\frac{2}{5}}$$

$$f(x) = \begin{cases} 3x, & x \le 3 \\ x^3, & x > 3 \end{cases}$$

## **AP Chemistry Summer Assignment 2023**

The purpose of this summer assignment is to review the nomenclature and problem solving skills you learned in Honors Chemistry so that we can begin the year with AP labs and topics. You can plan on spending approximately 10 hours to complete this summer assignment. It is due the first day you return to class in person or online. It is worth 15 points. You will receive late credit if it is late. Even though it may be easier for you to do this assignment now, I suggest you set the assignment aside until August so that this review process prepares you for the AP chemistry course.

After school is out in June you should organize your notes and prepare a review sheet or file, if you have not already done so. This sheet or file should include at a minimum; the conversion factors, a periodic table, a list of polyatomic ions, a list of the diatomic molecules, a list of common acids and bases with names and formulas (know the strong acids and bases), the processes used in composition stoichiometry calculations, and the equations associated with solutions, acids and bases. If you were in my class you should have a complete set of notes from class and if you have not already done so you may want to print out the online notes provided. I will be archiving the work in July so you may not have access to it. Prepare this review sheet or file while the information is still fresh. Then relax in July.

Begin the AP Chemistry summer assignment in early August. I suggest an hour a day. Since an answer key will be provided, the work you do to solve the problems will be far more important than the answer. Continue to use dimensional analysis and report your answers in correct significant figures and units. You may either type or pint your answers. There will be a **quiz** based on the summer assignment within the first two two weeks of school.

You will need to know the name, symbol and location on the periodic table of a list of elements. You will be asked to take a **periodic table quiz** within the first two weeks of school. It is important that you memorize these elements in the periodic table because they will appear frequently throughout the course and you will not have time to search for the elements. The elements you need to know are; all the elements in the s block and the p block, all the transition metals in the 4<sup>th</sup> period and Mo, W, Pd, Pt, Ag, Au, Cd and Hg.

Upon return to class you will need <u>1 composition notebook</u> for formal lab reports. You will also need a **notebook or a ring binder** to organize the notes you will receive throughout the course and **pen**, **pencils**.

## **AP Chemistry Summer Assignment**

**Directions** Show your work for each problem. To receive full credit for problems on the AP exam you have to show your work in a manner that the reader will understand. Therefore use dimensional analysis where appropriate. If the problem is equation based, write the equation, substitute appropriate values for variables and calculate your answer. Use units and significant figures in all your work. You will need to convert names to formulas, and write the equations for each reaction associated with a problem. You may type your work and answers. If you write your work and answers on separate paper, write your name on the paper and upload a picture of it. Include the problem number and letter associated with your work and answer for each question or problem. Write legibly.

If I can not read it I will not grade it.

- **1.** An element consists of 1.40 % of an isotope with a mass of 203.973 amu, 24.10 % of an isotope with a mass of 205.9745 amu, 22.10 % of an isotope with a mass of 206.9757 amu and 52.40 % of an isotope with a mass of 207.9766 amu. What is the average atomic mass of this element?
- **2.** The element rhenium has two naturally occurring isotopes,  $^{185}$  Re and  $^{187}$  Re, with an average atomic mass of 186.207 amu. Rhenium is 62.60 %  $^{187}$  Re with an atomic mass of 186.956 amu. What is the atomic mass of  $^{185}$  Re?
- **3.** Ascorbic acid, Vitamin C ( $C_6H_8O_6$ ), is an essential vitamin. It can not be stored in the body. A typical vitamin C tablet contains 500.0 mg of ascorbic acid. **a.** How many moles of ascorbic acid are 500.0 mg? **b.** How many molecules of ascorbic acid does this represent. **c.** How many carbon atoms are there in 500.0 mg of ascorbic acid?
- **4.** Aspartame ( $C_{14}H_{18}N_2O_5$ ) is an artificial sweetener that tastes 160 times sweeter than sugar when dissolved in water. It is marketed as Nutra-Sweet. **a.** How many moles of aspartame are there in 10.0 g of the compound? **b.** How many molecules does this represent? **c.**How many hydrogen atoms are there in 10.0 g of aspartame?
- **5.** What is the percent composition by mass of acrylic acid  $(C_3H_4O_2)$ ? Acrylic acid is the monomer from which acrylic plastics are made.
- **6.** What is the empirical formula of a compound that contains by mass; 56.79 % carbon, 6.56 % hydrogen, 28.37 % oxygen and 8.28 % nitrogen?
- **7.** An organic compound contains 49.31 % C and 43.79 % oxygen by mass with the remainder as hydrogen. The molar mass of this compound is 146.1 g/mol. **a.** What is the empirical formula of this compound? **b.** What is the molecular formula of this compound?

- **8.** Iron (III) oxide reacts with aluminum to form iron metal and aluminum oxide. **a.** What mass of each reactant is required to form 15.0 g of iron? **b.** What is the maximum mass of aluminum that could be produced?
- **9.** Ammonia (NH<sub>3</sub>) reacts with oxygen to form nitrogen monoxide and water. All the materials involved in this reaction are gasses. 0.100 moles of each of the reactants are initially introduced to a 5.0 liter reaction vessel. **a.** What would be the quantity of each gas in the container upon completion of the reaction? **b.** What would be the partial pressure of each gases on the reaction vessel upon reaction completion if the temperature of the system is 105 °C? **c.** What is the total pressure of all the gases on the reaction vessel at 105 °C?
- **10.** What mass of each product is produced when 1.0 Kg of calcium phosphate is combined with 1.0 Kg of concentrated sulfuric acid. (concentrated sulfuric acid solution is 98 % sulfuric acid by mass)
- **11.** Aspirin  $(C_9H_8O_4)$  is produced by reacting salicylic acid  $(C_7H_6O_3)$  with acetic anhydride  $(C_4H_6O_3)$  according to the balanced reaction ...  $C_7H_6O_3 + C_4H_6O_3 \rightarrow C_9H_8O_4 + HC_2H_3O_2$  **a.** What mass of acetic anhydride is needed to react completely with 1.00 x 10  $^2$  grams of salicylic acid? **b.** What is the maximum mass of aspirin that could be produced? **c.**In another experiment a student reacted 1.50 g of salicylic acid with 2.00 g of acetic anhydride. The yield was 1.50 g aspirin. What is the percent yield of this reaction?
- **12.** A 752 g sample of iron ore is heated with excess carbon to form pure iron and carbon dioxide. The ore contains iron (III) oxide and other impurities. 453 g of pure iron are obtained from this sample. **a.** What is the mass percent of iron (III) oxide in the ore? Assume that iron(III) oxide is the only source of iron in the ore and the reaction is 100 % efficient. **b.** What is the volume of carbon dioxide at 25 °C and 95.0 KPa produced in this reaction.
- **13.** What is the molarity of a solution that is prepared by dissolving 5.623 g of sodium bicarbonate in enough water to make a 250.0 ml solution?
- **14.** What is the molarity of a solution that is prepared by dissolving 184.6 mg of potassium dichromate in enough water to make a 500.0 ml solution?
- **15.** What is the concentration of each ion in a solution that is prepared by dissolving 5.00 g of ammonium chloride in enough water to make a 500.0 ml solution.
- **16.** What is the concentration of each ion in the solution when 1.00 g of potassium phosphate is dissolved in enough water to make a 250.0 ml solution?
- **17.** Which of the following solutions of strong electrolytes would result in the lowest freezing point; 100.0 ml of 0.100 M sodium hydroxide, 50.0 ml of 0.200 molar barium chloride or 75.0 ml of 0.150 molar sodium phosphate?

