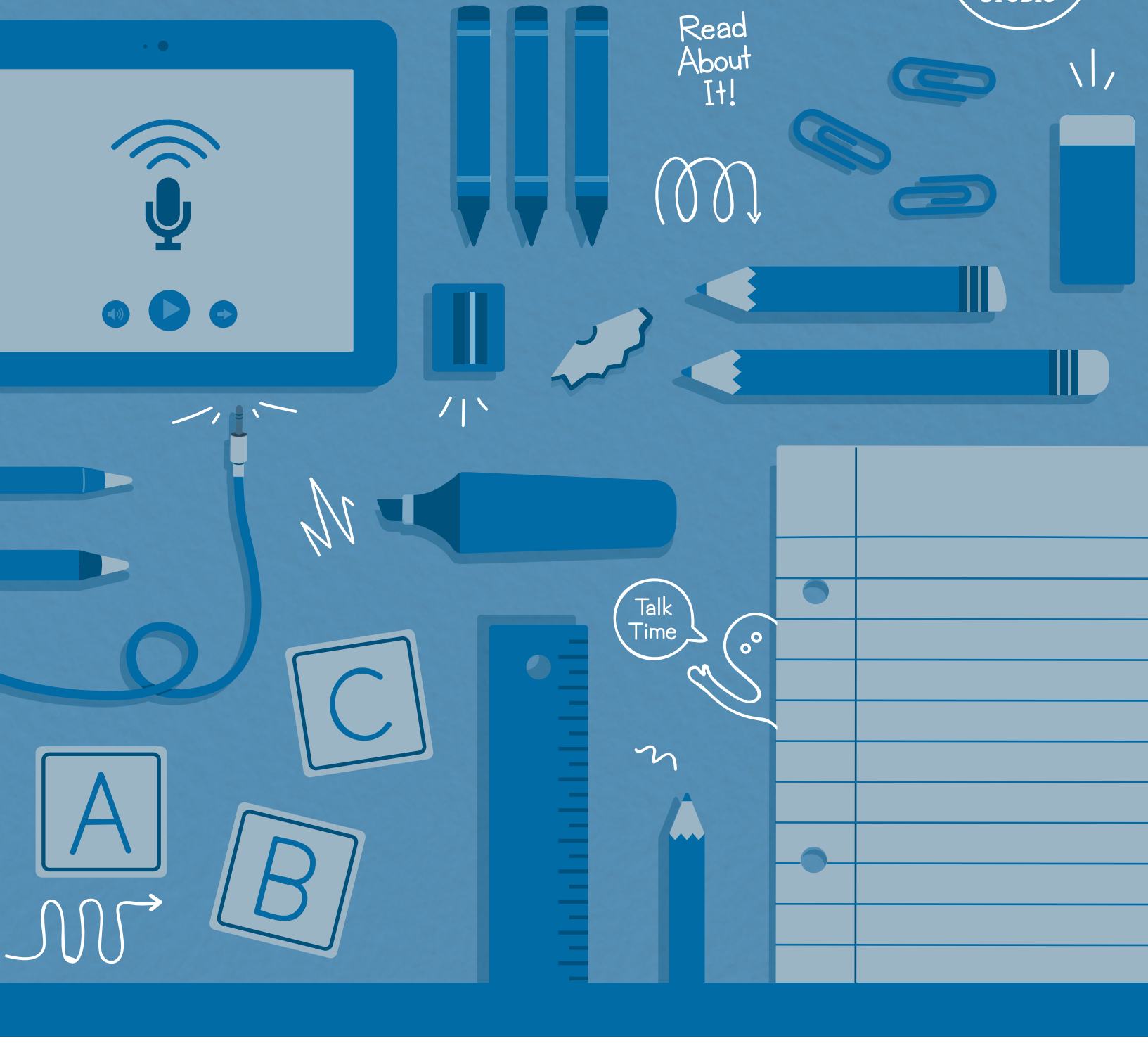
Amplify Core Knowledge Language Arts®

LANGUAGE STUDIO



Language Studio

Activity Book | Grade 4

Volume 2

Grade 4 | Language Studio 3-5

Volume 2

Activity Book

Amplify Core Knowledge Language Arts

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Language Studio 3

Poetry

NAME: _____

DATE: _____

1.1 ACTIVITY PAGE

LANGUAGE STUDIO 3: POETRY

Directions: Fill in the prediction chart with three of your predictions about Little Red Riding Hood and the Wolf. *Use complete sentences beginning with* I predict *or* My prediction.

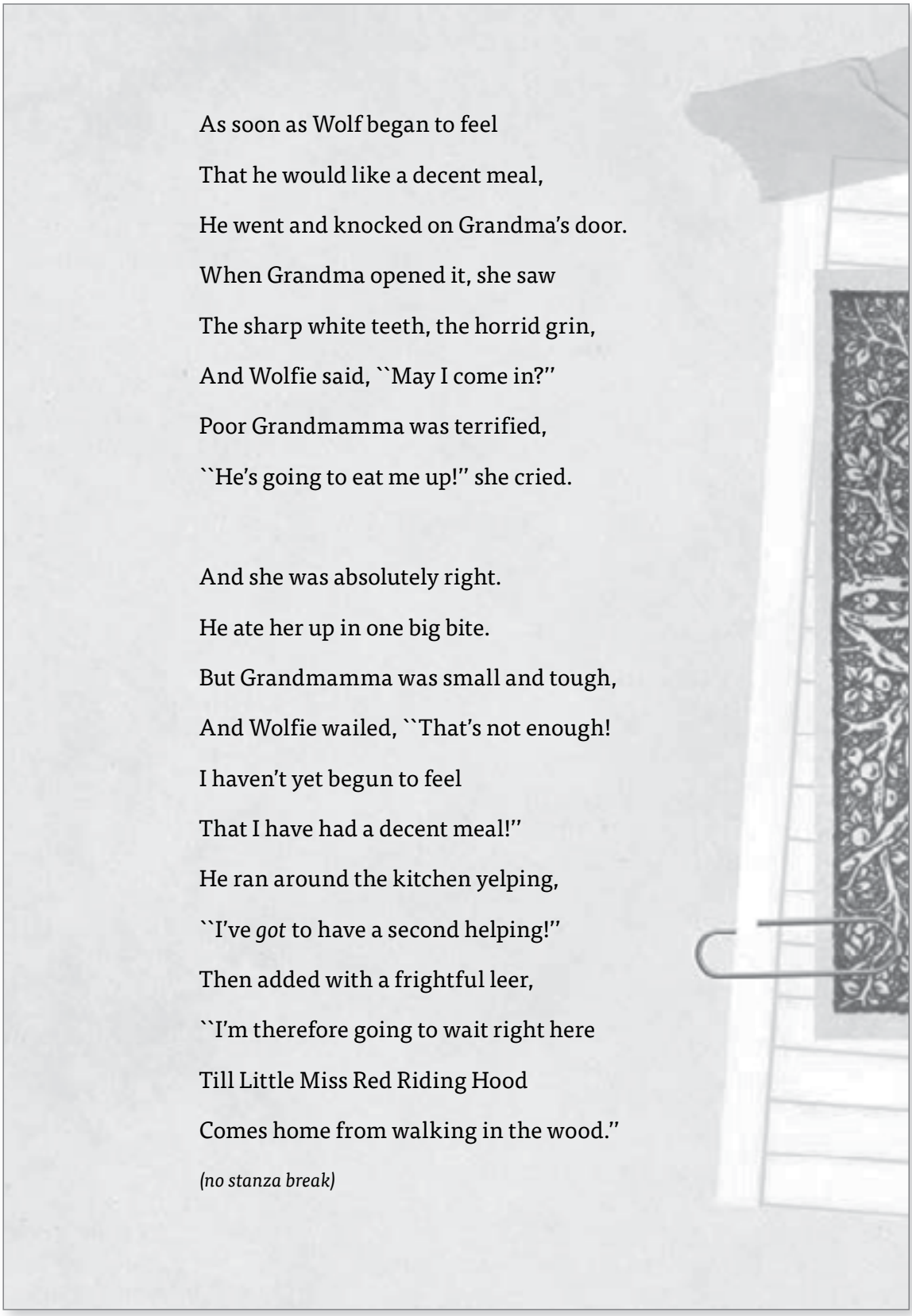
My Predictions
Prediction #1 *(Characters):*
Prediction #2 *(Setting):*
Prediction #3 *(Ending):*

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 3: EXCERPT FROM *LITTLE RED RIDING HOOD AND THE WOLF*



As soon as Wolf began to feel
That he would like a decent meal,
He went and knocked on Grandma's door.
When Grandma opened it, she saw
The sharp white teeth, the horrid grin,
And Wolfie said, ``May I come in?''
Poor Grandmamma was terrified,
``He's going to eat me up!'' she cried.

And she was absolutely right.
He ate her up in one big bite.
But Grandmamma was small and tough,
And Wolfie wailed, ``That's not enough!
I haven't yet begun to feel
That I have had a decent meal!''
He ran around the kitchen yelping,
``I've *got* to have a second helping!''
Then added with a frightful leer,
``I'm therefore going to wait right here
Till Little Miss Red Riding Hood
Comes home from walking in the wood.''

(no stanza break)

LANGUAGE STUDIO 3: POETRY

He quickly put on Grandma's clothes,
(Of course he hadn't eaten those).
He dressed himself in coat and hat.
He put on shoes, and after that
He even brushed and curled his hair,
Then sat himself in Grandma's chair.
In came the little girl in red.
She stopped. She stared. And then she said,

``What great big ears you have, Grandma,''
``All the better to hear you with,'' the Wolf replied.
``What great big eyes you have, Grandma.''
said Little Red Riding Hood.
``All the better to see you with,'' the Wolf replied.

He sat there watching her and smiled.
He thought, I'm going to eat this child.
Compared with her old Grandmamma
She's going to taste like caviar.

Then Little Red Riding Hood said, ``But Grandma,

what a lovely great big furry coat you have on.''

``That's wrong!'' cried Wolf. ``Have you forgot

To tell me what BIG TEETH I've got?

Ah well, no matter what you say,

I'm going to eat you anyway.''

[. . . . .]

A few weeks later, in the wood,

I came across Miss Riding Hood.

But what a change! No cloak of red,

No silly hood upon her head.

She said, ``Hello, and do please note

My lovely furry wolfskin coat.''

An Introduction to Poetry

Exit Ticket

Directions: Answer the following questions using complete sentences.

1. Who are the main characters in *Little Red Riding Hood and the Wolf*?

2. Was the ending of *Little Red Riding Hood and the Wolf* what you expected? Why or why not? *Refer to your prediction on Activity Page 1.1.*

ACTIVITY PAGE **2.1**

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 3: POETRY

Stanza Ordering Activity

Directions: Draw a box around each new stanza. Correctly label each stanza (Ex. Stanza 1, Stanza 2, etc.).

_____

As soon as Wolf began to feel
That he would like a decent meal,
He went and knocked on Grandma's door.
When Grandma opened it, she saw
The sharp white teeth, the horrid grin,
And Wolfie said, "May I come in?"
Poor Grandmamma was terrified,
"He's going to eat me up!" she cried.

_____

And she was absolutely right.
He ate her up in one big bite.
But Grandmamma was small and tough,
And Wolfie wailed, "That's not enough!
I haven't begun to feel
That I have had a decent meal!"
He ran around the kitchen yelping,
"I've *got* to have a second helping!"
Then added with a frightful leer,
"I'm therefore going to wait right here
Till Little Miss Red Riding Hood
Comes home from walking in the wood."
He quickly put on Grandma's clothes,
(Of course he hadn't eaten those).
He dressed himself in coat and hat.
He put on shoes, and after that
He even brushed and curled his hair,
Then sat himself in Grandma's chair.
In came the little girl in red.
She stopped. She stared. And then she said,

_____

"What great big ears you have, Grandma,"
"All the better to hear you with," the Wolf replied.
"What great big eyes you have, Grandma."
said Little Red Riding Hood.
"All the better to see you with," the Wolf replied.

_____

He sat there watching her and smiled.
He thought, I'm going to eat this child.
Compared with her old Grandmamma
She's going to taste like caviar.

_____

Then Little Red Riding Hood said, "But
Grandma,
what a lovely great big furry coat you have on."
"That's wrong!" cried Wolf. "Have you forgot
To tell me what BIG TEETH I've got?
Ah well, no matter what you say,
I'm going to eat you anyway."
[……..]
A few weeks later, in the wood,
I came across Miss Riding Hood.
But what a change! No cloak of red,
No silly hood upon her head.
She said, "Hello, and do please note
My lovely furry wolfskin coat."

All About Stanzas

Exit Ticket

Directions: Answer the following questions using complete sentences.

1. What is a stanza?

2. How many stanzas are there in *Little Red Riding Hood and the Wolf*?

Stanza Assembling Activity: Part I

Directions:

1. Cut out the following stanzas.

2. Place the stanzas in the correct order.

3. Check to make sure the stanzas are in the correct order!

4. Write the stanza number on the back of each cutout (Stanza 1–Stanza 5).

5. Glue or tape the stanzas, in order, on Activity Page 1.7.

A

And she was absolutely right.
He ate her up in one big bite.
But Grandmamma was small and tough,
And Wolfie wailed, "That's not enough!
I haven't begun to feel
That I have had a decent meal!"
He ran around the kitchen yelping,
I've got to have a second helping!"
Then added with a frightful leer,
I'm therefore going to wait right here
Till Little Miss Red Riding Hood
Comes home from walking in the wood."
He quickly put on Grandma's clothes,
(Of course he hadn't eaten those).
He dressed himself in coat and hat.
He put on shoes, and after that
He even brushed and curled his hair,
Then sat himself in Grandma's chair.
In came the little girl in red.
She stopped. She stared. And then she said,

B

Then Little Red Riding Hood said,
"But Grandma, what a lovely great big furry
coat you have on."
"That's wrong!" cried Wolf. "Have you forgot
To tell me what BIG TEETH I've got?
Ah well, no matter what you say,
I'm going to eat you anyway."
[……..]
A few weeks later, in the wood,
I came across Miss Riding Hood.
But what a change! No cloak of red,
No silly hood upon her head.
She said, "Hello, and do please note
My lovely furry wolfskin coat."

C

He sat there watching her and smiled.
He thought, I'm going to eat this child.
Compared with her old Grandmamma
She's going to taste like caviar.

D

"What great big ears you have, Grandma,"
"All the better to hear you with," the Wolf replied.
"What great big eyes you have, Grandma."
said Little Red Riding Hood.
"All the better to see you with," the Wolf replied.

E

As soon as Wolf began to feel
That he would like a decent meal,
He went and knocked on Grandma's door.
When Grandma opened it, she saw
The sharp white teeth, the horrid grin,
And Wolfie said, "May I come in?"
Poor Grandmamma was terrified,
"He's going to eat me up!" she cried.