- **18.** To what volume does 10.0 g of silver nitrate need to be diluted to prepare a 0.25 M solution of silver nitrate?
- **19.** A solution is prepared by dissolving 10.8 g of ammonium sulfate in enough water to make 100.0 ml of stock solution. A 10.0 ml sample of this stock solution is added to 50.0 ml of water. What are the concentrations of ammonium and sulfate ions in this final solution?
- **20.** Which of the following compounds are likely to be soluble in water; aluminum nitrate, magnesium chloride, rubidium sulfate, nickel (II) hydroxide, lead (II) sulfide, magnesium hydroxide and/or iron (IIi) phosphate?
- **21.** Write the formulas of the reactants for each combination. Then write the balanced, ionic and net ionic equations for each combination of reactants that results in the formation of a product. If no product is formed write "no reaction". **a.** phosphate and potassium nitrate, **b.** ammonium sulfate and barium nitrate, **c.** Iron (II) sulfate and potassium chloride, **d.** calcium chloride and sodium sulfate, **e.** potassium sulfide and nickel0 (II) nitrate, **f.** sodium hydroxide and nitric acid, **g.** lead (II) nitrate and sodium chloride, **h.** copper (II) chloride and sodium hydroxide.
- **22.** What mass of sodium chromate is required to precipitate all the silver ions in 75.0 ml of 0.100 M silver nitrate.
- **23.** What is the mass of the product produced when 50.0 ml of 0.200 M aluminum nitrate is added 200.0 ml of 0.100 M potassium hydroxide.
- **24. a.** How many grams of product can be prepared by the reaction of 100.0 ml of 0.20 M silver nitrate with 100.0 ml of 0.15 M calcium chloride? **b.** What is the concentration of each ion that remains in solution?
- **25.** 75.0 ml of 0.250 M hydrochloric acid is added to 225 ml of 0.0550 M barium hydroxide. **a.** How much product is formed? **b.** What is the concentration of each ion that remains in solution?
- **26.** A 25.00 ml sample of hydrochloric acid is titrated to the phenolphthalein endpoint with 24.16 ml of 0.106 M sodium hydroxide. What is the molarity of the acid?
- **27.** A 10.0 ml sample of vinegar, an aqueous solution of acetic acid ( $C_2H_3OH$ ) is titrated with 16.58 ml of 0.5062 M sodium hydroxide to the equivalence point. **a.** What is the molarity of the acetic acid? **b.** If the density of the vinegar is 1.006 g/cm<sup>3</sup> what is the mass percent of acetic acid in the vinegar?
- **28.**A particular balloon is designed by its manufacturer to be inflated to a volume of no more than 2.5 L. If the balloon is filled with 2.0 L of helium at sea level and is released and rises to an

altitude where the atmospheric pressure is 500. mm Hg will the balloon burst? Assume the temperature remains constant. Support your answer.

- **29.** A flask that can withstand an internal pressure of 2500 torr, but no more, is filled with a gas at 21.0 °C to a pressure of 758 torr. At what temperature will this tank burst if it is heated?
- **30.** A bicycle tire is filled with air to a pressure of 100. psi at a temperature of 19 °C. After riding the bike on asphalt on a hot day the temperature of the tire increases to 58 °C. The volume of the tire increases by 4.0 %. What is the pressure of the air in the tire?
- **31.** A sealed balloon is filled with 1.00 L of helium at 23 °C and 1.00 atm. The balloon rises to a point in the atmosphere where the pressure is 220. torr and the temperature is 31 °C. What is the change in the volume of the balloon as it ascends from 1.00 atm to a pressure of 220. Torr?
- **32.** Methane (CH<sub>4</sub>) is the main component of marsh gas. Heating methane in the presence of sulfur produces carbon disulfide and hydrogen sulfide as the only products. **a.** What is the maximum quantity of each product that is produced when 120. g of methane is reacted with an equal mass of sulfur. **b.** What volume does the methane occupy at 23 °C and 740. mm Hg?
- **33.** Commercial hydrogen peroxide  $(H_2O_2)$  solutions are explosively decomposed by traces of transition metal ions such as manganese or iron. When peroxide decomposes it forms water and oxygen. **a.** What volume of pure oxygen collected at 27 °C and 746 torr would be generated by the decomposition of 125 g of a 50 % by mass hydrogen peroxide solution. **b.** If the water formed by this reaction condenses what is the volume of the liquid water formed?
- **34.** A mixture of 1.00 g hydrogen and 1.00 g helium is placed in a 1.00 liter container at 27 °C. What is the partial pressure of each gas in the container and what is the total pressure of the gasses in the container?
- **35.** Small quantities of hydrogen gas can be prepared in the laboratory by placing zinc metal in aqueous hydrochloric acid. Typically the hydrogen gas is bubbled through water for ease of collection and it becomes saturated with water vapor. Suppose 240. ml of hydrogen gas is collected over water at 30. °C and a barometric pressure of 1.032 atm. (The vapor pressure of water at 30 ° is 32 torr) **a.** What is the partial pressure of the hydrogen gas? **b.** How many grams of zinc were reacted to generate this volume of hydrogen? **c.** What is the minimum volume of a 50 % by mass solution of hydrochloric acid required to react with all of the zinc? Assume the density of the hydrochloric acid solution is 1.00 g/ml. **d.** To ensure all the zinc reacts, 25 % more hydrochloric acid is used than the minimum required. What is the concentration of the ions in solution after the reaction is complete?
- **36.** The rate of effusion of a particular gas was measured and found to be 24.0 ml/min. Under the same conditions the rate of effusion of methane (CH<sub>4</sub>) gas is 47.8 ml/min. What is the molar mass of the unknown gas?

- **37.** What is the pH of each of the following solutions? **a.**  $4.4 \times 10^{-5}$  M hydrochloric acid, **b.**  $3.35 \times 10^{-6}$  M sodium hydroxide solution, **c.** distilled water, **d.**  $3.6 \times 10^{-4}$  M sulfuric acid solution, and **e.**  $2.13 \times 10^{-2}$  M barium hydroxide solution?
- **38.** What is the pOH of each of the solutions in problem 37?
- **39.** A solution is prepared by adding 50.0 ml of 0.050 M hydrochloric acid to 150.0 ml of 0.10 M nitric acid. What is the concentration of each ion in this solution?
- **40.** 20.0 ml of nitric acid is titrated with 20.65 ml of a 0.115 M sodium hydroxide solution. What is the molarity of the acid?
- **41.** 20.0 ml of a 0.0985 M solution of sodium hydroxide is added to 18.0 ml of a 0.103 M solution of hydrochloric acid. What is the pH of the final solution?

# AP Computer Science A Summer Packet 2023

Welcome to AP Computer Science A! In the coming year, you will be expanding on Java skills that you learned from Computer Science II, and will develop your problem-solving and critical thinking skills as well. This is a fun and challenging course and is a great way to get introduced to computer programming.

Your summer work consists of 3 assignments: getting started with an online Udacity lesson, researching some Java vocabulary, and checking out the AP College Board AP Computer Science A website.

# Assignment #1:

To get you started on the right foot, you will work through one lesson of a free online Java tutorial offered by Udacity.com. For this, you will need a computer with internet access. In this tutorial, there are short videos that you would complete from Lesson 1 to 4. As you watch the video, you will be doing small exercises along with the tutorial.

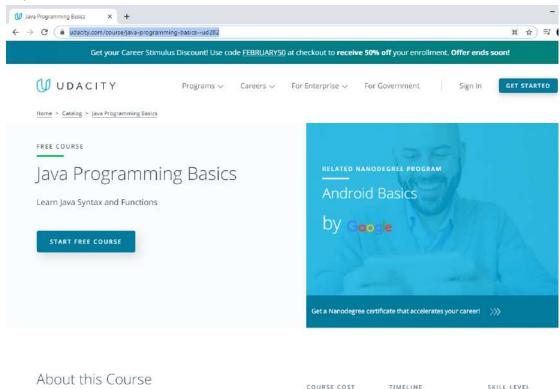
Your progress is tracked as you go. You will need to <u>complete this entire lesson by the first day of school</u>. The more you learn this summer, the lighter your load will be during the school year.

If you have questions or troubles with these tutorials, please contact me,

Mrs. Radhika Vaidyanathan @ vaidyanathan.radhika@rvilleschools.org

# Steps to Get Started:

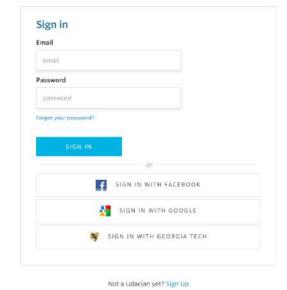
1. <a href="https://www.udacity.com/course/java-programming-basics--ud282">https://www.udacity.com/course/java-programming-basics--ud282</a> using either Internet Explorer or Chrome.



2. Select "Start Free Course" (blue button)

Notice that by selecting the "Start Free Course" button, you will have access to the instructor videos and exercises, but not some of the other features. This is OK... and it's free.

3. Sign-in using your school Google account by clicking "Sign in with Google" (@rvilleschools.org). You'll want to log-in repeatedly to complete this assignment (and may want to continue to view tutorials throughout the year if you find them helpful)!



- 4. Get started! You will have videos to watch and practice some exercise problems from Lesson 1 to 4. (You do not have to complete Lesson 5).
- 5. It will be helpful to have Eclipse installed in your computer at home. We will be using this throughout the course in school and homework will be assigned as well. If your parents control your ability to install things onto your computer, you may need their help.