Stanza Assembling Activity: Part II

STANZA ONE

STANZA TWO

LANGUAGE STUDIO 3: POETRY

STANZA THREE

STANZA FOUR

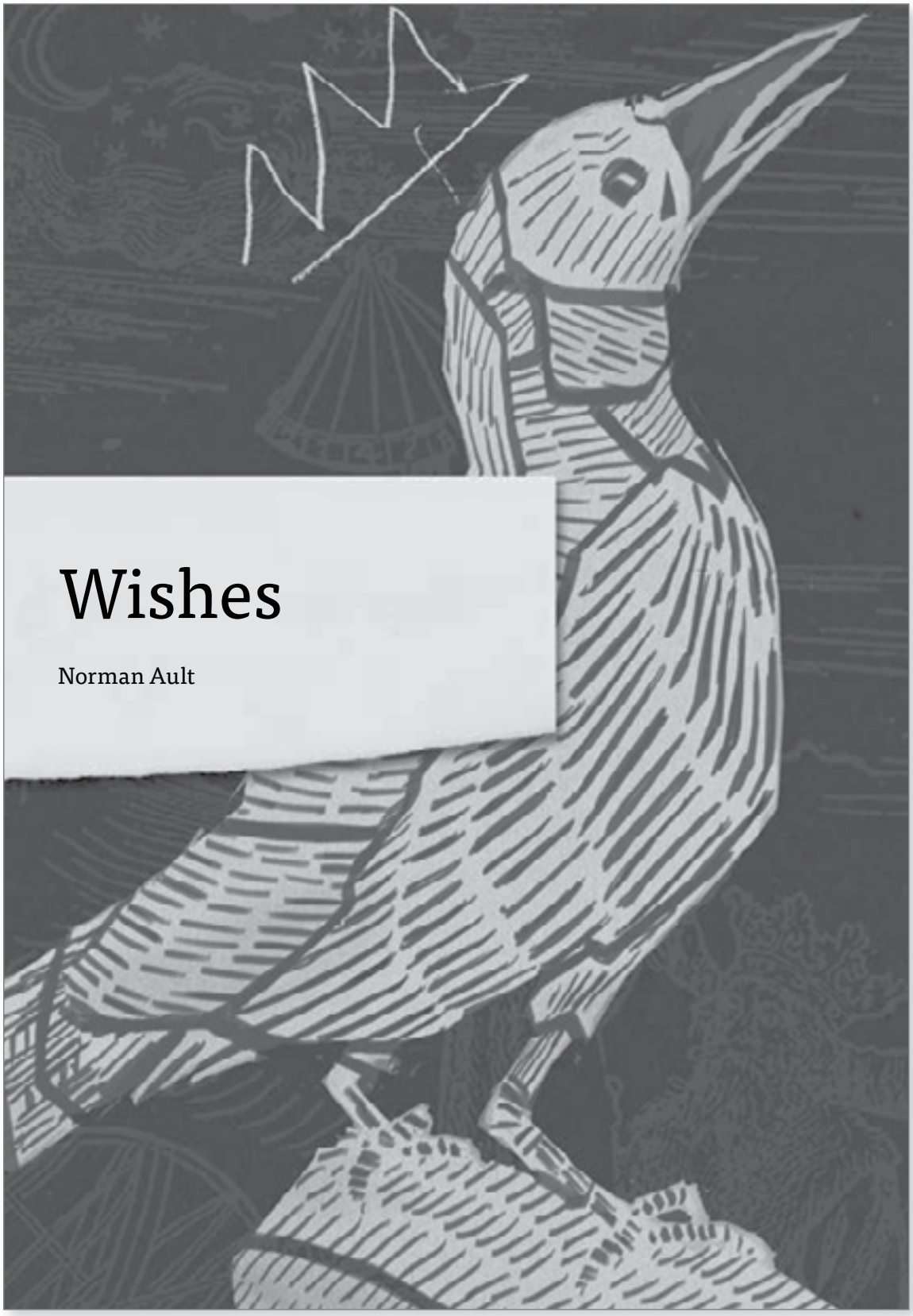
STANZA FIVE

NAME: _____

DATE: _____

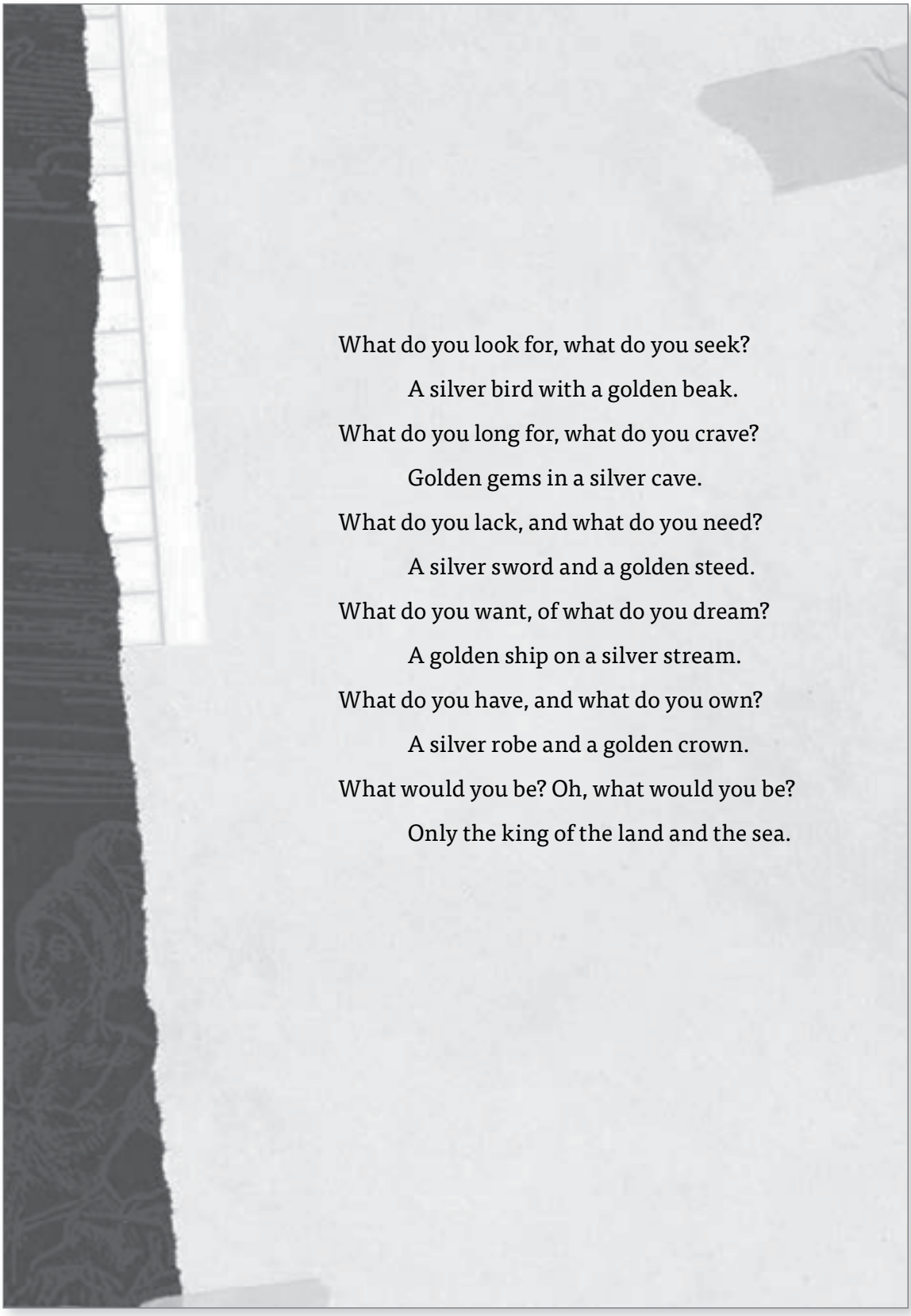
4.1 ACTIVITY PAGE

LANGUAGE STUDIO 3: POETRY



Wishes

Norman Ault



What do you look for, what do you seek?
A silver bird with a golden beak.
What do you long for, what do you crave?
Golden gems in a silver cave.
What do you lack, and what do you need?
A silver sword and a golden steed.
What do you want, of what do you dream?
A golden ship on a silver stream.
What do you have, and what do you own?
A silver robe and a golden crown.
What would you be? Oh, what would you be?
Only the king of the land and the sea.

My Wish List

Directions: Fill in the blanks below. The first blank of each line will be an adjective (big, small, beautiful, soft, delicious, etc.). The second blank will be a noun (person, place, thing, or idea). Question 6 is a personal question and should be answered in complete sentences.

My name is _____, and this is my wish list!

1. I wish that I could have a _____ _____.
   (adjective) (noun)

2. My entire life I have wished for a _____ _____.
   (adjective) (noun)

3. I wish I could give people a _____ _____.
   (adjective) (noun)

4. I wish that I could invent a _____ _____.
   (adjective) (noun)

5. I wish everyone in the world could have a _____ _____.
   (adjective) (noun)

6. Please write about your own personal wish:

_____

_____

_____

_____

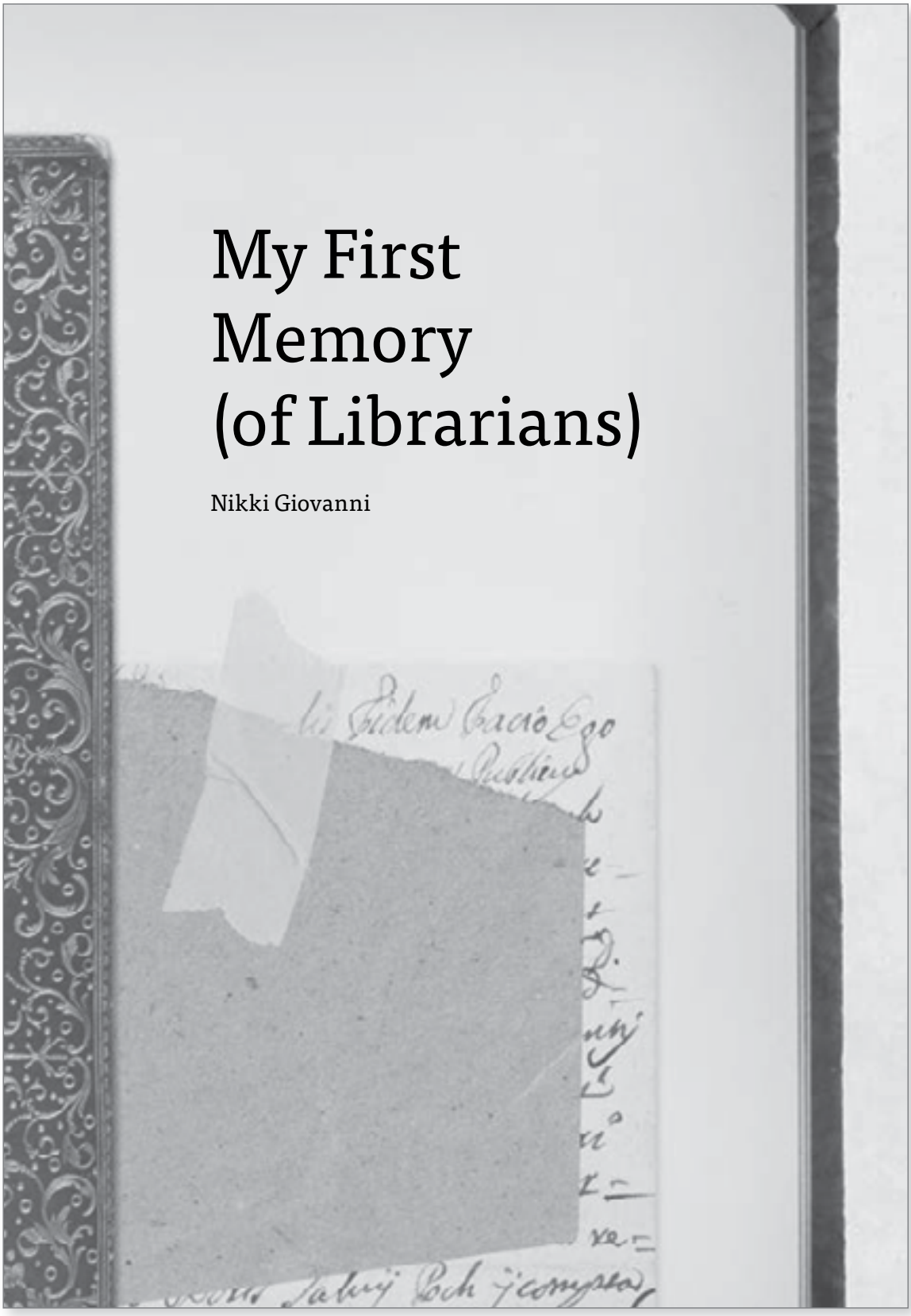
_____

ACTIVITY PAGE **5.1**

NAME: _____

DATE: _____

LANGUAGE STUDIO 3: POETRY



My First Memory (of Librarians)

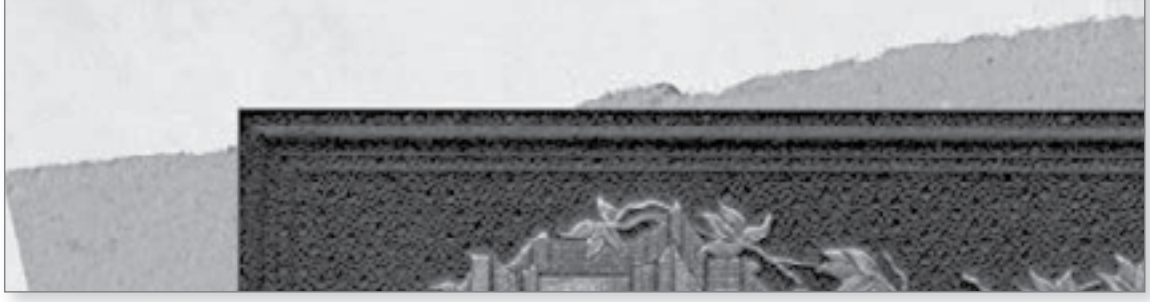
Nikki Giovanni

LANGUAGE STUDIO 3: POETRY

This is my first memory:
A big room with heavy wooden tables that sat on a creaky
    wood floor
A line of green shades—bankers' lights—down the center
Heavy oak chairs that were too low or maybe I was simply
    too short
        For me to sit in and read
So my first book was always big

In the foyer up four steps a semi-circle desk presided
To the left side the card catalogue
On the right newspapers draped over what looked like
    a quilt rack
Magazines face out from the wall

The welcoming smile of my librarian
The anticipation in my heart
All those books—another world—just waiting
At my fingertips.



NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 3: POETRY

Memory Reflection

*Directions: Write about one of your memories! Memories can be happy, sad, scary, or exciting. Different memories make you feel different emotions. Use **details** to describe your memory and include how it made you feel. Be sure to use plenty of **adjectives** in your paragraph!*

Autobiographical Poem Planner

Directions: Complete the autobiographical poem planner below by filling in the blanks.

Line #	Information	Sentence Frames
1	First name	_____
2	Gender, age	_____, _____ years old
3	Three characteristics that describe you	_____, _____, and _____
4	Brothers or sisters and their names	Brother/Sister of _____.
5	Parents/guardians names	Daughter/Son of _____ (and _____)
6	Two things you love	Lover of _____ and _____
7	Two things you are afraid of	Who fears _____ and _____
8	Two places you would like to visit	Who wants to visit _____ and _____
9	One thing you dream about	Who dreams of _____
10	Last name	_____

NAME: _____

DATE: _____

LANGUAGE STUDIO 3: POETRY

My Autobiographical Poem

Directions: Write your completed autobiographical poem on the lines below.

Poem Presentation Rubric

Autobiographical Poem Presentation Rubric	Needs Some Work.	You're Getting There.	Awesome Job!
Fluency: Did you read through the poem confidently and without pausing for extended periods of time?			
Voice: Did you speak loudly and clearly?			
Eye Contact: Did you try to make eye contact with the class while presenting?			

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 3: POETRY

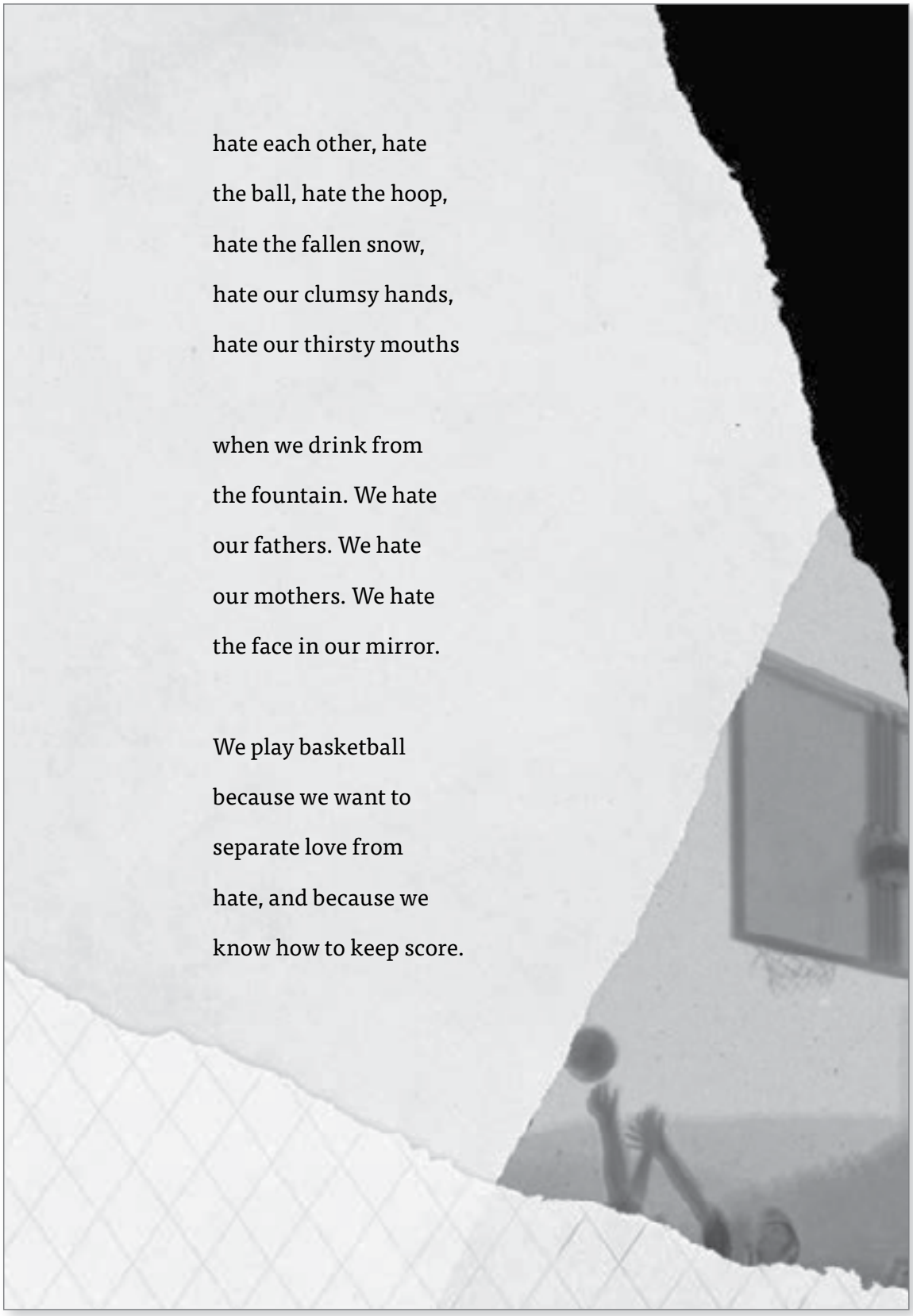
From Why We Play Basketball

Sherman Alexie

It is just a game
we are told by those
who cannot play it
unless it is play.
For us, it is war,

often desperate
and without reason.
We throw our body
against another
body. We learn to

LANGUAGE STUDIO 3: POETRY



hate each other, hate
the ball, hate the hoop,
hate the fallen snow,
hate our clumsy hands,
hate our thirsty mouths

when we drink from
the fountain. We hate
our fathers. We hate
our mothers. We hate
the face in our mirror.