# Assignment #2:

It is time to start learning some key works in Java. Think about what you've learned from the Udacity course and/or do an online search to find definitions for these key Java programming-related vocabulary words (remember the definition may be different or more specific than how the word is used in everyday language).

- 1. Primitive Data Types
- 2. Source code
- 3. Object code / executable
- 4. Byte code
- 5. Statement
- 6. Input
- 7. Output
- 8. Debugging
- 9. Syntax error
- 10. Run-time error
- 11. Logic error/semantics
- 12. Method
- 13. Class
- 14. Main method
- 15. What is a program?
- 16. What are high level and low-level programming language? Give example for each one.

# Assignment #3:

Visit <a href="www.collegeboard.org">www.collegeboard.org</a> and find the "AP Computer Science A" home page. (Do not choose AP Computer Science Principle as this is a different course.) Save this page as a "favorite" for future reference. Make sure that you can log in to the website as well. Save your user name and password as we will be using a lot of collegeboard resources in class. Open the course description and read the section on the exam. Please feel free to read any other section of the course description, but don't feel intimidated! You are just starting to learn this subject, much of the material may not make much sense yet!!

Answer the following questions (look at "The Exam" section):

- 1. How many multiple-choice questions are there on the APCS exam? How long do you have to complete these questions? So, how much time per question?
- 2. How many free response questions are there? How long is this section, and how much time do you have per question?
- 3. What percentage of the test deals with logic? What are the other categories included on the exam?

# AP French Summer Assignment 2023

## Les Instructions:

The Googleclassroom code is **c25krm2**. Please do all activities completely and to the best of your ability. I will be using this work to assess your skills upon your return in September. You will receive a test grade for this work and will have a test in September on the work as well. If you have any questions please email me at <a href="mainto:rimerman.julie@rvilleschools.org">rimerman.julie@rvilleschools.org</a>.

## Honor code:

All students are required to abide by the honor code that forbids them from cheating, lying and stealing, both within the academic world and as members of the general society. Therefore, you are expected to complete all assignments on your own, without consulting native speakers or abuse the use of a translator. Your work should represent what **YOU** can do. If you heavily rely on a translator (dictionary or electronic), this class will be extremely difficult for you and you will not be successful on the exam. It is in your best interest that you complete this work to the best of **YOUR** ability.

# Task 1: Familiarize yourself with the AP exam

Go to the website below and read about the exam. https://apcentral.collegeboard.org/courses/ap-french-language-and-culture/exam

## Task 2: Grammar

Complete the two grammar packets. The first one is on present tense and the second one is on past tense. The packets will be checked and corrected together at the beginning of the school year.

# Task 3: Listening

You are required to spend at least **5 hours** listening to authentic French this summer, in 30 minute increments. You may listen to the radio, CDs, podcasts, YouTube, TV, movies, etc. Use the attached listening log for each activity. This log will be collected at the beginning of the year.

# Task 4: Speaking

To improve your French speaking proficiency, you will submit 8 two minute recordings for the whole summer. You may speak about current events, pop culture, what you did last week, what you will do next week, etc. This assignment is broad and you may talk about anything as long as it is appropriate and in FRENCH. Use your cellphone, laptop, or any other recording device to record yourself speaking. You should practice speaking spontaneously, which means do not write down your speech ahead of time. Decide on a topic and just start speaking! Pauses and hesitations will be natural. Save these recordings and submit them all together on google classroom by the first day of school.

# L'écoute

Selectionner:	TV Radio	Podcast	YouTube	Autre		
URL:						
Résumé / Con	ımentaires s	sur ce que	vous avez c	ompris (en	vos prop	res mots)

## **AP Government Summer Work**

**Objective:** The purpose of this summer work is to begin to identify different political ideologies as well as tie different ideals that people develop in the United States. We will also be reading, researching, and annotating the most fundamental document that we have: The Constitution. The reason for the summer work is to get a head start on our course studies and allow for time to work on making connections as well as work on different writing prompts that are required for the exam. We are beginning with Units 4 and 5 in the course since they will line up with the election cycles that are taking place during the Fall. DON'T WORRY! We will transition back to Units 1, 2, and 3 in late October.

#### Part I. Unit 4.

Students will be asked to read and annotate Chapters 10, 11, and 12 in the textbook(Pages 328-405), *American Government: Stories of a Nation*. At the end of each chapter, complete multiple choice questions 1-10 for Chapters 10,11, and 12. We will review material during the first week of school and then have an assessment on Unit 4 after that. Annotations and responses will be turned in on Google Classroom

Work will be graded on the following criteria

- Effective annotations including definitions of terms and connections of those terms to the material
- Accurate responses to the Multiple Choice Questions for all three chapters

#### Part II. The Constitution

The Constitution will be the central document that we will be focusing on in our studies throughout this course. It is imperative that this document is understood completely and able to be applied in responses throughout the course. During the summer, you are expected to read through the Constitution and annotate the various parts of the document. Use the attached documents for the Articles of the Constitution and the Amendments to complete the annotations. Annotations and question responses will be turned in on Google Classroom.

Annotations will be graded on the following criteria:

- Accuracy in the annotations for each part of the Constitution
- Appropriate reasoning in responses to questions concerning the Constitution
- Effective use of the Constitution in responses

#### Part III. Amendments

- Students will fill out a worksheet that explains the 27 Amendments to the Constitution as well as briefly explain a Supreme Court Case that ties to that Amendment. They will complete that worksheet and turn it in via Google Classroom.
- The Amendments will be graded on the following criteria:
  - Accuracy in the explanation of the Amendment
  - Accurate explanation of the Supreme Court case and how it ties to the application of the Amendment to our society

All assignments will be posted on Google Classroom. The Code for the Summer work is c6uh7np

Due Dates for the Summer work will be posted on Google Classroom after we have our meeting in June.

If you have any questions, please feel free to reach out to me at <a href="https://hutchinson@rvilleschools.org">https://hutchinson@rvilleschools.org</a>

# AP Language and Composition Summer Assignment 2023 Robbinsville High School

## Part 1 - Weekly Reading & Annotating

## Reading:

Read a collection of 10 opinion-editorial articles. You should be finding one or more articles from a reputable publication every week. By the first day of class, you should have a collection of 10 articles with annotations as a hard copy to turn in with notes directly on the articles (additional pages of notes or a typed set of notes will not be accepted). Notes should be reflecting all of the elements of <u>SOAPS</u>. If elements of SOAPS are implied versus explicit, be sure to note that. This collection of articles must be turned in on the FIRST DAY OF SCHOOL.

## Part 2 - Assigned Reading:

Obtain *The Grammar Bible* by Michael Strumpf. Understanding and practicing the form and structure of Standard Written English will be assessed within the first class session (the first day the class meets). This is usually in the form of a quiz.

## Part 3 - Assigned Reading:

Obtain *The Tragedy of Macbeth* by William Shakespeare and conduct an active reading. Active reading is designed to improve comprehension and retention by increasing the reader's involvement in the text. Responses must be in the form of notes taken directly in the text. You are asked to comment on the rhetorical strategies and use of language including character motivation, imagery and symbolism, and tone and mood. Also, offer personal reactions to the message of the author. This is due on the first day of class and will be assessed within the first class session (the first day the class meets). This is usually in the form of a quiz.

## Part 4 - Assigned Reading:

Obtain *The Language of Composition Third Edition* by Shea, Scanlon, Aufses, and Harowitz Pakiewicz. Read and create notes for Chapters 1 - 4. Pay particular attention to close reading strategies, the three appeals, and the three forms of writing (rhetorical analysis, synthesis, and argument).

## Part 5 - Definition of Terms

Rhetorical device study broadens the scope of stylistic and syntactical strategies that writers employ. These terms should be used to help you analyze all of the work you will have read over the summer and the pieces you will be reading during the school year. Know these terms for the start of the first full week of school. Quizzes on these terms will occur intermittently throughout the first three marking periods of the school year. Terms and definitions can be found on Google Classroom. Here is the join code: u44hjgh

**Dynamic Character** 

For this year's summer reading assignment, you will be tasked to read **TWO** (2) full texts to prepare for AP Literature this coming year. After reading each of the books, you will complete the assignments listed on the next page.

## **BOOKS**

- 1. <u>How to Read Literature like a Professor: For Kids by Thomas C. Foster OR How to Read Literature Like a Professor by Thomas C. Foster\*</u>
- 2. The Joy Luck Club by Amy Tan

\*The original version is longer with examples from adult fiction. The kids version covers the same strategies, but it is much shorter and uses examples from YA and children's literature. I am totally fine with you using whichever works better for you. Here's a <u>digital version</u> of the original if you'd prefer not to purchase it.