We play basketball
because we want to
separate love from
hate, and because we
know how to keep score.

ACTIVITY PAGE **9.1**

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 3: POETRY

Directions: Answer the questions below using complete sentences.

1. What do you think the tone of "Why We Play Basketball" is? Provide words or lines from the poem to support your answer.

_____

_____

_____

2. If you wrote a poem right now, what tone would you use? Why?

_____

_____

_____

3. Write three sentences using different tones.

   1. _____

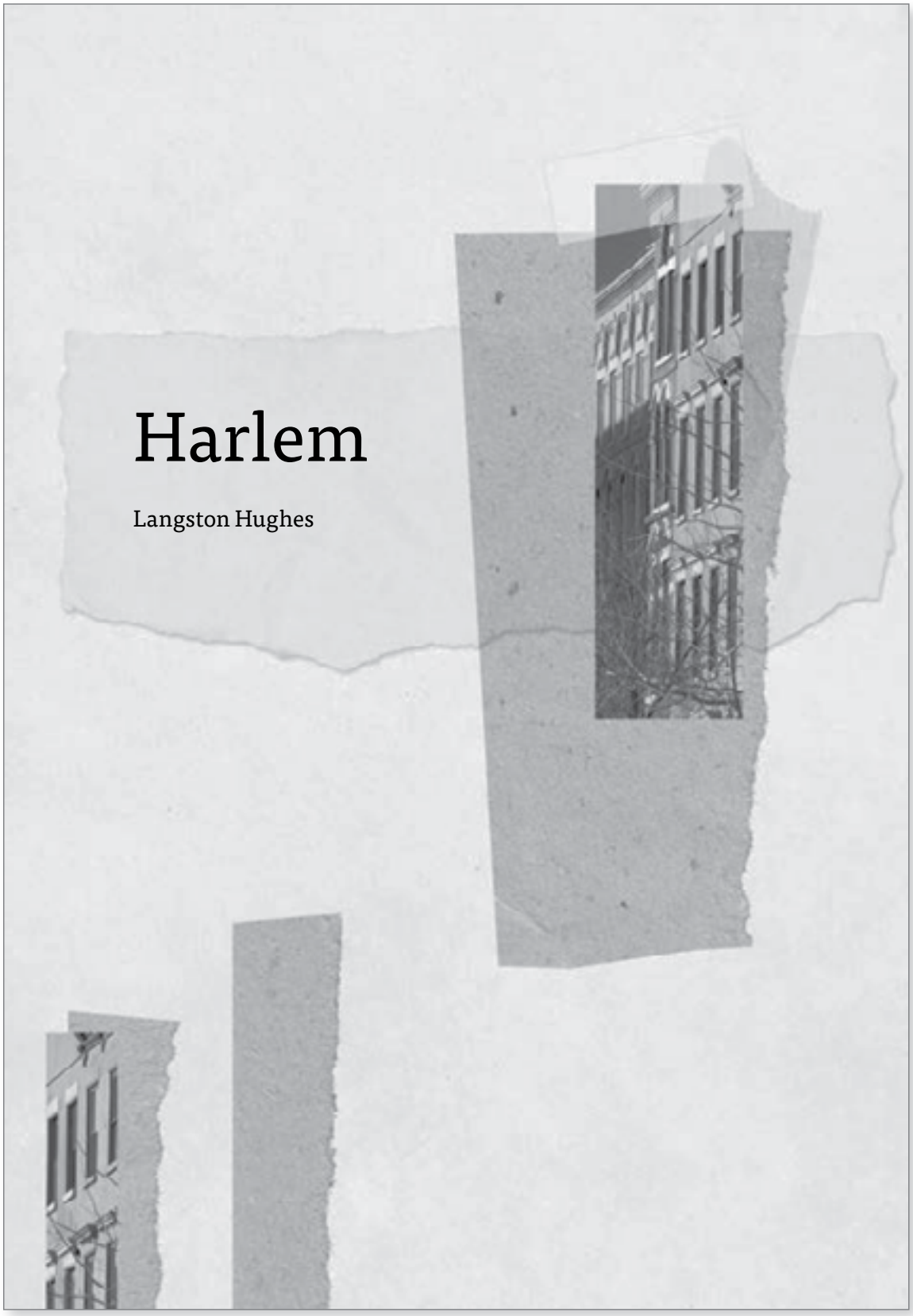
   _____

   2. _____

   _____

   3. _____

   _____


Harlem
Langston Hughes

What happens to a dream deferred?

Does it dry up
like a raisin in the sun?
Or fester like a sore —
And then run?
Does it stink like rotten meat?
Or crust and sugar over —
like a syrupy sweet?

Maybe it just sags
like a heavy load.

Or does it explode?

Simile Connection Activity

Directions:

1. *Read the first row of the chart. These are the similes from the poem "Harlem."*
2. *Use the second row of the chart to draw a visual of the simile located directly above in row 1.*
3. *Use the third row of the chart to write what the simile actually means.*

1 **Does it dry up like a raisin in the sun?**	2 **Or fester like a sore**	3 **Does it stink like rotten meat?**	4 **Or crust and sugar over — like a syrupy sweet?**	5 **Maybe it just sags like a heavy load.**
1	2	3	4	5
1	2	3	4	5

ACTIVITY PAGE **11.1**

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 3: POETRY

Group Simile Poem

Directions: Fill in the blanks to complete the simile poem. Use a different word for each blank. Remember, the first blank will be an adjective!

As _____ as a _____.

As _____ as a _____.

As _____ as a _____.

As _____ as a _____.

As _____ as a _____.

As _____ as an _____.

As _____ as an _____.

As _____ as an _____.

As _____ as an _____.

As _____ as an _____.

As _____ as a _____.

As _____ as a _____.

As _____ as a _____.

As _____ as a _____.

As _____ as a _____.

Shape Poem Planner

Directions: Complete the Shape Poem Planner below with as much detail, and as much creativity, as possible.

1. Shape: _____

2. Fill out the six areas of the chart.

Sight: What does your shape look like?	Touch: What does your shape feel like?
Scent: What does your shape smell like?	Hearing: What does your shape sound like?
Taste: What does your shape taste like?	Anything else about your shape:

NAME: _____
DATE: _____

Shape Poem Rubric

Shape Poem Rubric	 Needs Some Work.	 You're Getting There.	 Awesome Job!
Shape: Does your poem match the shape? (Example: The poem about apples is written in the shape of an apple).			
Poem: Does all of your text fit inside of your shape?			
Effort: Were you creative? Is your poem original? Are you proud of your poem?			

Shape Poem

Directions: Complete your Shape Poem below.

_____

Shape Poem Presentation Rubric

Shape Poem Presentation Rubric	 Needs Some Work.	 You're Getting There.	 Awesome Job!
Fluency: Did you read through the poem confidently and without pausing for extended periods of time?			
Voice: Did you speak loudly and clearly?			
Eye Contact: Did you try to make eye contact with the class while presenting?			

Language Studio 4

Eureka!
Student Inventor

What Is an Invention?

An invention is . . .	An invention is not . . .
Inventions are important because . . .	**Draw an image that represents an invention:**

ACTIVITY PAGE **2.1**

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 4: EUREKA!

Paper

Before Paper:

Throughout most of history, only a very small amount of human knowledge was ever written down. Most knowledge was communicated through spoken words. This meant that what a person knew was limited to what they could remember.

One reason for this is that writing was very inconvenient. The writing surface made from the papyrus plant in ancient Egypt was extremely fragile.

Almost two thousand years ago, around the year 105, a man named Cai Lun believed he could come up with a better option—a writing surface that was light, cheap, and easy to make.

Inventing Paper:

Cai Lun experimented with lots of different materials and methods before discovering his winning formula: He mixed tree bark, old cloth, and discarded pieces of rope and fishing nets in a big kettle of boiling water. As the water evaporated, he mashed up the mush that was left into a paste, which he then set to dry on screens in thin layers. As they dried, these layers of Cai Lun's strange mixture hardened into the first sheets of paper! Cai Lun's lightweight invention made writing, transporting, and storing records much easier.

Neither of them could have predicted that a few hundred years later the Chinese would find two new uses for Cai Lun's invention that would become hugely popular: paper money and toilet paper.

How Paper Changed Things:

Portable Knowledge

Cai Lun's invention changed civilization. People could now spread knowledge of science, literature, and art over great distances. Paper also helped people communicate across thousands of years because stories, poems, artwork, and history could now be written down, stored, and copied for many years.

Fun

Paper is also used for fun—coloring books, comics, crosswords, and novels would not exist without paper! Through the spread of books, paper has enabled billions of people to learn to read, receive an education, and read for pleasure.

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 4: EUREKA!

The Telephone

Before the Telephone:

For thousands of years, the only way for most people to communicate with those who lived far from them was through the mail, and letters could take weeks or even months to arrive. In the middle of the nineteenth century an invention called the telegraph was revolutionizing long-distance communication around the world. With the telegraph, an operator in one city could send a message to an operator in another city in minutes by sending an electric current over a wire, but the telegraph could not transmit sound—only a complicated code of clicks that few people could understand. People couldn't have back-and-forth conversations over a telegraph line. They had to go to special telegraph offices to give their messages to an operator to send.

Inventing the Telephone:

Alexander Graham Bell's goal was to send the human voice across a wire by turning it into electrical signals. In 1875 he was tinkering in his lab when he accidentally spilled acid on his pants. He called to his assistant, Thomas Watson, who was in the next room, where the receiver of Bell's invention sat on a table. Eureka! Watson heard Bell's voice coming out of the machine. The first phone call!

Bell worked on improving the invention and in 1876, he and Watson had a telephone conversation over a distance of two miles. When Bell spoke into the telephone, his voice caused a thin piece of parchment (the diaphragm) to vibrate. A magnet turned those vibrations into electricity that traveled over the telephone line. At Watson's end of the call, a second magnet and diaphragm turned the electrical signal back into sound vibrations.

How the Telephone Changed Things:

By 1886 more than one hundred thousand Americans had telephones in their homes. The country, and eventually the world, became much more connected because people were able to pick up their phones and speak to anyone anywhere. People who lived in isolated areas were now able to call for help in an emergency. News traveled more quickly. Eventually the telephone became one of the most successful inventions of all time.

ACTIVITY PAGE **2.3**

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 4: EUREKA!

The Clock

Before the Clock:

Even prehistoric men and women kept track of the passing of time. They noted the sunrise and sunset, the locations of the stars and planets, the changes in weather, and the cycle of the moon. These clues helped them know when to plant, when to hunt, and perhaps when to move to someplace warmer. As time went on, people began measuring smaller units of time with sundials, which told time using the direction and size of shadows cast by the sun. But sundials could not tell the exact time. People eventually divided the day into twenty-four hours and needed more accurate ways of keeping track of those hours.

Inventing the Clock:

The next great innovation in timekeeping was the water clock. The first water clocks, which the Egyptians started using about 1400 BCE, were simple bowls with holes carved into them. If you knew how long it took for all the water to flow out of a full bowl, you could measure the passage of time by checking the water level. Over time water clocks improved, and in the eleventh century a Chinese engineer named Su Song built a water clock that was very advanced. Su Song's clock was powered by a waterwheel and stood

forty feet high. Puppets playing musical instruments emerged from five different doors to announce each hour. It also displayed the positions of the planets. Water clocks like Su Song's were the most accurate timepieces for hundreds of years.

Keeping Time at Sea:

As centuries passed, clocks became more accurate as waterpower was replaced by springs and pendulums. However, these early clocks were very breakable and didn't work on ships because of all the motion caused by the sea. Knowing the time at home by using such a clock, and the time on board, which they could calculate using the stars, would let sailors figure out their ship's exact location. Not knowing the ships' location often led to shipwrecks or ships becoming lost at sea. After many sailors were killed at sea in 1707, a carpenter named John Harrison spent almost fifty years designing clocks and watches that kept time at sea and helped sailors navigate safely.

How the Clock Changed Things:

As the number of clocks in the world continued to grow, more and more people were better able to coordinate with one another because of their shared understanding of time. Clocks also made workplaces run more smoothly because bosses could plan and assign work knowing exactly when their employees would be arriving and leaving. Railroads and airlines, which need to operate according to schedules, would not have been possible without clocks.

ACTIVITY PAGE **2.4**

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 4: EUREKA!

My Expert Invention: _____.

1. What did people do before this invention?

_____

_____

2. Who was the inventor?

_____

_____

3. What year was it invented?

_____

_____

4. How did the invention change things? List 3 changes.

   1. _____

   2. _____

   3. _____

5. One thing I thought was interesting:

_____

_____

Invention Information

Invention: _____

1. The year it was invented: _____

2. It was invented by _____

3. Before the _____ was invented people used _____

4. How did this invention change things?

   1. _____

   2. _____

   3. _____

5. An interesting thing the expert told me was:

_____

_____

_____

_____

_____

_____

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 4: EUREKA!

Invention Information

Invention: _____

1. The year it was invented: _____

2. It was invented by _____

3. Before the _____ was invented people used _____

4. How did this invention change things?

   1. _____

   2. _____

   3. _____

5. An interesting thing the expert told me was:

_____

_____

_____

_____

_____

_____

Noun Descriptions

Directions: Write down the five nouns you found on Activity Page 2.1: Paper.

Nouns:

1. _____

2. _____

3. _____

4. _____

5. _____

Directions: Next, use adjectives to add descriptions to the nouns. Remember to make the descriptions as detailed as you can!

Noun	Description
Noun 1:	
Noun 2:	
Noun 3:	
Noun 4:	
Noun 5:	

NAME: _____

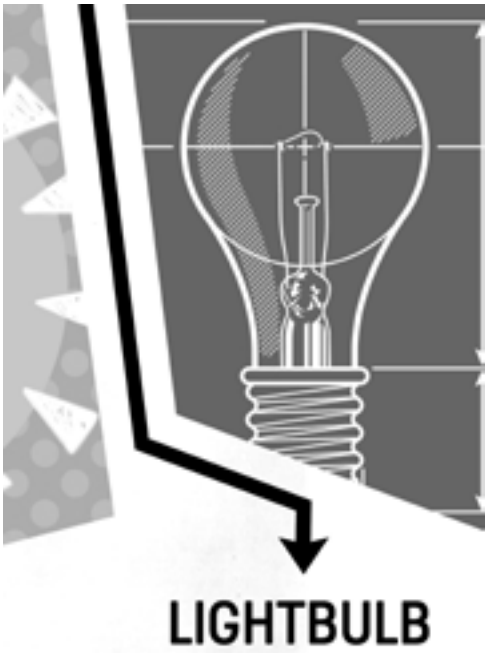
DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 4: EUREKA!

The Lightbulb

Before the Lightbulb:



For most of human history, people got up at sunrise and didn't do much after sunset because there wasn't much light indoors and traveling in the dark was dangerous—people could easily get lost or fall and hurt themselves. Of course people lit their homes before the lightbulb. Candles, however, didn't give off much light. Wood fires took a lot of effort to build and gave off unwanted heat when the weather was warm. Accidental fires were a problem with all of these light sources and with the gas lamps that became popular in the nineteenth century.

Inventing the Lightbulb:

Electric lights existed before Thomas Edison's lightbulb, but they were expensive and unreliable, and the lighting was very dim. One reason is that early inventors could not come up with a proper filament, which is the tiny wire that runs through the center of a lightbulb. When the filament heats up, it glows, which is the source of the bulb's light. Before Edison, inventors made filaments from metals that would catch fire at the slightest heat. As a result the bulbs

burned out very quickly, or the filament would burn so hot that the bulb would explode. Starting in 1880, Edison came up with a charred bamboo filament that provided 1,200 hours of illumination.

How the Lightbulb Changed Things:

As a smart businessman, Edison realized the potential in selling both lightbulbs and electricity. He quickly started a company to supply electricity to customers, and in 1882 his first power station lit up fifty-nine homes in New York City.

Almost every part of our lives has been affected by electric light. Think about all the things people do before sunrise or after sunset that would not have been possible before the lightbulb. The headlights on all sorts of vehicles, including ambulances and fire engines, allow for safe travel after dark. And nighttime activities that we take for granted, from sleepovers to concerts to reading in bed, would be more difficult or impossible without electric light.

The lightbulb also led to lots of other inventions, because once electric outlets were installed in homes, many inventors realized that things other than lamps could be plugged into these outlets. They then got busy inventing all sorts of home appliances—like the toaster, dishwasher, and electric fan—that make our lives easier and more comfortable.

NAME: _____

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LANGUAGE STUDIO 4: EUREKA!

The Microscope

Before the Microscope:

One reason doctors and scientists had difficulty curing many diseases before the invention of the microscope is that they couldn't see the tiny organisms that often spread sickness. Until about 150 years ago, most people believed that dirty, smelly air rising from rotting plants or dead animals formed a poisonous gas that spread illness. This idea of bad air causing disease made some sense at the time. After all, people could smell the bad odor of rotten meat, but could not see germs.

A few scientists in ancient and medieval times suggested the existence of tiny living organisms, but not many people believed them. "Seeing is believing," they thought. And by the middle of the seventeenth century, no one had figured out how to examine tiny objects and organisms.

Inventing the Microscope:

In 1654 a young man named Antonie van Leeuwenhoek opened up a shop in Holland selling cloth and textiles. Although he was a successful salesman, he was more interested in science, and began experimenting with glass lenses, like those used in eyeglasses. Van Leeuwenhoek manufactured a tiny lens that was double convex, which means the glass bulged out on both sides of the lens, like two tiny domes. He attached

his lens to a brass plate and eureka!, he'd made a microscope. He started studying the tiniest details of organisms like mold, bees, and lice, while working on improving his lenses. By 1676 he had invented a microscope so powerful that he was able to see single-celled organisms, like bacteria.

How the Microscope Changed Things:

Over the years the microscope has been an important tool in great scientific and medical discoveries. Thanks to the microscope, nineteenth-century scientists like Robert Koch and Louis Pasteur were able to see the bacteria that cause many deadly diseases. Once these bacteria had been identified, scientists invented vaccines that saved millions of lives by preventing these diseases. The microscope has also helped the environment. Scientists have been able to analyze and improve the health of ecosystems.

Van Leeuwenhoek's most powerful microscope had a magnification of 270, which means tiny objects appeared 270 times their actual size. Today's most powerful microscopes can achieve a magnification of ten million. Modern microscopes have more uses than van Leeuwenhoek could have imagined. They are used to manufacture tiny computer parts. They also make possible many complicated medical procedures.

NAME: _____

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LANGUAGE STUDIO 4: EUREKA!

The Radio

Before the Radio:

For most of the nineteenth century, many Americans lived fairly isolated lives. They may not have ever traveled more than twenty or thirty miles from their homes. For entertainment they visited with neighbors, played cards and games, and maybe danced, sang, and played music together. Concerts and the theater were mostly for those who lived in cities. People didn't have much reason to communicate with those outside their communities, and when they did it was by mail, which could take weeks or months to arrive. In 1861 the Western Union Company completed the first transcontinental electric telegraph, connecting the East and West Coasts of the United States. The telegraph was a machine that sent coded messages over a wire in the form of electricity in a matter of minutes. A telegraph operator tapped out the message in code in one city, and then a second operator decoded and wrote down the message in another city. At the time the telegraph was the fastest and most efficient means of communicating over long distances, but putting up the wires (and making sure they stayed up) was so expensive that telegraph companies did it only where there were significant populations. This left many Americans who lived far from big cities out of reach of the telegraph.

Inventing the Radio: Wireless

In 1894 a young man in Italy named Guglielmo Marconi read a book that explained electromagnetic waves—that's electricity that travels through the air. He reasoned that if electricity could travel through the air without a wire, then he could send telegraph messages wirelessly. He quickly got to work in his attic building a wireless transmitter (to send messages) and a wireless receiver (to receive messages). Soon Marconi was sending wireless signals across the room, and by 1895 he was sending them over a distance of a mile and a half.

Marconi wrote to an Italian official asking the government for money to help him further develop his invention. The official thought he was crazy, so Marconi moved to England, where he found people who believed in him. In 1898 Marconi sent a wireless message across the English Channel to France, and in 1902—only eight years after he built his first machine in the attic—Marconi sent a wireless message all the way across the Atlantic Ocean! Soon scientists and businesspeople realized that the future of Marconi's technology was in sending sound directly to receivers in people's homes. These receivers were called radios.

How the Radio Changed Things:

The first commercial radio station began broadcasting in 1920, and by 1930, long before televisions were available, radios were in twelve million American homes. Radio stations broadcast news, music, comedies, adventure shows, game shows, soap operas, talent contests—almost everything you can see on TV today. Lots of families gathered in the evenings to listen to the radio the same way many families now watch TV together. Today the electromagnetic waves that Marconi first sent across his attic are also used for cell phones, GPS, radar, and TV, and even to control satellites in outer space.

NAME: _____

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LANGUAGE STUDIO 4: EUREKA!

My Expert Invention: _____.

1. What did people do before this invention?

_____

_____

2. Who was the inventor?

_____

_____

3. What year was it invented?

_____

_____

4. How did the invention change things? List 3 changes.

   1. _____

   2. _____

   3. _____

5. One thing I thought was interesting:

_____

_____

Invention Information

Invention: _____

1. The year it was invented in: _____
2. It was invented by: _____
3. Before the _____ was invented people used
4. How did it change things?
    1. _____
    2. _____
    3. _____
5. An interesting thing the expert told me was:

_____

_____

_____

_____

_____

_____

_____

NAME: _____

DATE: _____

LANGUAGE STUDIO 4: EUREKA!

Invention Information

Invention: _____

1. The year it was invented in: _____
2. It was invented by: _____
3. Before the _____ was invented people used
4. How did it change things?
    1. _____
    2. _____
    3. _____
5. An interesting thing the expert told me was:

_____

_____

_____

_____

_____

_____

_____

My Mystery Present

Directions: In the space around the mystery present, describe the present (noun) in detail using as many adjectives as you can. Then, show your paper to a partner and see if they can guess your present. If they cannot, add more adjectives!

NAME: _____

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LANGUAGE STUDIO

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Airplane Video Viewing Guide

When was the airplane invented?	
Who invented the airplane?	
What problem did the invention of the airplane solve?	
Draw a picture of the first airplane:	

Invention Storyboard

Explain WHAT problem your invention will solve.	**Explain HOW your invention will solve the problem.**
What is your invention?	**How does it work?**

Draw a picture of your invention.	Who will use your invention?
Would your friends like to use your invention?	**Does your invention improve on any existing invention?**

Invention Storyboard Rubric

	Graphic Organizer	Content	Delivery
3	Shares all sections of the graphic organizer, using complete sentences	Includes many specific details—including a problem, solution, and images—about the invention	Speaks clearly and uses an appropriate pace, tone, and volume
2	Shares few sections of the graphic organizer, using incomplete sentences	Includes some specific details—including a problem, solution, or images—about the invention	Speaks clearly most of the time and uses an appropriate pace, tone, and volume
1	Shares only one or two sections of the graphic organizer, using incomplete sentences	Includes no specific details—including a problem, solution, and images—about the invention	Speaks in an unclear manner and uses an inappropriate pace, tone, and/or volume

ACTIVITY PAGE **6.1**

NAME: _____

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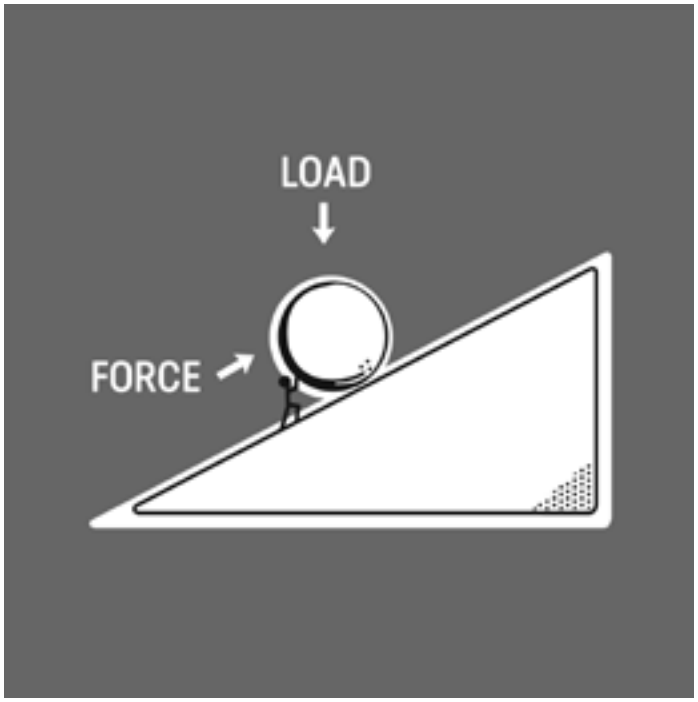
LANGUAGE STUDIO 4: EUREKA!

The Inclined Plane

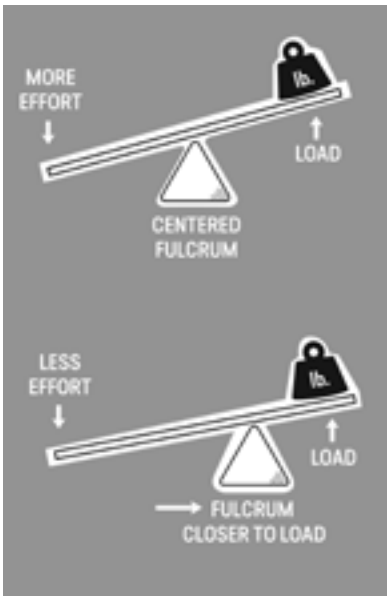
An inclined plane is really just a ramp—a flat surface tilted so that one side is higher than the other, just like a seesaw. It is the one simple machine that does not move, but it makes moving things a lot easier. An inclined plane supports a lot of the weight of an object, so when rolling or pushing something up a ramp, it is much easier for you. When you want to move a heavy object onto something you start from the lowest end and work your way to the highest end.



Imagine you were moving from one house to another and the movers had to take your couch and put it into a moving truck. A couch can be very heavy, so sliding the couch up a flat inclined plane, onto a truck, would make it much easier for the movers than lifting a couch onto a truck.

You probably encounter inclined planes all the time. A winding trail up a mountain is an inclined plane. A wheelchair ramp is an inclined plane. Humans have been using inclined planes to move heavy things throughout history. The ancient Egyptians used inclined planes to move heavy stones to build the pyramids.

The Lever



A lever is a simple machine made of a beam or rod. The lever must be supported on a fulcrum, which is something it needs to pivot on in order to work. A lever allows you to lift weights or carry a heavy load with less effort. There are three types of levers that exist.

The first kind of lever consists of a fulcrum supporting a beam or rod between the load and the effort, so that the two arms of the beam or rod are equal. When the two arms of the lever are balanced, the effort must be equal to the weight in order to lift it. Kids on either end of a seesaw, lifting one another's weight, is an example of this. If the effort side of the lever is longer than the load arm, the effort will travel farther than the load while being less than the load. A crowbar prying open the lid of a wooden box is an example of this.

The second type of lever carries the load between the effort and fulcrum. A wheelbarrow is the most common example of this lever. The axle of the wheel is the fulcrum, the effort is focused at the handles, and the heavy load is placed in the center of the wheelbarrow. For this type of lever, the effort will travel farther than the load while also being less than the load.

The third type of lever has the effort placed between the load and the fulcrum. The effort must be greater than the load and always travel a shorter distance than the load. You use this lever everyday. Imagine you see an apple and you pick it up. Your elbow is the fulcrum, you apply effort with your bicep, and the apple, which is the load in your hand, is lifted.

NAME: _____

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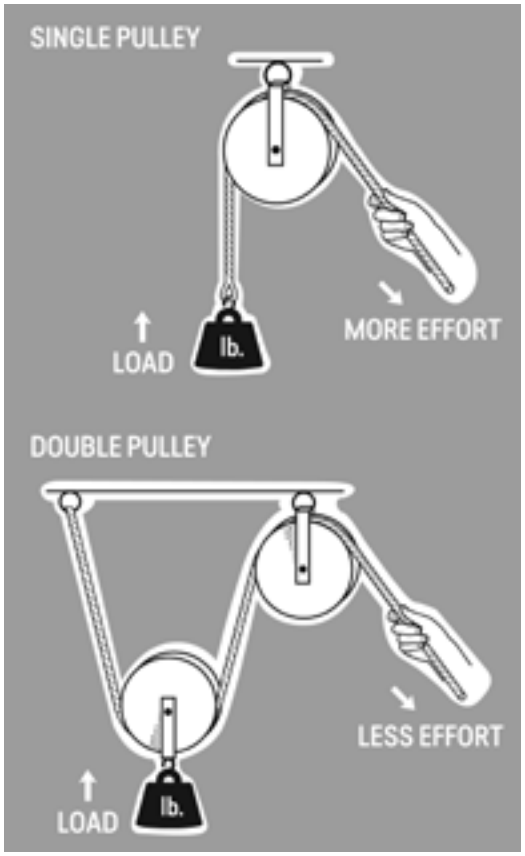
LANGUAGE STUDIO 4: EUREKA!

The Pulley

A pulley is a simple machine that has been used throughout history. Pulleys make it easier to lift heavy loads and supports movement. A pulley is made of a wheel and rope. A rope goes around a fixed and grooved wheel (usually on an axle) and one end is tied to a load.



The pulley is a very useful tool that is used in a number of inventions. A simple example of a pulley system is a well. Attached to one end of a rope is a bucket filled with water and you pull on the other end of the rope with equal or greater force to move the heavy load.

If you have hung wet clothes to dry on a clothesline, you have used a pulley. If you have ever raised a flag up a pole, you have used a pulley. Theatre curtains also move apart with the help of a pulley system.

An elevator is another important invention that uses a pulley system. Attached above every elevator is a strong cable or rope that runs through a grooved wheel on an axle. On the other end of the rope is a weight that is almost as heavy as the elevator. A motor turns the wheel so the elevator can move up or down as the weight does the opposite. You activate this motor when you push a button in the elevator.

Simple Machines Graphic Organizer

Directions: After reading about each simple machine, fill in the chart below.

Name of simple machine:	
Example:	
How does it work?	
What process does it improve?	
Image representation:	

Name of simple machine:	
Example:	
How does it work?	
What process does it improve?	
Image representation:	

LANGUAGE STUDIO 4: EUREKA!

Name of simple machine:	
Example:	
How does it work?	
What process does it improve?	
Image representation:	

ACTIVITY PAGE **7.1**

NAME: _____

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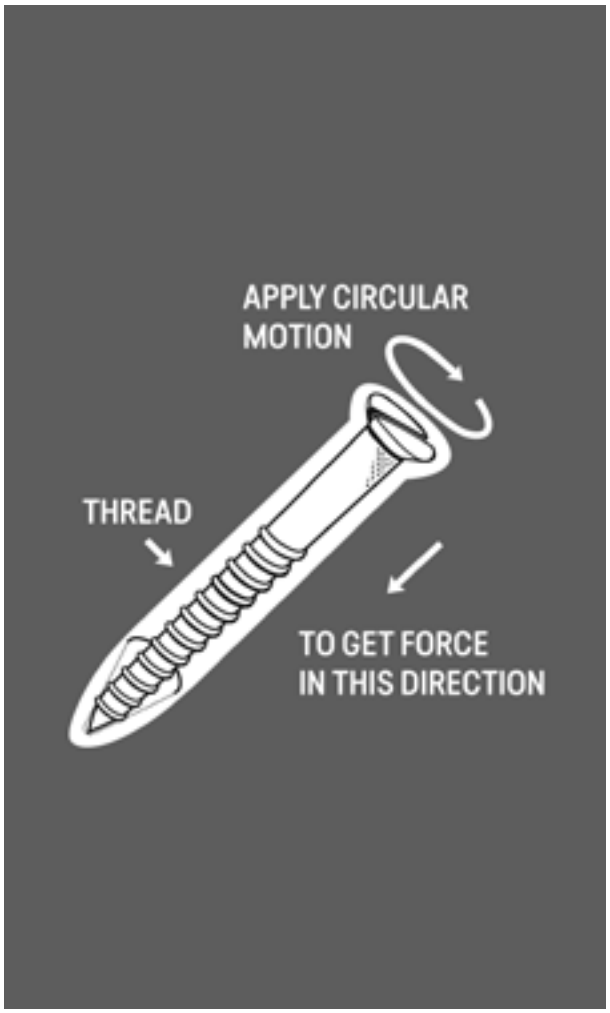
LANGUAGE STUDIO

LANGUAGE STUDIO 4: EUREKA!