## **ASSIGNMENTS**

Double Entendre

1) Define and memorize the following AP Lit terms:

## AP Literature & Composition Literary Terms to Know

Lyric Poetry Simile Exposition Sonnet Rising Action Metaphor **Epigram** Personification Climax Meter Synecdoche **Falling Action Epigraph** Metonymy Denouement Hyperbole Foil character Allegory Polysyndeton Diction Round character Paradox **Syntax** Flat character Tone Oxymoron Contrast Imagery Mood Foreshadow Sensory Imagery Prose Onomatopoeia Pun Parallelism Allusion Figurative Language

Static Character

2) In a table like the sample below, identify **10** different applications of any of the literary terms in the first two columns above used in *The Joy Luck Club*. Provide a brief explanation of the author's use of the literary device and how it enhanced your understanding of the writing.

Literary Device	Evidence of Use (Direct Quote from Text)	Explanation	

3) In a table similar to the sample below, identify <u>5</u> methods outlined by Thomas C. Foster in his text *How to Read Literature like a Professor* demonstrated in *The Joy Luck Club*. Be sure to include text evidence. Explain how the chosen method adds to your understanding and analysis of the text.

Method	Evidence of Use (Direct Quote from Text)	Explanation

Please have these assignments completed and ready to use on the first day of class. You will use these tables for assessments that will test your knowledge of the assigned texts and terms.

You will be asked to:

- Closely read passages from *The Joy Luck Club* and answer short and long answer questions
- Identify and define literary devices in a short story
- Conduct a timed write regarding your summer reading work

The in-class assignments will count for roughly 15% of your first marking period grade.

# AP MUSIC THEORY Summer Work 2023

Students are required to read through and take notes on the first seven chapters of *The Musician's Guide to Theory and Analysis*. Notes will be graded upon returning to school. We will quickly run through each chapter to confirm mastery before assessments. If you have any questions about the work over the summer, please feel free to email Mr. Williams at williams.brian@robbinsville.k12.nj.us.

\*\*\*\*Please email Mr. Williams for a PDF version of the textbook chapters you need to read over the summer.

# AP Physics I Summer Work 2023

**(30 Points)** 

Part I: Please complete the packet. Answers will be reviewed in depth during the first week of class followed by an assessment based on the content covered in the packet.

Part II: Join the Summer Work Google Classroom. Classroom Code TBD. There are several online assignments posted there. All assignments should be completed before the first day of class.

## **Kinematics Chapter Questions**

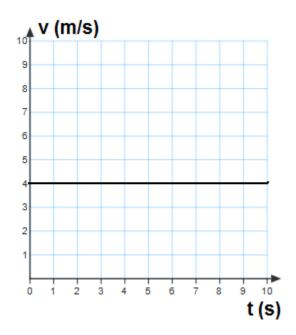
- 1. When you drive a car and take a quick look on the speedometer, what do you see, velocity or speed?
- 2. A ball is thrown vertically up and is caught at the starting point; compare the traveled distance and displacement of the ball.
- 3. Can an object with a constant acceleration reverse its direction of travel? Explain.
- 4. Can an object have a varying speed when its velocity is constant? Explain.
- 5. Is it possible for an object to have average velocity equal to its instantaneous velocity?
- 6. What quantity describes how quickly you change your speed?
- 7. Can an object have a southward velocity and a northward acceleration?
- 8. Is it possible for an object to have average speed equal to the magnitude of its average velocity?
- 9. If you take a quick look at the car's speedometer, what do you read?
- 10. What does the area under the curve on a velocity-versus-time graph represent?
- 11. What does the slope of the curve on a displacement-versus-time graph represent?
- 12. What does the slope of the curve on a velocity-versus-time-time graph represent?

## **Dynamics Chapter Questions**

- 1. What is Newton's First Law? Second Law? Third law?
- 2. Can an object with zero net force acting on it be moving? Explain.
- 3. Discuss how an object's acceleration relates to the direction of its movement.
- 4. A box is placed on a table. Describe the action-reaction forces between the box and the table, the box and the earth's gravitational field, and the table and the earth's gravitational field.
- 5. You are on a train. A baseball that is initially at rest in the aisle suddenly starts moving backwards without an applied force. Apply the definition of an inertial reference frame to explain what is happening.
- 6. Compare/contrast the physically measured quantities of mass and weight.
- 7. What is the normal force?

- 8. Explain the differences between kinetic and static friction without using equations.
- 9. What is a free body diagram and how is it used to solve for the motion of an object?
- 10. Draw the free body diagram for a physics student fast asleep at her desk.
- 11. Draw a free body diagram for a box being pushed across the floor at a constant velocity.
- 12. Draw a free body diagram for a box being accelerated across the floor.
- 13. When there is friction between a moving object and the surface it rests on in the x axis, why is it necessary to first apply Newton's Second Law to the free body diagram in the y direction?
- 14. What assumption is made about moving objects on a surface oriented in the x axis that results in  $F_N = mg$ ?
- 15. A 250 N force acts at an angle of 35° above the horizontal. Resolve this force into its x and y components.
- 16. You are pulling a wagon with a handle that is at an angle  $\theta$  with respect to the horizontal x axis with a force F.
  - a) Explain how you would find how much of F results in acceleration of the wagon in the x axis.
  - b) Assume there is friction between the wagon and the ground. How do you determine the value of the frictional force, using the y component of the applied force F?
  - Instead of pulling the wagon, you push it with the handle oriented at the same angle with respect to the horizontal. Compare the frictional force to when the wagon was being pulled.
- 17. An object is moving with constant velocity downwards on a frictionless inclined plane that makes an angle of  $\theta$  with the horizontal.
  - a) Which direction does the force of gravity act on the object?
  - b) Which direction does the normal force act on the object?
  - c) Which force is responsible for the object moving down the incline?
- 18. Give two reasons why the x-y coordinate axes are rotated to align with the inclined plane.
- 19. For an object to remain at rest, it is necessary for it to be in translational equilibrium. What can you say about the net force on the object for this to be true?
- 20. A box of mass m is suspended by two ropes from a ceiling.
  - a) If the ropes make the same angle with the vertical, what is the tension in each rope?
  - b) The ropes make different angles with the vertical, one being more vertical than the other. Which rope has the greatest tension?
  - c) Why can the ropes that support the box never be perfectly horizontal?

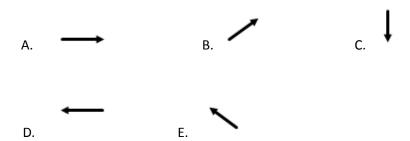
- 1. An object moves at a constant speed of 6 m/s. This means that the object:
  - A. Increases its speed by 6 m/s every second
  - B. Decreases its speed by 6 m/s every second
  - C. Doesn't move
  - D. Has a positive acceleration
  - E. Moves 6 meters every second



- 2. The graph above represents the relationship between velocity and time for an object moving in a straight line. What is the traveled distance of the object at 9 s?
  - A. 10 m
- B. 24 m
- C. 36 m
- D. 48 m E. 56 m
- 3. Which of the following statements is true?
  - A. The object speeds up
  - B. The object slows down
  - C. The object moves with a constant velocity
  - D. The object stays at rest
  - E. The object is in free fall
- 4. What is the velocity of the object at 5 s?
  - A. 1 m/s
- B. 2 m/s C. 3 m/s
- D. 4 m/s E. 5 m/s

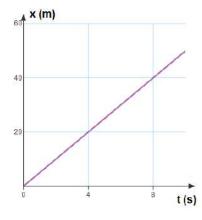


5. A motorbike travels east and begins to slow down before a traffic light. Which of the following is the correct direction of the motorbike's acceleration?



The following graph represents the position as a function of time for a moving object. Use this graph to answer questions 6 and 7.