The Screw

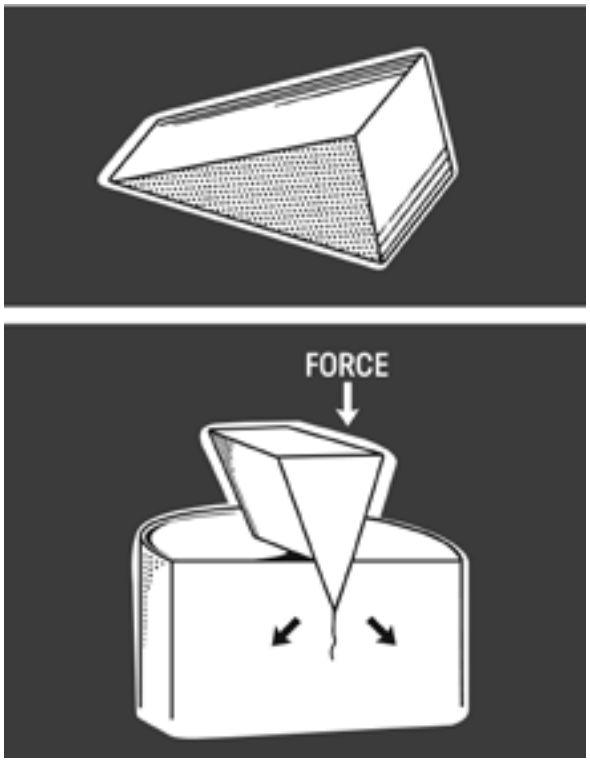
The screw has existed for thousands of years and can be found everywhere you look. A screw is a rod that has an inclined plane, also called a thread, which spirals around the rod. The screw should not be taken for granted since it is a simple machine that makes tough jobs a lot easier.



Screws are remarkable simple machines. Any force you apply when you rotate a screw around and around in one spot will be converted by the thread into a force that travels up and down. The most common example of this is the way you can pass a screw through wooden objects to hold them together. Screws can be used to hold down metal objects too. A metal nut must be attached to a metal object. The screw can then be rotated around and around to fasten into the metal nut, allowing metal objects to be held together.

Screws are found in many different forms. The end of a light bulb uses a screw to fasten into a lamp or a ceiling. Even the inside of a jar lid is made like a screw so the lid can seal the jar. This machine may be simple, but it is an ingenious aspect to many other machines, large and small.

The Wedge



A wedge is a piece of material (usually hard) with two sloping or inclined planes that meet to create an edge (usually sharp). Wedges are used to split things apart. A knife, is an example, of a wedge. The two inclined planes meet to create a sharp edge used for cutting things, like slicing an apple in half. If you force a wedge into something hard enough, it will split that something apart.

When a lumberjack takes an axe and pounds it into the side of a tree, eventually that tree will split all the way through and fall down.

Like all the simple machines, the wedge offers a mechanical advantage. It takes whatever effort you put into it and provides an output that is greater. The wedge shape of the axe's sharp edge turns the force the lumberjack puts into each swing into an even stronger force when the axe's sharp edge makes contact with the tree. A chisel works the same way. A chisel's wedge turns the force of an artist's hammer into an even greater force and chips apart the rock. Wedges are also used to hold objects in place; a doorstopper, for example, holds doors open.

Whether you use a shovel to dig through dirt or a fork to break apart food, wedges are long-standing simple machines that continue to appear everywhere.

NAME: _____

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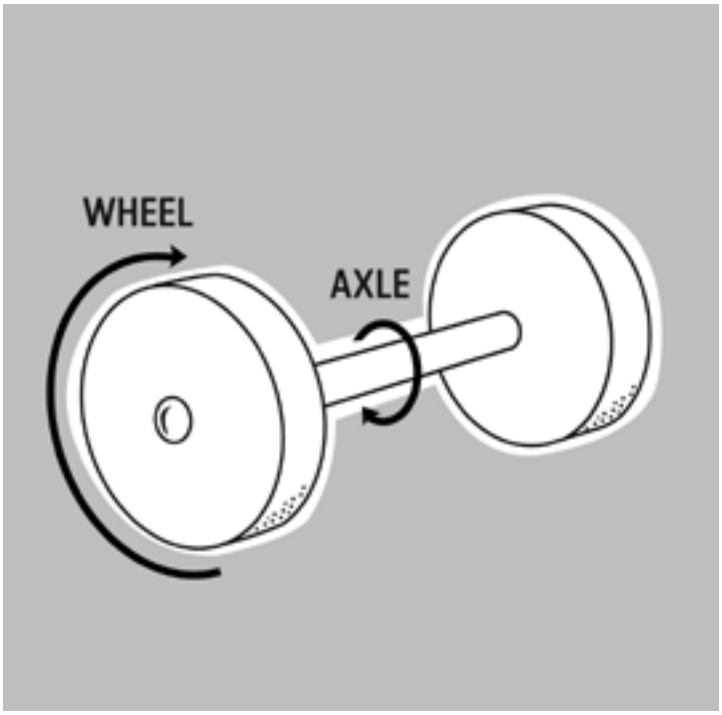
LANGUAGE STUDIO 4: EUREKA!

The Wheel and Axle



The wheel is one of the most famous inventions in human history. The wheel and axle, together, are just as special. A wheel and axle is made up of a thin cylinder or rod, called an axle, which is attached to the center of a wheel. The faster the rod turns, the faster the wheel turns. Similarly, the faster the wheel turns, the faster the rod turns.

The wheel and axle provide the mechanical advantage of moving heavy objects around at a faster speed. Rollerblades, for example, are made up of little wheels and axles that help you move around faster.

You can identify this simple machine in many other forms. A bicycle operates with a wheel and axle. So do wagons, cars and, skateboards. You even use a wheel and axle every day to open doors. The knob of the door is the wheel, and the metal rod that connects the door to the knob is the axle. This machine truly makes living life more simple.

Simple Machines Graphic Organizer

Directions: After reading about each simple machine, fill in the chart below.

Name of simple machine:	
Example:	
How does it work?	
What process does it improve?	
Image representation:	

Name of simple machine:	
Example:	
How does it work?	
What process does it improve?	
Image representation:	

LANGUAGE STUDIO 4: EUREKA!

Name of simple machine:	
Example:	
How does it work?	
What process does it improve?	
Image representation:	

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 4: EUREKA!

Formal vs. Informal Language

1. "Hello, how are you?" This is an example of
   a. formal language b. informal language

2. "Hey!" I would most likely NOT say this to
   a. my sister b. my friend c. my teacher

3. I would most likely use informal language if I were having a conversation with
   a. my principal b. my friend c. my teacher

4. I would most likely use formal language if I were having a conversation with
   a. my brother b. my teacher c. my friend

5. "See ya!" You might say this to your friend. Below, write what you might say to your teacher instead of "See ya!"

_____

_____

Demonstration Speech Planning Guide

1. Simple machine: _____

2. Process you will demonstrate: _____

Introduction: _____

Formal Language Greeting: _____

_____

Problem: _____

_____

_____

_____

Body: _____

_____

_____

_____

_____

_____

_____

_____

How this invention helps solve the problem: _____

Steps for using the simple machine: _____

1. First, _____
2. Next, _____
3. Then, _____
4. After that, _____
5. Finally, _____

Conclusion: _____

_____

_____

_____

How this invention improves a process and overall society: _____

_____

_____

_____

Formal Language Closing: _____

_____

_____

_____

_____

Presentation Rubric

	Invention Graphic Organizer	Content	Formal Language Delivery
3	Shares all sections of the graphic organizer, using complete sentences	Includes many specific details—including a problem, solution, and images—about the invention	Speaks clearly and uses an appropriate pace, tone, and volume. Includes formal language in greeting and closing
2	Shares few sections of the graphic organizer, using incomplete sentences	Includes some specific details—including a problem, solution, or images—about the invention	Speaks clearly most of the time and uses an appropriate pace, tone, and volume. Includes formal language in greeting or closing
1	Shares only one or two sections of the graphic organizer, using incomplete sentences	Includes no specific details—including a problem, solution, and images—about the invention	Speaks in an unclear manner and uses an inappropriate pace, tone, and/or volume. Does not include formal language in greeting and closing

ACTIVITY PAGE **10.1**

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 4: EUREKA!

Listening Note Guide

Presenting Group: _____

Something I thought was interesting is:

_____

_____

_____

Something I'd like to know more about is:

_____

_____

_____

One question I have is:

_____

_____

_____

_____

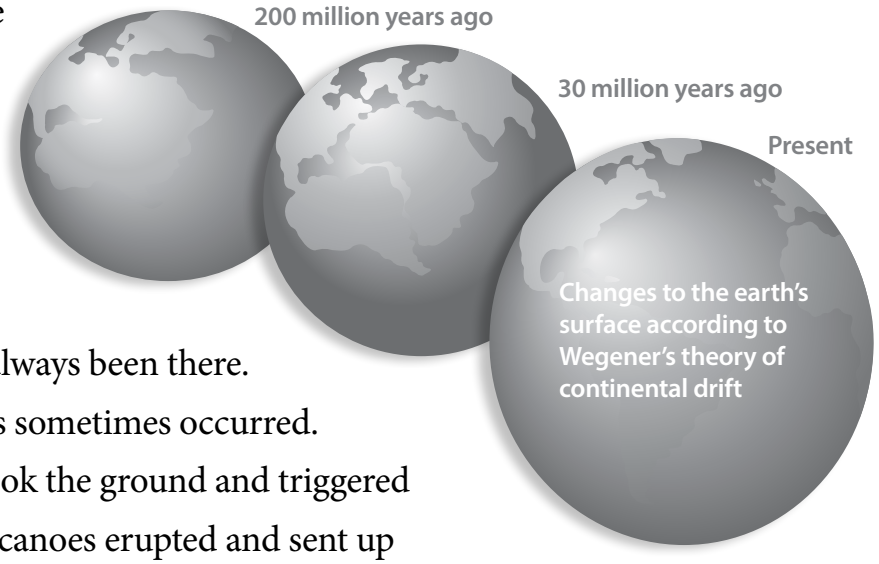
_____

Language Studio 5

Geology

Introduction to Geology

Directions: Read along to the passage below as your teacher reads it out loud.



If you had lived in Europe during the Middle Ages, the idea that the earth changes would have seemed crazy. At that time, people believed that mountains, valleys, and other landscape features had always been there. True, rare natural catastrophes sometimes occurred. Earthquakes, for example, shook the ground and triggered landslides. In some places, volcanoes erupted and sent up fountains of lava, or red-hot melted rock. However, people viewed these catastrophes as punishments from God, not as the earth changing.

Geology is the study of the makeup of the earth and the forces and processes that shape and change it. Rocks are very important in geology. That's because rocks hold clues to how Earth's surface has changed over time. Together with fossils, rocks provide information about the history of the earth.

During the 1700s and 1800s, many people skilled in scientific observation became convinced that Earth's surface features do indeed change. They noticed how great masses of rock appeared to have been lifted up to form cliffs and mountains over time. They began to believe that once-tall mountains had been worn down by wind, rain, and ice and that, over thousands of years, valleys had been carved by rivers flowing through them.

These scientists found evidence that seemed to show that sea levels had been higher—and lower—at different times in the past. They found layers of rock on mountain peaks that contained fossils, the preserved remains of things that lived long ago. These scientists observed how big rocks gradually broke down into tiny pieces called sediments. They saw how new rocks formed as they observed volcanic lava cool and harden.

During the 1800s and early 1900s, geologists studied rock layers on the continents. They made many intriguing discoveries. For example, rock layers along the northern and eastern coasts of South America match rock layers along Africa's western coast. Also, deposits of coal and salt in eastern North America are similar to those in southern Europe.

Geology Key Ideas

Directions: As your teacher reads the paragraphs aloud, take notes on the key ideas in the space provided below each paragraph.

Paragraph 1: If you had lived in Europe during the Middle Ages, the idea that the earth changes would have seemed crazy. At that time, people believed that mountains, valleys, and other landscape features had always been there. True, rare natural catastrophes sometimes occurred. Earthquakes, for example, shook the ground and triggered landslides. In some places, volcanoes erupted and sent up fountains of lava, or red-hot melted rock. However, people viewed these catastrophes as punishments from God, not as the earth changing.

Key Ideas:

Paragraph 2: Geology is the study of the makeup of the earth and the forces and processes that shape and change it. Rocks are very important in geology. That's because rocks hold clues to how Earth's surface has changed over time. Together with fossils, rocks provide information about the history of the earth.

Key Ideas:

Paragraph 3: During the 1700s and 1800s, many people skilled in scientific observation became convinced that Earth's surface features do indeed change. They noticed how great masses of rock appeared to have been lifted up to form cliffs and mountains over time. They began to believe that once-tall mountains had been worn down by wind, rain, and ice and that, over thousands of years, valleys had been carved by rivers flowing through them. These scientists found evidence that seemed to show that sea levels had been higher—and lower—at different times in the past. They found layers of rock on mountain peaks that contained fossils, the preserved remains of things that lived long ago. These scientists observed how big rocks gradually broke down into tiny pieces called sediments. They saw how new rocks formed as they observed volcanic lava cool and harden.

Key Ideas:

Paragraph 4: During the 1800s and early 1900s, geologists studied rock layers on the continents. They made many intriguing discoveries. For example, rock layers along the northern and eastern coasts of South America match rock layers along Africa's western coast. Also, deposits of coal and salt in eastern North America are similar to those in southern Europe.

Key Ideas:

Magnet Summary

Directions: Add any words or images that come to mind when you think of geology.

Geology

ACTIVITY PAGE **2.1**

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 5: GEOLOGY

Geologists' Observations

Directions: Write a paragraph in response to the prompt below.

Prompt: How do geologists' observations help solve problems caused by the earth's changing surface?

Writing Rubric

Directions: Review the Writing Rubric below.

	Key Words	Organization
3	Includes at least three relevant key words	Demonstrates a logical, clear plan of organization. Includes all of the following: a beginning, middle, and end.
2	Includes one or two relevant key words	Demonstrates some logical, clear plan of organization. Is missing one or two of the following: a beginning, middle, and end.
1	Does not use key words	Demonstrates no logical or clear plan of organization; does not contain a beginning, middle, or end

NAME:
DATE:

Adjective Order Chart

Directions: Fill in the chart below.

Opinion/ observation	Physical description				Origin	Material	Purpose	Noun
	Size	Age	Shape	Color				
		old	round	black		rubber	watering	hose
	huge	ancient			Chilean			volcano
beautiful				red	volcanic			lava
dirty	small			gray			building	rocks

Adjective Order Chart

Directions: Fill out the chart below then create noun phrases for each adjective.

Opinion/ observation	Physical description					Origin	Material	Purpose	Noun
	Size	Age	Shape	Color					
					earthquake				
					magma				
					rock				
					ocean				

Noun Phrase 1: _____

_____

Noun Phrase 2: _____

_____

Noun Phrase 3: _____

_____

Noun Phrase 4: _____

_____

Expanding Noun Phrases

Helpful Guide:

Opinion/ observation	Physical description				Origin	Material	Purpose	Noun
	Size	Age	Shape	Color				

Directions: Choose the correct answer.

1. The _____ glacier is in Antarctica.
   A. slow ancient
   B. ancient slow

2. In California the _____ San Andreas Fault causes many earthquakes.
   A. large dangerous
   B. dangerous large

3. _____ magma erupts from the earth's surface during a volcano.
   A. red hot
   B. hot red

4. In the 1960s, Wegener developed the _____ theory of plate tectonics.
   A. controversial new
   B. new controversial

5. _____ rocks give geologists information about how the earth changes.
   A. volcanic black
   B. black volcanic

Directions: Now that you have practiced ordering adjectives, write three of your own sentences describing three different nouns.

1. Noun: _____

_____

_____

_____

2. Noun: _____

_____

_____

_____

3. Noun: _____

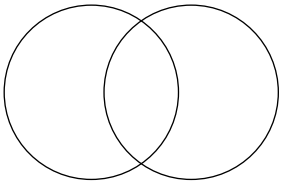
_____

_____

_____

Text Structures Chart

Review the chart below.

Text Structures: How does the author organize information in a text?			
Different types of text structures	**Defined**	**Clue words**	**Image**
Sequence	Explains the order in which events happened	First Next Then After Last Finally	
Cause and effect	Explains why things happen	Because Then If So As a result When	
Comparison	Shows differences and similarities between two or more things	However On the other hand Like Unlike Same	
Problem/solution	Introduces and describes a problem and then offers one or more solutions	Problem Solution Solve Plan	

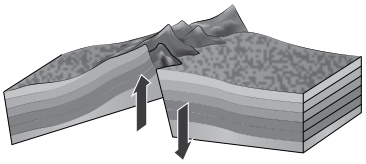
NAME: _____

DATE: _____

LANGUAGE STUDIO 5: GEOLOGY

Identifying Text Types

Directions: Underline or highlight the key words in the passages. Then label the text type in the right-hand column.

	**Moving Faults** A fault is a fracture or crack in the Earth's crust. Most faults occur along the boundaries of tectonic plates. When the plates move, the huge blocks of rock along the fault get stuck together. While this is happening, the material in the mantle keeps moving. Because of the moving in the mantle, the plates are also forced to keep moving. As a result a large amount of energy can be released.	
	**Tsunamis vs. Earthquakes** A tsunami is caused by an earthquake at sea. Like an earthquake, a tsunami starts with a release of energy when tectonic plates slip past each other. However, the tectonic plates that slip past each other are located in the oceanic crust at the bottom of the sea. As there are faults along the boundaries of tectonic plates on land, there are also faults along the boundaries of tectonic plates in the ocean. Unlike an earthquake caused by shaking ground, a tsunami is caused by a shift in the seafloor. Also unlike an earthquake, the release of energy during a tsunami causes ocean water to move. A tsunami may form a gigantic wave in the ocean that crashes with tremendous force against the shore.	

Volcanic Eruptions

A volcano is a hill or mountain that forms over a crack in Earth's crust. An active volcano is one that has erupted in the past 10,000 years and is likely to erupt again. A volcanic eruption follows these steps: first, the pressure and heat in the mantle become too great. Then, the pressure forces the magma in the chamber upward through the crack in the Earth's crust. Next, the magma erupts as lava from the crater at the top of the volcano. The lava oozes down the sides of the volcano. Finally, the lava cools and hardens, forming a new layer of volcanic rock.

Invention of the Seismograph

Alfred Wegener's continental drift hypothesis explained why many continents seem to fit together like a puzzle. However, the problem was that many geologists did not believe his hypothesis because there was no proof.

Oddly enough earthquakes helped scientists solve this problem. Earthquakes' shaking is caused by the waves of energy called **seismic waves**. Geologists began using the seismograph. This solution helps scientist prove Wegener's continental drift hypothesis.

NAME: _____

DATE: _____

LANGUAGE STUDIO 5: GEOLOGY

Volcanoes

Directions: Read the paragraph below with a partner. As you read, underline the text structure key words. Use those to help identify and write the text type on the lines below.

A volcano is a hill or mountain that forms over a crack in Earth's crust. An active volcano is one that has erupted in the past 10,000 years and is likely to erupt again. A volcanic eruption follows these steps: first, the pressure and heat in the mantle become too great. Then, the pressure forces the magma in the chamber upward through the crack in the Earth's crust. Next, the magma erupts as lava from the crater at the top of the volcano. The lava oozes down the sides of the volcano. Finally, the lava cools and hardens, forming a new layer of volcanic rock.

Text Type:

Volcanoes Sequence

Directions: Illustrate and describe the sequence of a volcanic eruption.

First, _____

_____

Next, _____

_____

Then, _____

_____

Finally, _____

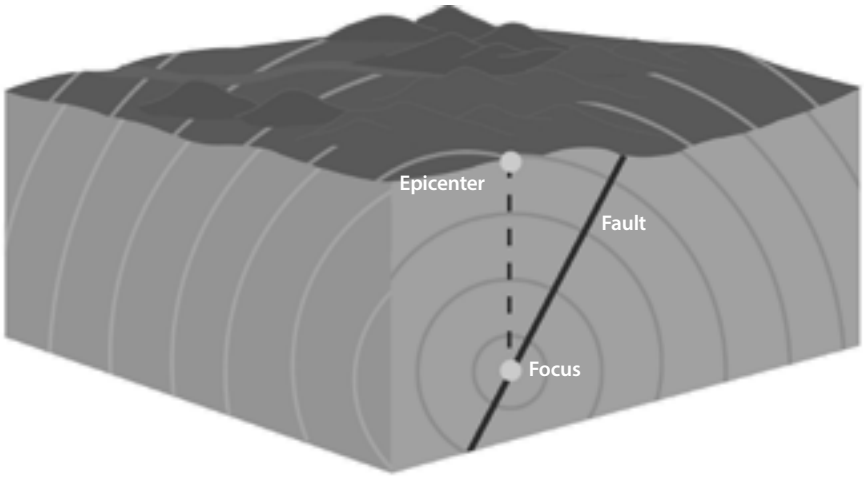
_____

Earthquakes

Directions: Read the paragraph below with a partner. As you read, underline the text structure key words. Use those to help identify and write the text type on the lines below.

Earthquakes occur at faults, or fractures, in Earth's crust. Faults most often form along the boundaries of tectonic plates. As tectonic plates move underneath the Earth's crust, huge rough blocks of rock on either side of a fault get stuck against each other. Because the material beneath the plates keeps moving, the plates press harder and harder together. As the plates press together, the pressure builds and builds. If the pressure becomes too great, the blocks of rock suddenly break and slip past one another. When the rocks break and slip past one another, a gigantic burst of energy is released in every direction. As a result of this release of energy, the ground shakes. A powerful earthquake causes the ground to shake dangerously.

Text Type: _____



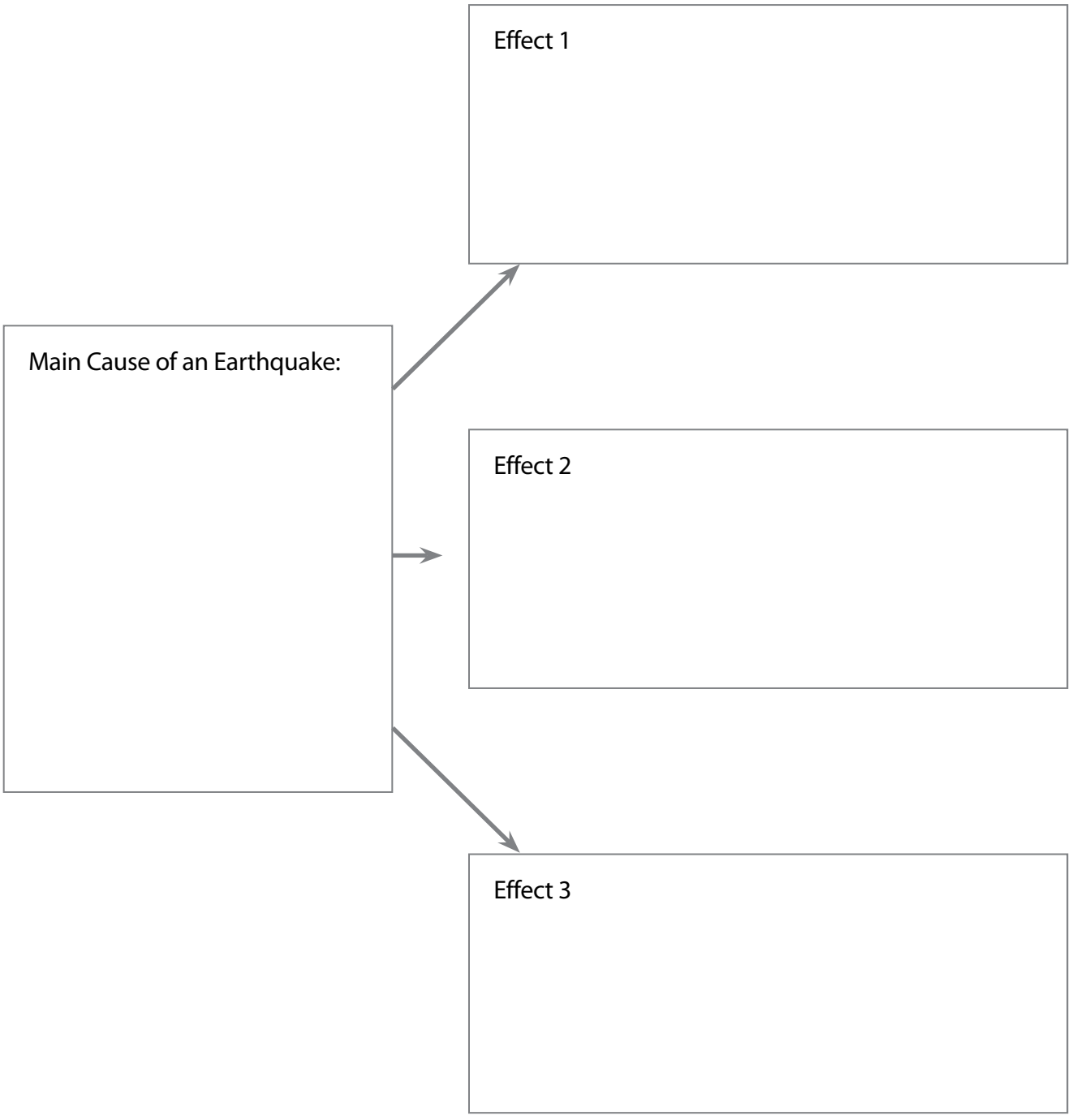
NAME: _____

DATE: _____

LANGUAGE STUDIO 5: GEOLOGY

Cause and Effect Graphic Organizer

Directions: Fill in the graphic organizer using the "Earthquakes" reading on Activity Page. 7.1.



Earthquakes vs. Tsunamis

Directions: Read along to the passage below as your teacher reads it out loud.

A tsunami is caused by an earthquake at sea. Like an earthquake, a tsunami starts with a release of energy when tectonic plates slip past each other. However, the tectonic plates that slip past each other are located in the oceanic crust at the bottom of the sea. As there are faults along the boundaries of tectonic plates on land, there are also faults along the boundaries of tectonic plates in the ocean. Unlike an earthquake caused by shaking ground, a tsunami is caused by a shift in the seafloor. Also unlike an earthquake, the release of energy during a tsunami causes ocean water to move. A tsunami may form a gigantic wave in the ocean that crashes with tremendous force against the shore.

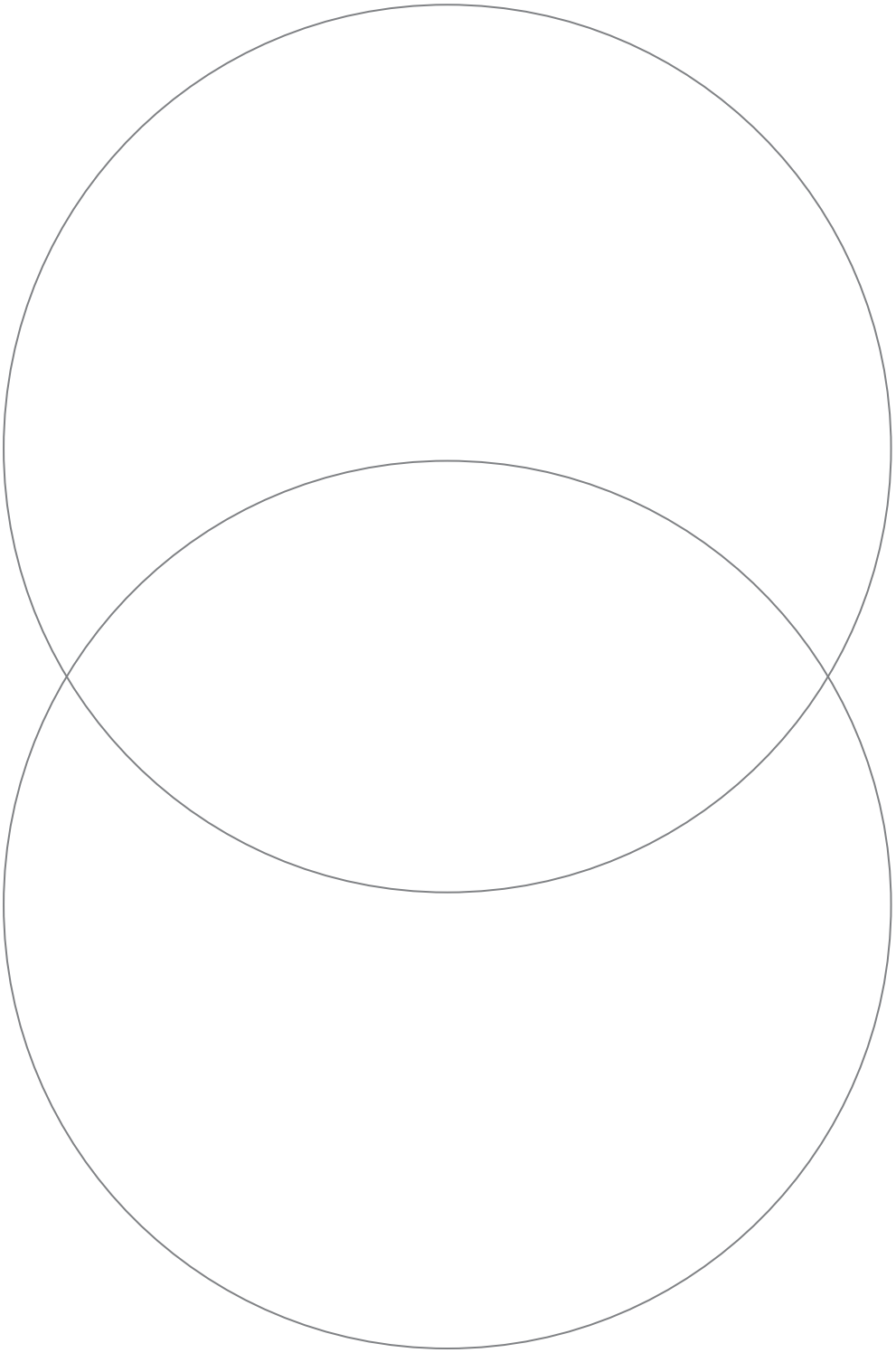
NAME: _____

DATE: _____

LANGUAGE STUDIO 5: GEOLOGY

Compare and Contrast Graphic Organizer

Directions: Fill in the Venn diagram below. Then summarize your comparison in the space provided.



Challenge: Write a short paragraph **comparing** earthquakes and tsunamis.

ACTIVITY PAGE **9.1**

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 5: GEOLOGY

Adding *–ly*

Directions: Write a description of the image.

Word Bank

Slowly Silently Quickly Happily

Image 1:

_____

_____

_____

Image 2:

Image 3:

Image 4:

ACTIVITY PAGE **9.2**

NAME: _____

DATE: _____

LANGUAGE STUDIO

LANGUAGE STUDIO 5: GEOLOGY

Text Structure in Magazines

Directions: Fill in the information below based on the article(s) you read.

Article 1: _____

Title: _____

Text structure words I circled: _____

Text type: _____

Article 2: _____

Title: _____

Text structure words I circled: _____

Text type: _____

Article 3: _____

Title: _____

Text structure words I circled: _____

Text type: _____

Article 4: _____

Title: _____

Text structure words I circled: _____

Text type: _____

Collaborative Group Work Recording Sheet

Part 1:

Directions: With your group, choose 3 from each category. Mark your selections with a check mark.

Text Structures

_____ Compare and Contrast

_____ Cause and Effect

_____ Sequence

_____ Problem and Solution

Geology Magazine Topics

_____ Earthquakes

_____ Tsunamis

_____ The Rock Cycle

_____ Continental Drift

_____ Faults

Part 2:

Directions: Write your sections on the lines below under the correct headings.