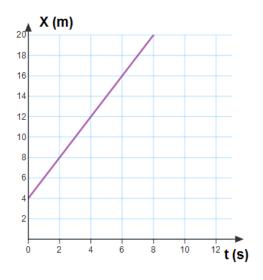
E. 5 m/s



- 6. Which of the following is true?
  - A. The object increases its velocity
  - B. The object decreases its velocity
  - C. The object's velocity stays unchanged
  - D. The object stays at rest
  - E. More information is required
- 7. What is the velocity of the object?
  - A. 4 m/s B. 20 m/s C. 8 m/s D. 40 m/s

- 8. A car and a delivery truck both start from rest and accelerate at the same rate. However, the car accelerates for twice the amount of time as the truck. What is the traveled distance of the car compared to the truck?
  - A. Half as much
  - B. The same
  - C. Twice as much
  - D. Four times as much
  - E. One quarter as much

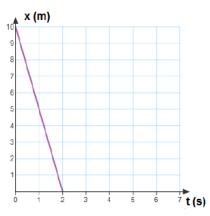
The following graph represents the position as a function of time of a moving object. **Use this graph to answer questions 9 and 10.** 



- 9. What is the initial position of the object?
  - A. 2 m
- B. 4 m
- C. 6 m
- D. 8 m
- E. 10 m
- 10. What is the velocity of the object?
  - A. 2 m/s
- B. 2.5 m/s
- C. 4 m/s
- D. 8 m/s
- E. 10 m/s

The following graph represents the position as a function of time of a moving object. **Use this graph for** 

questions 11 and 12.



11. What is the initial position of the object?

A. 2 m

B. 4 m

C. 6 m D. 8 m

- E. 10 m
- 12. What is the velocity of the object?

A. 5 m/s

B. -5 m/s

C. 10 m/s

D. -10 m/s

E. 0 m/s

13. Which of the following is a vector quantity?

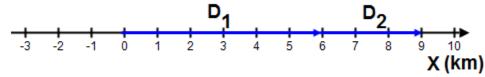
A. Speed

B. Time

C. Traveled distance

D. Velocity

E. Area



14. Starting from the origin, a person walks 6 km east during first day, and 3 km east the next day. What is the net displacement of the person from the initial point in two days?

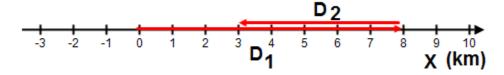
A. 6 km, west

B. 3 km, east

C. 10 km, east

D. 5 km, west

E. 9 km, east



The diagram above illustrates a person who, starting from the origin, walks 8 km east during first day, and 5 km west the next day. Use it to answer questions 18 and 19.

15. What is the net displacement of the person from the initial point in two days?

A. 6 km, east

B. 3 km, east

C. 10 km, west

D. 5 km, west

E. 9 km, east

16. What is the traveled distance of the person from the initial point in two days?

A. 13 km

B. 3 km

C. 10 km

D. 5 km

E. 9 km



The diagram above illustrates a car that, starting from the origin, travels 4 km east and then 7 km west. Use it to answer questions 17 and 18.

17. What is the net displacement of the car from the initial point?

A. 3 km, west

B. 3 km, east C. 4 km, east

D. 7 km, west

E. 7 km east

18. Starting from the origin, a car travels 4 km east and then 7 km west. What is the traveled distance of the car from the initial point?

A. 3 km

B. 3 km

C. 4 km

D. 7 km

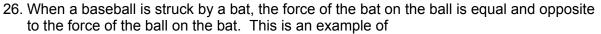
E. 11 km

- 19. When a platypus sleeps on a table, the net force on it is
  - A. zero
  - B. directed upward
  - C. directed downward
  - D. directed in the horizontal direction
  - E. more information is required
- 20. When the engines on a rocket ship in deep space, far from any other objects, are turned off, it will
- A. slow down and eventually stop
- B. stop immediately
- C. turn right
- D. move with constant velocity
- E. turn left
- 21. In order for a rocket ship in deep space, far from any other objects, to move in a straight line with constant speed it must exert a net force that is
  - a. proportional to its mass
  - b. proportional to its weight
  - c. proportional to its velocity
  - d. zero
  - e. proportional to its displacement
- 22. If a book on the dashboard of your car suddenly flies towards you, the forward velocity of the car must have
  - a. decreased
  - b. increased
  - c. changed direction to the right
  - d. become zero
  - e. changed direction to the left

- 23. Which Newton's law can explain the following statement that we often see on the highway display: "Buckle up –it's the State Law"?
  - A. First Newton's Law
  - B. Second Newton's Law
  - C. Third Newton's Law
  - D. Gravitational Law
  - E. None from the above
- 24. A spacecraft travels at a constant velocity in empty space far away from any center of gravity. Which of the following about the force applied on the spacecraft is true?



- A. The applied force is equal to its weight
- B. The applied force is slightly greater than its weight
- C. The applied force is slightly less that its weight
- D. The applied force must perpendicular to its velocity
- E. No applied force is required to maintain a constant velocity
- 25. A boy rides a bicycle at a constant velocity. Which of the following about the net force is true?
  - A. There is a net force acting in the velocity direction
  - B. There is a net force acting opposite to the velocity direction
  - C. The net force is zero
  - D. There is a net force acting perpendicularly to the velocity direction
  - E. None from the above



- a. Newton's first law
- b. Newton's second law
- c. Newton's third law
- d. Newton's law of gravitation
- e. None from the above
- 27. If you exert a force F on an object which has a much greater mass than you do, the force which the object exerts on you will
  - a. be of magnitude F and in the same direction
  - b. be of magnitude F and in the opposite direction
  - c. be of much less magnitude than F
  - d. be of much greater magnitude than F
  - e. be zero

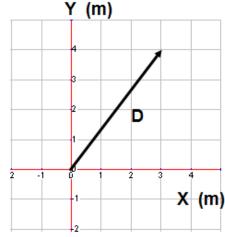




- 28. Newton's third law refers to "action-reaction forces". These forces always occur in pairs and
  - a. sometimes act on the same object
  - b. always act on the same object
  - c. may be at right angles
  - d. never act on the same object
  - e. always act at right angles
- 29. Action-reaction forces are
  - a. equal in magnitude and point in the same direction
  - b. equal in magnitude and point in opposite directions
  - c. unequal in magnitude but point in the same direction
  - d. unequal in magnitude and point in opposite directions
  - e. cancel each other
- 30. Mass and weight
  - a. Both have the same measuring units
  - b. Both have different measuring units
  - c. Both represent force of gravity
  - d. Both represent measure of inertia
  - e. None from the above
- 31. The acceleration due to gravity is higher on Jupiter than on Earth. The mass and weight of a rock on Jupiter compared to that on Earth would be
  - a. same, more
  - b. same, less
  - c. more. more
  - d. more, less
  - e. same, same

A vector of displacement D is placed in X-Y coordinate system shown in the diagram to the right. Use this diagram to answer questions 32 through 34.

- 32. What is the x-component of vector D?
  - A. 2 m
- B. 3 m
- C. 4 m
- D. 5 m
- 33. What is the y-component of vector D?
  - A. 2 m
- B. 3 m
- C. 4 m
- D. 5 m
- 34. What is the magnitude of vector D?
  - A. 2 m
- B. 3 m
- C. 4 m
- D. 5 m



#### **Kinematics in 1-D:**

- 1. An object is moving with an initial velocity of 19 m/s. It is then subject to a constant acceleration of 2.5 m/s<sup>2</sup> for 15 s. How far will it have traveled during the time of its acceleration?
- 2. An object accelerates from rest, with a constant acceleration of  $8.4 \text{ m/s}^2$ , what will its velocity be after 11s?
- 3. An arrow is projected by a bow vertically up with a velocity of 40 m/s, and reaches a target in 3 s. What is the velocity of the arrow just before it hits the target? How high is the target located?
- 4. An object is traveling with a constant velocity of 3.0 m/s. How far will it have gone after 4.0 s?
- 5. An object accelerates from rest to a velocity of 34 m/s over a distance of 70 m. What was its acceleration? An object falls from a height of 490 m. How much time does it take for the object to reach the ground?

## Problems using Newton's 2<sup>nd</sup> Law:

- 1. A physics student pushed a 50 kg load across the floor, accelerating it at a rate of 1.5 m/s². How much force did she apply?
- 2. A 10,000 N net force is accelerating a car at a rate of 5.5 m/s<sup>2</sup>. What is the car's mass?
- 3. A boy pedals his bicycle with a net horizontal force of 227 N. If the total mass of the boy and the bike is 40 kg, how much are they accelerating?
- 4. A 20 kg box on a frictionless surface is subject to two forces: F1 is 100N and acts towards the right, F2 is 20N and acts towards the left. What is the magnitude and direction of the acceleration of the box?
- 5. A boy weighs 285 N. What is his mass?
- 6. Find the weight of a 63 kg table.
- 7. A Martian weighs 17 N on the surface of Mars. Calculate his weight on Earth and on the Earth's moon. Does his mass change along the flight from Mars to the Moon to the Earth? The acceleration due to gravity on Mars is 3.8 m/s² and the acceleration due to gravity on the Moon is 1.6 m/s².

## AP Physics 2 Summer Assignment 2023 (25 total points)

The summer assignment is due by the first day of class (9/6 A Day, 9/7 B Day). If it is turned in anytime after the first day of class, it is late and only half credit will be given. The assignment will not be accepted after the second day of class. It will count toward your 1st marking period grade, and points will be awarded for correct answers only.

To join our AP Physics 2 Google Classroom, use this code: 22f7ppx

- 1. Complete the following Review Assignments. All assignments will be posted in our Google Classroom.
  - a. Kinematics Review (16 pts)
  - b. Dynamics Review (11 pts)
  - c. Work and Energy Review (7 pts)
- 2. Mark your multiple choice answers on the google form I will provide on Google Classroom. For free response questions, show all work and circle your final answer (including units). **Print out and turn in a hard copy of your FRQs on the first day of class.**
- 3. Using 10 m/s<sup>2</sup> for gravitational acceleration is acceptable\*.
- \*MC 3 in the Dynamics packet could have two possible correct answers depending on whether you used 9.8 or 10 for g. I will make sure both answers are counted as correct in the google form.

# Advanced Placement Psychology Summer Assignment 2023

Myers' Psychology for AP By David G. Myers

#### **Requirements**

• All assignments must be submitted via Google Classroom in September.

#### **Google Classroom**

- Join the summer Google Classroom; students must use the rvilleschools.org account to enroll in the classroom.
  - 1. Sign in to Classroom at classroom.google.com.
  - 2. On the Home page, click + .
  - 3. Enter one of the codes in the box and click **Join**.
  - 4. Code:

#### **Summer Assignment**

• These questions/prompts are meant to help you understand the Essential Questions scattered throughout the "Myers' Psychology for AP" textbook. If you can answer these questions, then you are able to explain the main points from the unit.

#### September

• Expect a guiz around the first few days of school.

#### **Late Placement**

• There is no need to email me once you are enrolled in class late unless you have questions about the assignment. The student will follow a schedule that allows 2 weeks to complete all the assignments.

#### **DIRECTIONS: SOCIAL PSYCHOLOGY**

Step 1: Read ALL the units from the PDF File. (You are not provided a textbook until September.)

Step 2: Complete the Essential Questions. Your responses should be supported and detailed (several sentences)

#### Unit 14- Module 74- Pick one to answer

- 1. How do conformity experiments reveal the power of social influence?
- 2. Compare and contrast peripheral route persuasion to central route persuasion.

#### Unit 14- Module 75- Pick one to answer

- 3. How do conformity experiments reveal the power of social influence?
- 4. Compare and contrast normative social influence to informational social influence. 5. Identify how the foot-in-the-door effect explains Milgram's results to his experiment.

#### Watch these video clips

Asch experiment https://www.youtube.com/watch?v=TYIh4MkcfJA&t=2s Milgram experiment https://www.youtube.com/watch?v=yr5cjyokVUs Dangerous conformity https://www.youtube.com/watch?v=vjP22DpYYh8&feature=youtu.be Elevator conformity https://www.youtube.com/watch?v=dDAbdMv14Is

#### Unit 14- Module 76- Pick one to answer

- 1. https://www.psychologytoday.com/us/blog/darwins-subterranean-world/201610/the-psychology-behind the-creepy-clown-phenomenon Read this short article from psychologytoday.com. Then, explain a new perspective gained from reading about deindividuation.
- 2. Why are group polarization and groupthink opposite ideas?
  - a. Provide a unique example of each (not from the textbook).
- 3. https://www.psychologytoday.com/us/blog/adventures-in-divergent-thinking/202006/4-questions-help-you-avoid-groupthink Read this short article from psychologytoday.com. Then, explain a new perspective gained from reading about groupthink.

#### **Unit 14- Module 77- ANSWER ALL THE QUESTIONS**

This section requires you to take an IAT test and view a documentary.

- 1. Watch this documentary- blue eyed, brown eyed. How did these terms apply to the documentary? https://www.pbs.org/wqbh/frontline/film/class-divided/
  - a. in-groups/out-groups
  - b. social identity theory
  - c. self-fulfilling prophecy
  - d. fundamental attribution error
  - e. attitudes
  - f. stereotypes
  - g. Do you believe a role playing scenario like the one you watched is beneficial or harmful to young children? Why?

#### Lastly, watch these clips:

other race effect https://www.youtube.com/watch?v=cUOIW7g7mOw hindsight bias https://www.youtube.com/watch?v=csqOL\_KT4Go

#### (Optional) Take Harvard's Project Implicit Test. How do you feel about your results? Why?

https://implicit.harvard.edu/implicit/takeatest.html
If you wish to proceed, select Race IAT
https://implicit.harvard.edu/implicit/selectatest.html

#### Unit 14- Module 78- Pick one to answer

1. What are the biological factors of aggression? What are the social-cultural factors of aggression? 2. https://www.psychologytoday.com/us/blog/ulterior-motives/201406/the-danger-labeling-others-or-yours elf Read this short article from psychologytoday.com. Then, explain a new perspective gained from reading about aggression and personality.

#### Unit 14- Module 79- Pick one to answer

1. What is altruism and how is deciding to help someone related to the presence of others? 2. Compare and contrast social exchange theory, reciprocity norm, and social responsibility norm. 3. Explain the impact of the bystander effect.

#### **Watch these video clips**

Bystander Effect & the Kitty Genovese Story

#### Unit 14- Module 80- Pick one to answer

- 1. What governs attraction and love, and what are the different kinds of love?
- 2. How do superordinate goals promote cooperation?

#### **Key Terms**

Be prepared to have these terms memorized. A simple definition does not suffice.

# Prejudice & Aggression

1st ed: p. 667-677 2nd ed: p. 780-787

#### **Prejudice**

- Discrimination
- Stereotype
- Ingroup/outgroup bias
- Other-race effect
- Scapegoat theory •

Just-world phenomenon • Frustration-aggression principle

- implicit bias
- explicit bias

#### **Aggression**

• Frustration-aggression principle

#### **Attribution**

1st ed: p. 643-649 2nd ed: p. 754-761

- Attribution theory
- Fundamental attribution error
- Attitude
- Central route persuasion
- Peripheral route persuasion
- Foot-in-the door phenomenon
- Role

• Cognitive dissonance theory

# Conformity & Group Behavior

1st ed: p. 650-663 2nd ed: p. 762-779

- Conformity
- Normative social influence
- Social facilitation
- Social loafing
- Deindividuation
- Group polarization
- Groupthink
- Culture
- Norm
- Personal space

**Additional support: Crash Course** 

• Superordinate goals

- Mirror-image perceptions
- Self-fulfilling prophecy
- Social traps

#### Altruism

1st ed: p. 679-691 2nd ed: p. 798-815

- Bystander effect
- Social exchange
- theory
- Reciprocity norms •
- Social-responsibility ullet
- Liking and Loving •
- Mere exposure effect •
- Passionate love •
- Companionate love Self-disclosure
- equity

videos from Youtube Social Thinking

#### **Social Influence**

https://www.youtube.com/watch?v=UGxGDdQnC1Y

Table of Contents:

Milgram Experiment 0:31

Automatic Mimicry 3:29

Solomon Asch 4:08

Normative Social Influence 5:31

Social Facilitation 5:59

Social Loafing 6:19

Deindividuation, Group Polarization, &

Groupthink 6:50

https://www.youtube.com/watch?v=h6HLDV0T5Q8 Table of Contents:

Social Psychology 01:29

Fundamental Attribution Error 02:04

Dual-Process Theory of Persuasion 03:18

Foot-In-The-Door Phenomenon 04:35

Stanford Prison Experiment 05:12

Cognitive Dissonance 8:08

#### **Prejudice & Discrimination**

https://www.youtube.com/watch?v=7P0iP2Zm6a4 Table of Contents: Prejudice, Stereotyping, & Discrimination 00:00 Prejudice Can Often Be Non-Conscious 02:03 Implicit Association Test or AIT 04:23 Ingroup-Outgroup Phenomenon 07:08 In-Group Bias 07:48

# AP Spanish Language and Culture Summer 2023

## ¡Bienvenidos a la clase de Español AP!

Estoy emocionada que hayas decidido continuar tus estudios de español. Yo seré tu profesora, Sra. Capritti. Te escribo para notificarte sobre la tarea de verano para la clase de Español AP. Hay cinco temas diferentes de la tarea; escribir, escuchar, leer, hablar y conocer a la cultura hispana. Para prepararte y mejorar tus habilidades es importante que practiques lo más posible este verano. Recuerda que la meta para la clase es mejorar fluidez y comprensión del idioma. Todas las tareas están seleccionadas para ayudarte y prepararte para el comienzo de la clase en septiembre.