TEXT STRUCTURE TYPES	GEOLOGY MAGAZINE TOPICS
1. _____	_____
2. _____	_____
3. _____	_____

Part 3:

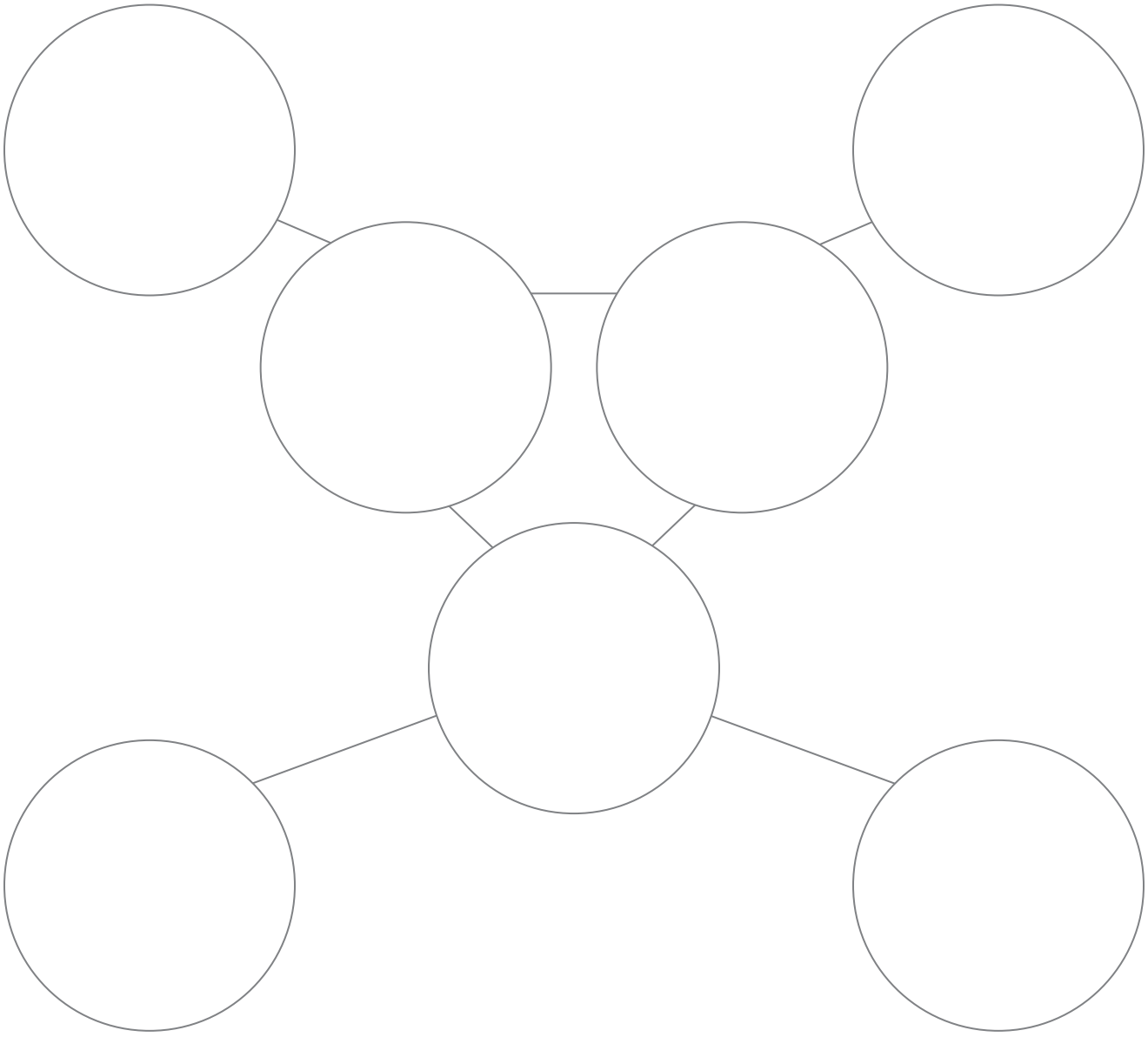
Directions: With your group, draw a line matching the geology topic and the text structure you are going to use.

Text Structure: Compare and Contrast

Geology Magazine Topic

_____ and volcanoes

Directions: Fill in the similarities and differences of your chosen geology topics using the Graphic Organizer.



Plan your article.

_____ and _____ are similar because

_____

_____.

What is different _____ and _____. They

have _____ in common, but _____ is different.

Free writing space.

Sketch of image.

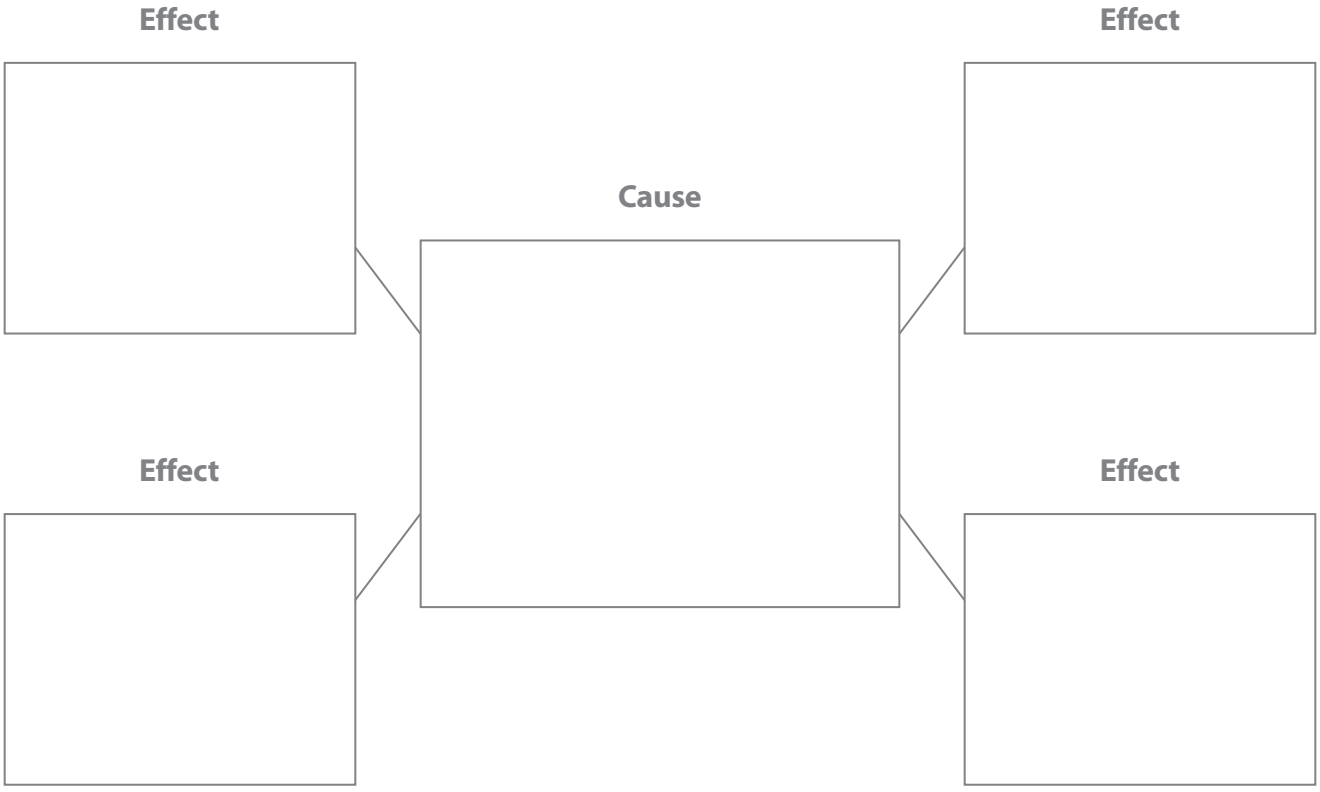
Text Structure: Cause and Effect

Geology Magazine Topic

_____

Planning Map

Directions: Fill in the cause and effects of your chosen geology topics using the Graphic Organizer.

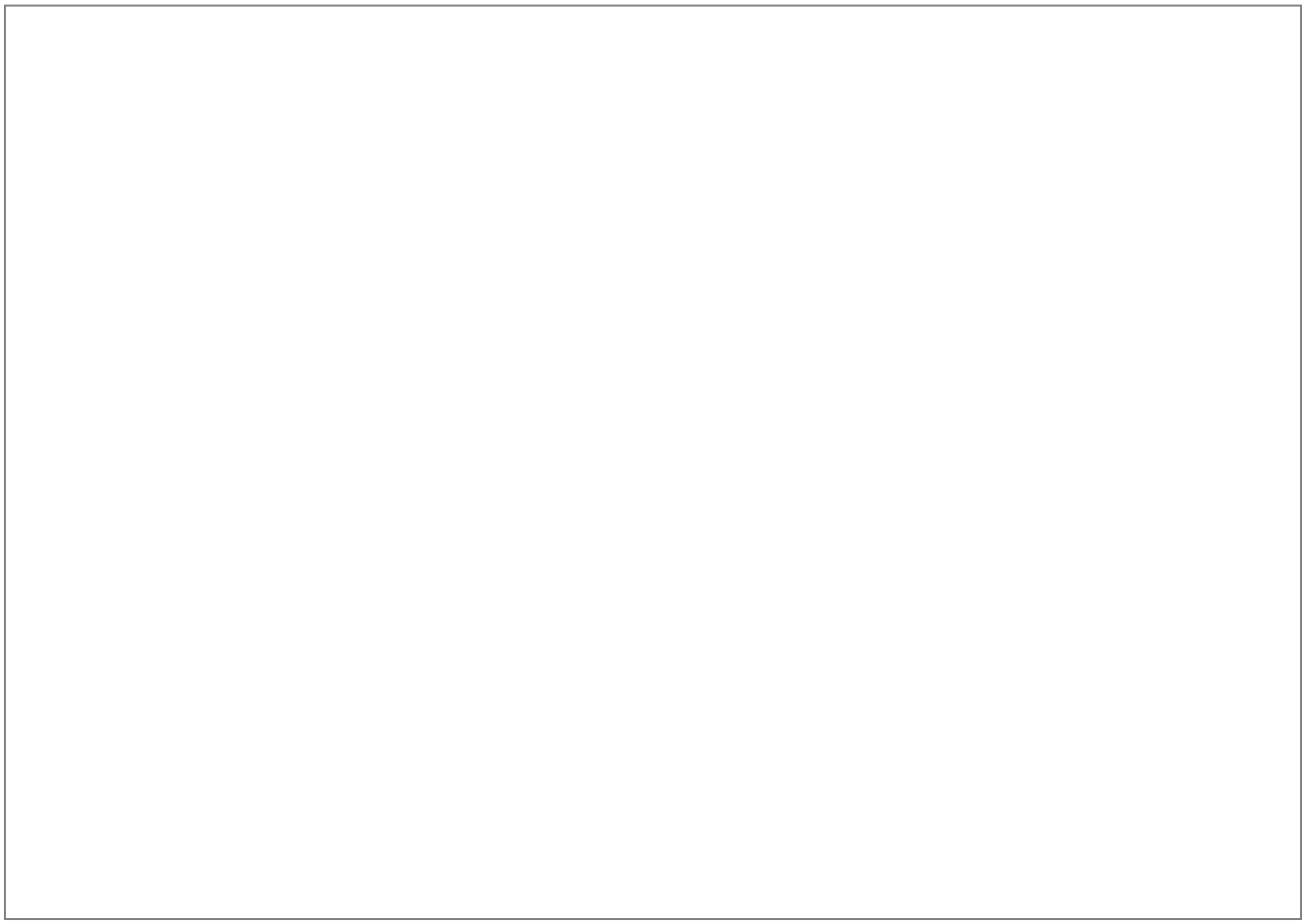


When _____ happens the result is _____.

As a result of _____. Then _____.

Free writing space.

Sketch of image.



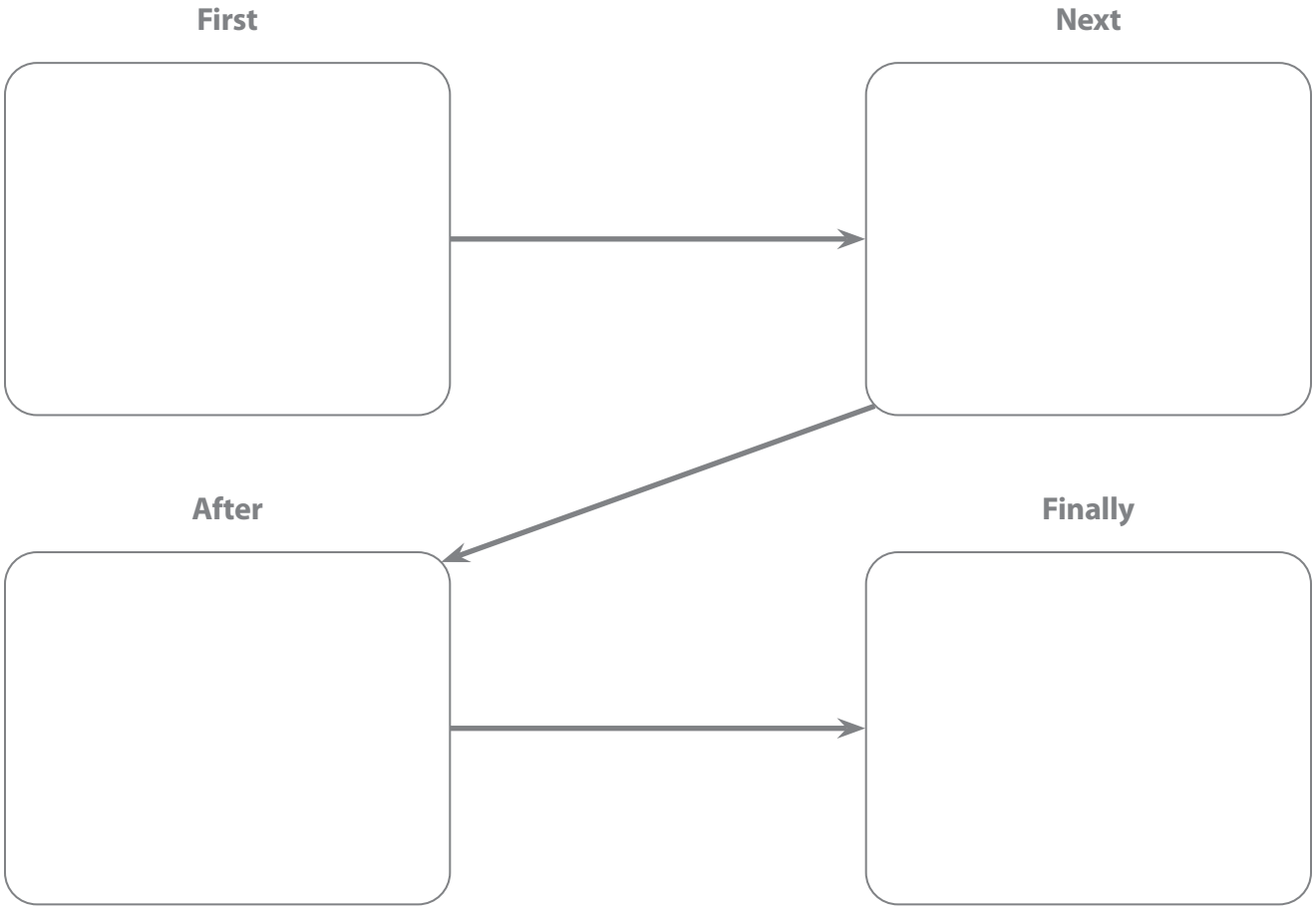
Text Structure: Sequence

Geology Magazine Topic

_____

Planning Map

Directions: Fill in the sequence of events of your chosen geology topics using the Graphic organizer.

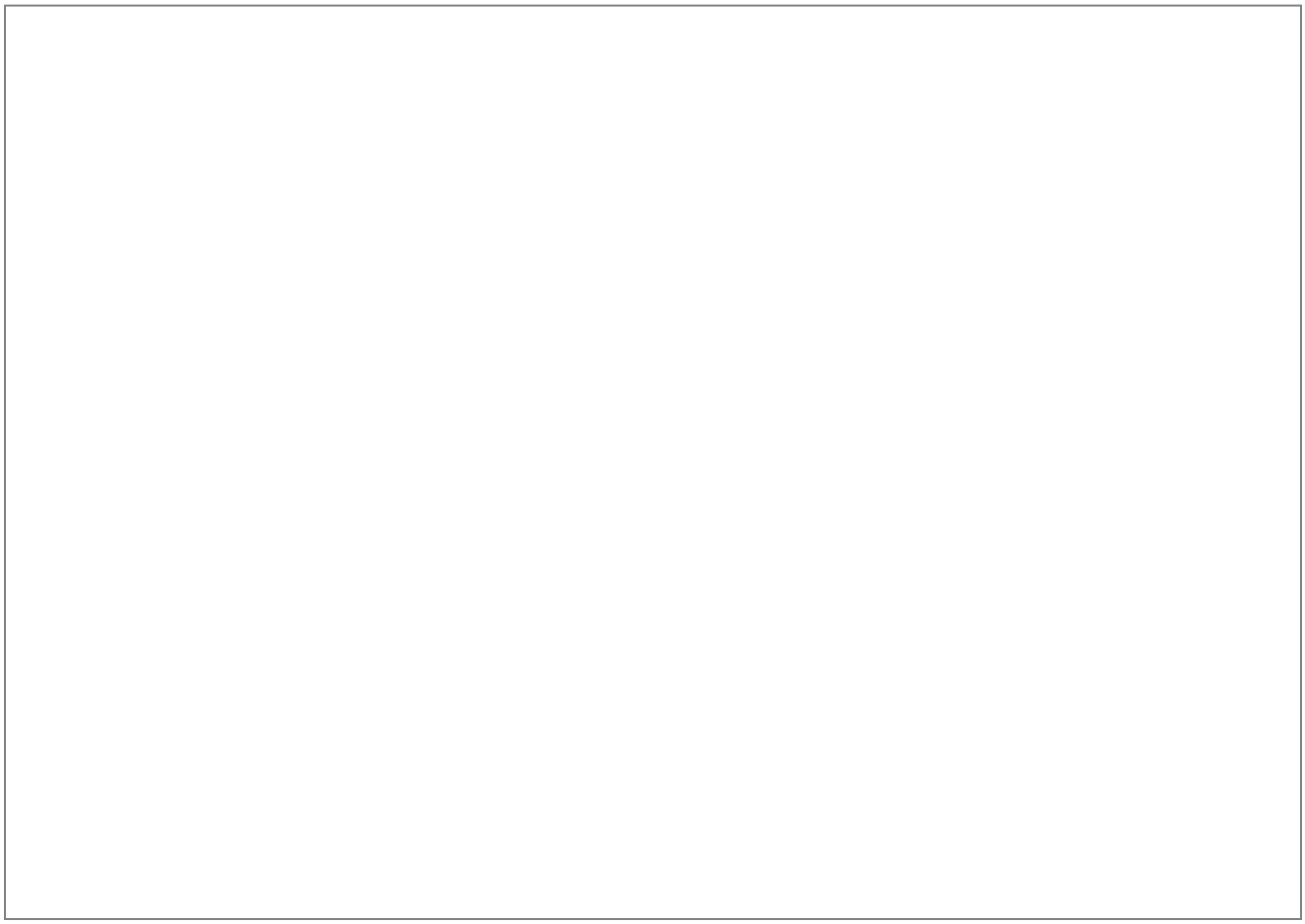


First _____. Next _____.