Espero que te diviertas este verano y aprendas mucho. Si necesitas ayuda, puedes mandarme un mensaje por correo electrónico a

capritti.adrienne@rvilleschools.org

¡Nos vemos en septiembre!

## Las instrucciones:

Please do all activities completely and to the best of your ability. I will be using this work to assess your skills upon your return in September. You will receive a major test grade for this work.

 All work is to be submitted to me weekly on our AP Spanish Summer Google Classroom: a4vawse

# El código de honor:

All students are required to abide by the honor code that forbids them from cheating, lying and stealing, both within the academic world and as members of the general society. Therefore, you are expected to complete all assignments on your own, without consulting native speakers or abuse the use of a translator. Your work should represent what **YOU** can do. If you heavily rely on a translator (dictionary or electronic), this class will be extremely difficult for you and you will not be successful on the exam. It is in your best interest that you complete this work to the best of **YOUR** ability.

# Tarea 1: Familiarize yourself with the exam

Go to the website below and read about the exam.

https://apstudents.collegeboard.org/courses/ap-spanish-language-and-culture?spanlang

Look at the tips from the College Board.

https://apstudent.collegeboard.org/apcourse/ap-spanish-language/exam-tips

After you have read through everything, write a short summary (100 words) in <u>English</u> of what you have learned about the exam. Include why you are taking AP Spanish, some ideas of how you will be successful, what are your hopes, areas of concerns, etc.

Post your summary on Google Classroom by Sunday, June 25<sup>th</sup>.

# Tarea 2: Reading/Writing

To improve your Spanish reading comprehension and writing skills, you will read 8 news articles in Spanish. Identify new words that you learn and use them in original sentences. Use the provided form at the end of this document to record the articles you have read and write your summaries. Your articles must cover the following themes:

La economía, Los derechos humanos, El entretenimiento (música, cine, arte, etc.), Los días festivos, El medio ambiente, La política, Las ciencias, La tecnología, La inmigración, Los deportes

Use the following websites to find your articles:

www.bbcmundo.com

www.elpais.com

www.univision.com

www.un.org/spanish/News

www.eluniversal.com.mx/noticias.html

www.prensaescrita.com

www.veintemundos.com/en/

One article summary is to be submitted to Sra. Capritti on Google Classroom each week by 11:59pm on Sunday. The first due date is <u>Sunday</u>, <u>July 9th</u> and the last should be submitted by <u>Sunday</u>, <u>August 27th</u>.

## Tarea 3: Listening

You are required to listen to authentic Spanish this summer, in 30 minute increments. You may listen to the radio, CDs, podcasts, YouTube, TV, movies, Netflix programs, etc. Use the attached listening log for each activity.

Here are some websites you may find interesting:

https://www.goodhousekeeping.com/life/entertainment/g34240808/best-spanish-shows-on-netflix/

https://www.babbel.com/en/magazine/5-best-podcasts-for-spanish-language-learners

http://www.notesinspanish.com/

http://www.rtve.es/radio/radio-exterior/

http://www.20minutos.es/

http://www.vmetv.com/

Listening logs are to be submitted to Sra. Capritti on Google Classroom each week by 11:59pm on Sunday. The first due date is <u>Sunday</u>, <u>July 9th</u> and the last should be submitted by <u>Sunday</u>, <u>August 27th</u>.

### Tarea 4: Grammar

As an AP Spanish student, you should be familiar with the tenses listed below. You should know how to form each tense as well as how to use each one. You must master the following tenses in order to do well on the exam and improve your proficiency and fluency in the language: *present*, *preterit*, *imperfect*, *future*, *conditional*, *present subjunctive*, *imperfect subjunctive*. You will have a test the first week of school on the regular verb tenses listed above.

http://todo-claro.com/e\_index.php

http://studyspanish.com/

http://www.spaleon.com/

https://conjuguemos.com/

# Tarea 5: Speaking

To improve your Spanish speaking proficiency, you will submit <u>two minute</u> recordings weekly. You may speak about current events, pop culture, what you did last week, what you will do next week, etc. This assignment is broad and you may talk about anything as long as it is appropriate and in SPANISH. Use your cellphone, laptop, or any other recording device to record yourself speaking. You should practice speaking spontaneously, which means <u>do not</u> write down your speech ahead of time. Decide on a topic and just start speaking! Pauses and hesitations will be natural.

Recordings are to be submitted to Sra. Capritti on Google Classroom each week by 11:59pm on Sunday. The first due date is <u>Sunday</u>, <u>July 9th</u> and the last should be submitted by <u>Sunday</u>, <u>August 27th</u>.

\*\*On the next page, you will find the forms you need to complete the reading and listening activities. ALL work must be completed in <a href="#SPANISH">SPANISH</a> and submitted on Google Classroom.

1	Noticias en español
1. Título y autor	
2. Fecha	
	1
5. Tema	
6. Vocabulario	
10 palabras nuevas	Definiciones o sinónimos en español
7. Escribe 5 oraciones orig 1 2	
3.	
4	
5	
8. Resumen de 60 palabras	s (en tus propias palabras)
_	
_	

Nombre \_\_\_\_\_\_ Fecha \_\_\_\_\_

Γu opinión, r	eacción, y co	nexión a tu	vida (60 pal	abras)	
_					
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Nombre	Fecha		_ Escuchar	
Selecciona: TV Radio Podcast You	Tube Otro_	Cana	l	
o URL:		_		
Nombre de programa:				
Resumen / Comentarios por l palabras)	lo menos	60 palabras	(en tus propias	

<sup>\*</sup>Adapted from summer work created by Ruth Graves

# AP Stat Summer Work 2023

THE RESULTS ARE PRETTY CONCLUSIVE, IT SEEMS THAT 75.8% OF THE 65.2% OF GPs WHO BOTHERED TO VOTE WERE 29.3% HAPPY WITH 14.2% OF THE PROPOSALS...AND THE REST WEREN'T SURE!



Part 1: Read and take notes/outline chapter 1: Data Analysis

\*to be completed in your AP stats notebook

Part 2: Chapter 1 Book Practice

Part 3: 2 Previous AP Free Response Questions

Packet Due Date: Hard copy due first day of class

Be prepared for a test on chapter 1 on the third day of class.

This packet will count for a 30 point axis grade for both

This packet will count for a 30 point quiz grade for both completion and accuracy.

# Part 2: Book Practice

this models the amount of work you will have assigned for each chapter throughout the year

- to be handed in/all work shown
- check answers in the back of the book as you go

**Pages 7-8** #1-9 odd and 10 **Pages 24-30** #13-23 odd, 27, 29, 33, 35, 40-43 **Pages 47-54** #45, 49, 51, 55, 59, 63, 65, 69, 77, 80-85 all **Pages 75-80** #87, 89, 91, 95, 97, 101-105 odd, 109-115 odd, 121, 123-126 all

# Part 3: "FRAPPY" Free Response AP Problem. . . Yay!!

The following problems are taken from an actual Advanced Placement Statistics Examination. Your task is to generate a complete, concise statistical response in 15 minutes (or less). You will be graded based on the AP rubric. After grading, keep this problem in your files for your AP Exam preparation.

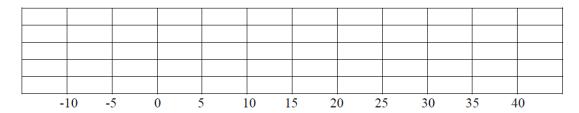
1. A consumer advocate conducted a test of two popular gasoline additives, A and B. There are claims that the use of either of these additives will increase gasoline mileage in cars. A random sample of 30 cars was selected. Each car was filled with gasoline and the cars were run under the same driving conditions until the gas tanks were empty. The distance traveled was recorded for each car.

Additive A was randomly assigned to 15 of the cars and additive B was randomly assigned to the other 15 cars. The tank of each car was filled with the gasoline and the assigned additive. The cars were again run under the same driving conditions until the tanks were empty. The distance traveled was recorded and the difference in the distance with the additive minus the distance without the additive for each car was calculated.

The following table summarizes the calculated differences. Note that negative values indicate less distance was traveled with the additive than without the additive.

Additive	Values below Q1	Q1	Median	Q3	Values above Q3
A	-10, -8, -2	1	3	4	5, 7, 9
В	-5, -3, -3	-2	1	25	35, 37, 40

A. On the grid below, display parallel boxplots (showing outliers, if any) of the differences of the two additives.



Show all of your work. Indicate clearly the methods you use.

B. Two ways that the effectiveness of the gasoline additive can be evaluated are by looking at either
<ul> <li>the <u>proportion</u> of cars that have increased gas mileage when the additive is used in those cars.</li> </ul>
OR
• the <u>mean increase</u> in gas mileage when the additive is used in those cars.
<ul> <li>i. Which additive, A or B, would you recommend if the goal is to increase gas mileage in the <u>highest proportion</u> of the cars? Explain your choice.</li> </ul>
ii. Which additive, A or B, would you recommend if the goal is to have the <u>largest mean</u> increase in gas mileage? Explain your choice.

The graph below displays the scores of 32 students on a recent exam. Scores on this exam ranged from 64 to 95 points.

- (a) Describe the shape of this distribution.
- (b) In order to motivate her students, the instructor of the class wants to report that, overall, the class's performance on the exam was high. Which summary statistic, the mean or the median, should the instructor use to report that overall exam performance was high? Explain.
- (c) The midrange is defined as  $\frac{\text{maximum} + \text{minimum}}{2}$ . Compute this value using the data on the preceding page.

Is the midrange considered a measure of center or a measure of spread? Explain.

#### Hello APUSH students!

Welcome to AP US History! I am very excited to have you in class this year. We will be learning quite a bit about American History, as there are 9 units in this course. During each unit, we will discuss historical figures, events, and themes, all while building our writing and historical thinking skills. The course has been designed to challenge and push students to become better readers and historians by the end of the school year. To keep up with our busy schedule of 9 units, you will be completing notes and assignments for Units 1 and 2 over the summer. All of these assignments can be found and completed in our Summer Google Classroom page. In addition to summer assignments, you will also be able to find our course syllabus, learning objectives for Units 1 and 2, and Cornell notes. Please explore this information to prepare yourself for this school year.

Starting in July, you will have an assignment due every week. For your notes assignments, please read the attached American Pageant PDF chapters and fill out your notes, Cornell style. This will require you to take notes, name important terms and dates, and summarize chapters and their themes. Along with notes, you will find a review assignment at the end of each unit. These vary from open-ended questions, to organizers, or Short Answered Questions (SAQs). We will review Units 1 and 2 when we come into school in September.

The join code for our Summer Google Classroom page is: Obk6qhS

Please reach out to me if you have any questions. Have a great summer!

Ms. Fleck Fleck.kelly@rvilleschools.org



# **Readings**

**Suggested Reading:** (If you are serious about doing well in this course, reading ONE the following texts will greatly help you on your way to a 5!)

- 1. Jared Diamond's Guns, Germs, and Steel
- 2. Jared Diamond's Collapse
- 3. Tom Standage's A History of the World in 6 Glasses

#### **REQUIRED READING:** (Assignment information on pages 2&3)

- 1. Ancient History Review
- 2. Strayer's Ways of the World (textbook)
  - a. Chapters 7, 8, 9 & 10

# **Assignments**

- 1. Ancient History Review on Google Classroom
- 2. Strayer's Ways of the World: Chapters 7, 8, 9 & 10

It is essential that you complete these assignments to the best of your ability. These chapters will be covered less in class to make room for all the chapters we must get through. If you do not take this work seriously, you will not be prepared for the start of the year and will fall behind in a class that moves at a VERY fast pace.

#### Requirements:

- All assignments must be submitted via Google Classroom.
- Assignments need to be thoroughly completed and submitted on time.
- Late assignments will not be accepted.
- If summer work is incomplete, students are ineligible to remain in the class.
- Send questions to Mr. Armstrong <u>karmstrong@rvilleschools.org</u>

#### **Google Classroom**

- All work will be submitted through *Google Classroom*. Students must use the rvilleschools.org account to enroll in the *AP World Summer 2023 Classroom*. To do this, follow the steps below:
  - 1. Sign in to Classroom at classroom.google.com
  - 2. On the Home page, click + in the upper right corner
  - 3. Enter the join code below in the box and click Join.
  - 4. Code: **t22qz3x**

<u>Due Dates</u> - Submit your completed work through Google Classroom any time before the due date below. Do NOT submit work while it is in progress, only submit work when you have completely finished the assignment.

- 1. Ancient History Review August 1
- 2. Ways of the World: Chapters 7, 8, 9 & 10 September 1

#### **Other Information:**

- TEST There will be a TEST <u>at the beginning of the school year</u>. The test date will be announced on Google Classroom in advance. I will create questions from any content found within Chapters 7-10 of the textbook and the *Prologue: History before 1200 CE* reading from the Ancient History Review assignment. While assigned supplemental resources such as videos are helpful to fully understand a topic, you will NOT be tested on the videos. This will be a challenging assessment and only students who have seriously prepared will succeed. If you are looking to get through your summer work as quickly/easily as possible, you have the wrong attitude and should probably remove yourself from this course. AP World History is a demanding class that will require the time commitment of an honors level college student. Each chapter should be read at least 2-3 times to fully prepare for the rigor of exams in this
- Beginning of the Year Assignment In September, you will be asked to reflect back on your summer work experience. Essentially, you will be tasked to make meaningful connections between what you learned while completing the assignment and your prior knowledge/other parts of your life. In preparation for this assignment, it will be helpful to keep notes on how the information presented relates to you.

## AP World History: Modern Summer Work

Academic Integrity - This is an AP course; you must abide by the school's academic integrity
policy at all times. You MAY NOT work with anyone on this assignment, nor may you copy
words/ideas from other sources without proper documentation or use AI based programs
such as ChatGTP to generate your responses. This assignment must be completed in your
own words.

# **Assignment 1 - Ancient History Review**

Since this course, AP World History: Modern, begins around 1200 CE, your summer work is designed to provide necessary historical context of the world before 1200 CE. The Ancient History Review is the first part of your summer work and is divided into the follow three different eras:

- The World Before Civilization: the first people to the Agricultural Revolution
- First Wave Civilizations (aka river civilizations)
- Second Wave Civilizations ( aka classical civilizations)

Directions and specific details about this part of your summer work can be found on the *AP World Summer 2023* Google Classroom.

# Assignment 2 - Strayer's Ways of the World

The second part of your summer work, chapter 7-10 from Ways of the World, will help you continue to build necessary historical context beyond the Ancient world. This part of your summer work will focus on the centuries immediately before the official start of this course (1200 CE). Below you will find the assignment details and directions. You can also find these directions on the *AP World Summer 2023* Google Classroom.

As you read and take notes in preparation for the test on the first day of class, you are required to complete two separate assignments for each chapter.

- 1. What is the Significance? Using complete sentences, explain why each term is important. To do this you will need to go beyond defining the term by explaining why it is significant to the part of history it occurred in. While your answers should include an explanation of the term, it should also identify any other key people, places, events or terms that relate to it, as well as an explanation to how it left a lasting impact on history. If you simply define the term, you will not get credit.
  - a. Neatly organize this assignment in ONE Google Doc
  - b. Title the Doc: AP world *Significance* YOUR last name (SAMPLE: AP World *Significance* Smith)
  - c. Clearly label each chapter
  - d. Number each term starting at 1 for each chapter
  - e. Submit completed work through Google Classroom
- 2. **Big Picture Questions** Completely respond to each question with a minimum of 2-3 paragraphs. Use examples/evidence from the textbook to support your answers. Cite specific page numbers for the evidence/examples you use.
  - a. Neatly organize this assignment in ONE Google Doc (separate from *What is the Significance?* assignment)
  - b. Title the Doc: AP world *Big Picture* YOUR last name (SAMPLE: AP World *Big Picture* Smith)
  - c. Clearly label each chapter
  - d. Begin each response with the number and question exactly as it appears in the textbook
  - e. Submit completed work through Google Classroom

#### Assignment information by chapter

The page numbers below indicate where you can find the *What is the Significance?* terms and *Big Picture Questions* for each required chapter. There is a unit introduction (p.272-279) that you should read first. Also, at the end of each chapter you will find *Documents* and *Visual Resources* that should be included in your reading as well.

- Chapter 7 p. 311
  - o Terms 14 (in total)
  - Questions 5 (in total)
- Chapter 8 p. 354-355
  - o Terms 18 (in total)
  - Questions 4 (in total)
- Chapter 9 p. 397
  - o Terms 20 (in total)
  - Questions 5 (in total)
- Chapter 10 p. 446-447
  - Terms 17 (in total)
  - Questions 4 (in total)