After _____. Finally _____.

Free writing space.

Sketch of image.



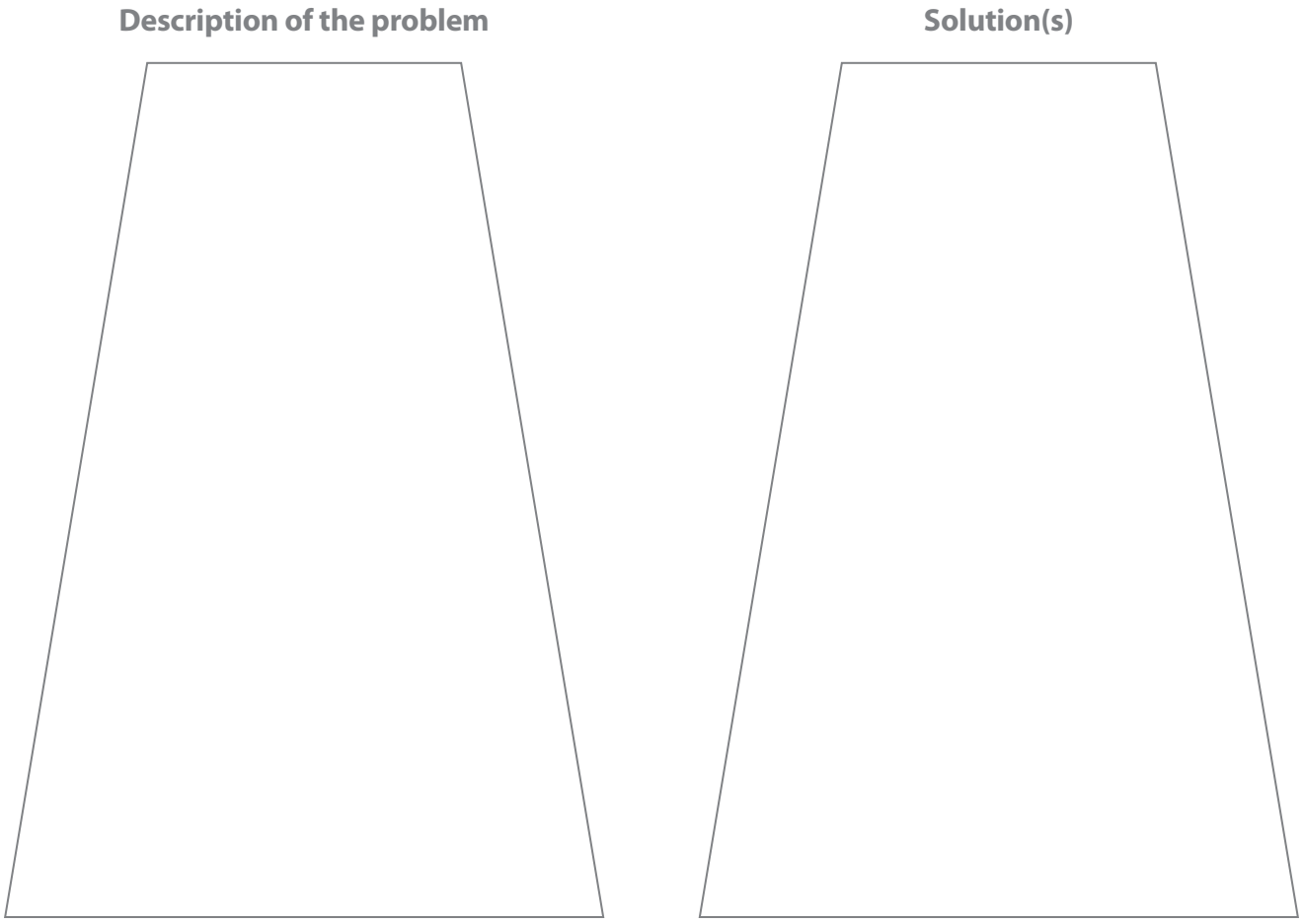
Text Structure: Sequence

Geology Magazine Topic

_____

Planning Map

Directions: Fill in the problem and solution of your chosen geology topics using the Graphic Organizer.

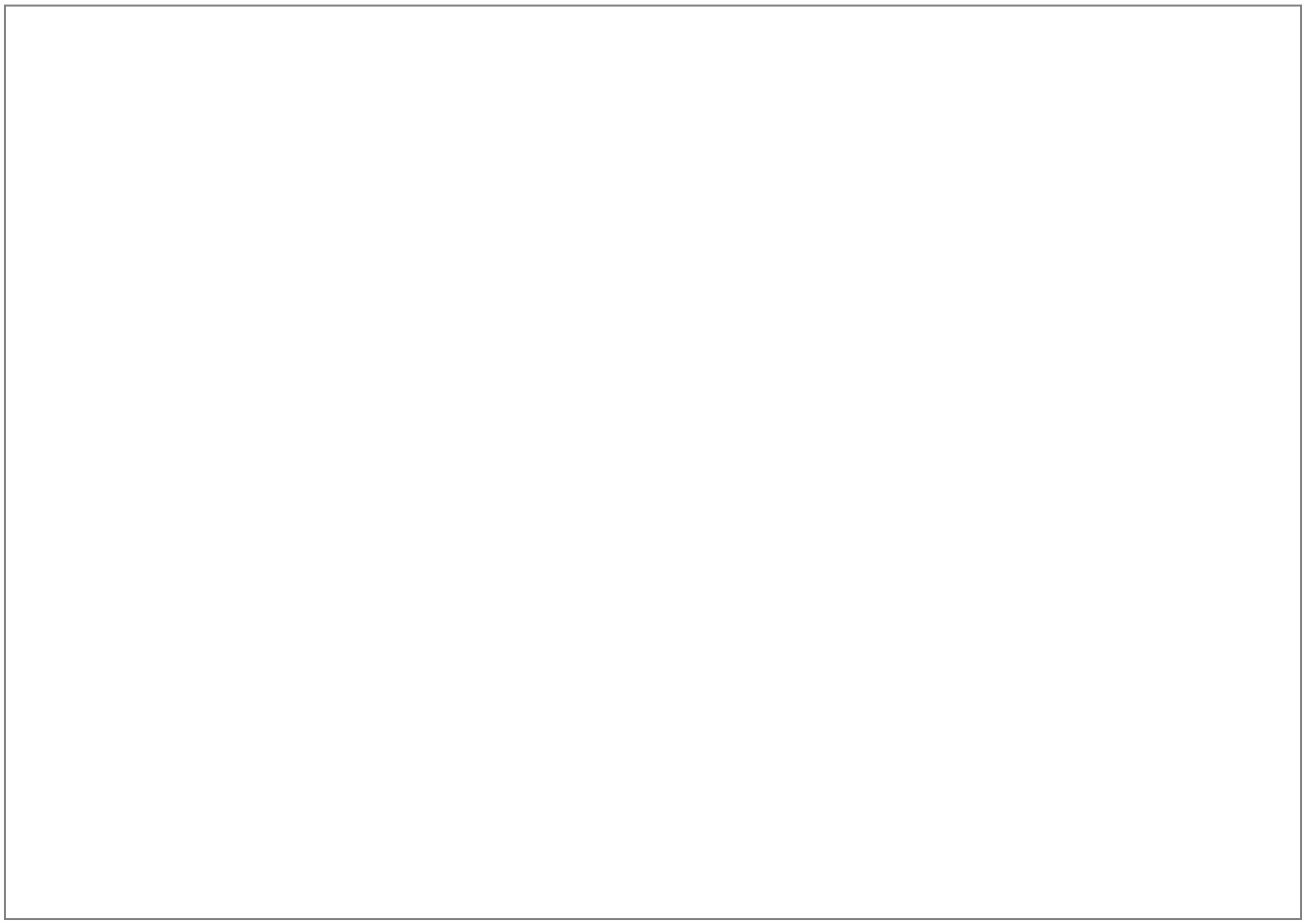


The problem is _____. One way to solve the problem

is _____. The solution is to _____.

Free writing space.

Sketch of image.



LANGUAGE STUDIO 5: GEOLOGY

Directions: Review the Presentation and Listening Rubrics below.

Presentation Rubric

	Text Structure	Content	Delivery
3	Uses many key words for the chosen structure (look at AP 5.1).	Includes many specific details, including images, about the chosen topic.	Speaks clearly at an appropriate pace, tone, and volume.
2	Uses some key words for the chosen structure (look at AP 5.1).	Includes some specific details, including images, about the chosen topic.	Speaks clearly most of the time at an appropriate pace, tone, and volume.
1	Uses no key words for the chosen structure (look at AP 5.1).	Includes no specific details, except images, about the chosen topic.	Speaks in an unclear manner at an inappropriate pace, tone, and volume.

Listening Rubric

	Attention	Engagement	Connection
3	Focuses on speaker; shows strong listening behaviors—head nodding, eye contact; does not talk while another is speaking.	Takes notes; prepares questions for presenters; makes thoughtful suggestions for presenters.	Asks authentic, thought-provoking questions; considers multiple points of view.
2	Focuses on speaker for most of the presentation; rarely interrupts or talks while another is speaking.	Takes some notes; prepares some questions and suggestions for presenters.	Asks relevant questions; able to recall what has been said.
1	Lack of focus on speaker; looks around; interrupts or talks to person sitting nearby.	Takes no notes.	Does not ask questions; does not recall what the speaker has said.

ACTIVITY PAGE **11.2**

NAME: _____

DATE: _____

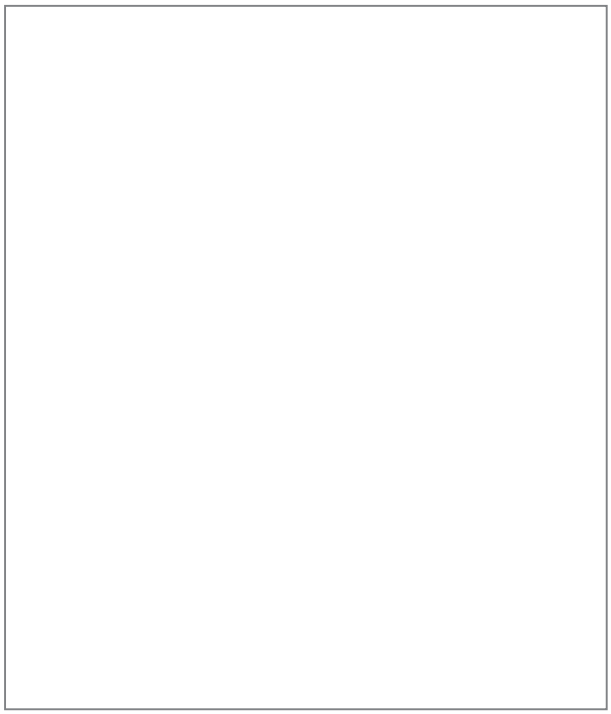
LANGUAGE STUDIO

LANGUAGE STUDIO 5: GEOLOGY

Directions: Write an article and draw a picture for your geology magazine.

_____

(Article Title)



NAME: _____

DATE: _____

11.3 ACTIVITY PAGE

LANGUAGE STUDIO 5: GEOLOGY

Directions: Write an article and draw a picture for your geology magazine.

_____

(Article Title)

ACTIVITY PAGE **11.4**

NAME: _____

DATE: _____

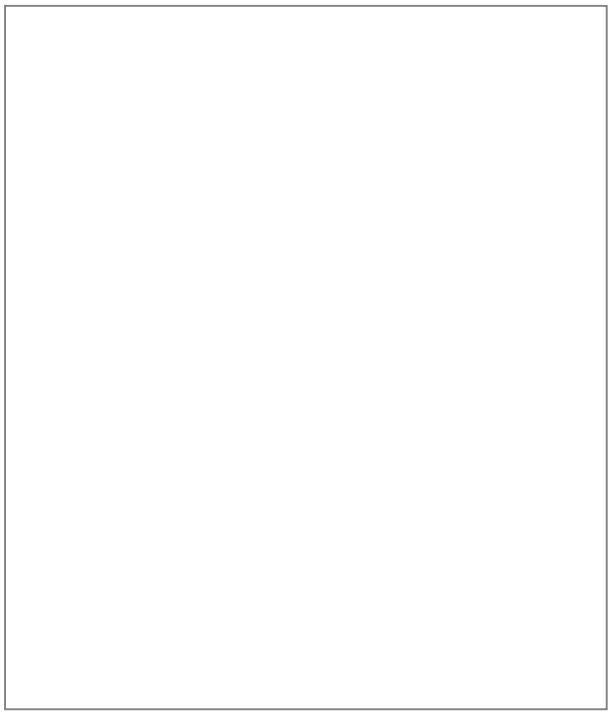
LANGUAGE STUDIO

LANGUAGE STUDIO 5: GEOLOGY

Directions: Write an article and draw a picture for your geology magazine.

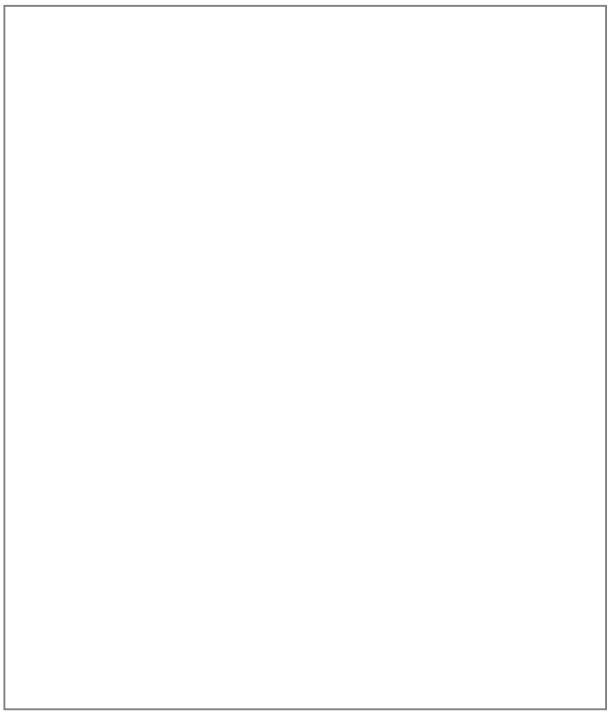
_____

(Article Title)



_____

(Article Title)



ACTIVITY PAGE **12.1**

NAME: _____

DATE: _____

LANGUAGE STUDIO 5: GEOLOGY

Coordinating Conjunctions

F	A	N	B	O	Y	S
For	And	Nor	But	Or	Yet	So

Directions: Circle the coordinating conjunctions and underline the parts of the sentence that are being connected.

1. Flowing water picks up sediments and carries them to new locations.

2. As wind slows down, the sediments it carries fall back to Earth. They are deposited on land or in water.

3. Gravity is a very strong force, so it can pull sediments out of wind and water.

4. Weathering and erosion work neither quickly nor are the effects obvious right away.

5. The tall mountains we know today will not last forever, but new mountains will take their places.

Now, create three of your own sentences using coordinating conjunctions.

1. _____

2. _____

3. _____

Presentation Rubric Example

Directions: Use the rubric to evaluate the presentation. Then explain your scores on the lines provided below.

	Text Structure	Content	Delivery
3	Uses many key words for the chosen structure (look at AP 5.1).	Includes many specific details, including images, about the chosen topic.	Speaks clearly at an appropriate pace, tone, and volume.
2	Uses some key words for the chosen structure (look at AP 5.1).	Includes some specific details, including images, about the chosen topic.	Speaks clearly most of the time at an appropriate pace, tone, and volume.
1	Uses no key words for the chosen structure (look at AP 5.1).	Includes no specific details, except images, about the chosen topic.	Speaks in an unclear manner at an inappropriate pace, tone, and volume.

Explanation of Text Structure Score:

Explanation of Content Score:

Explanation of Delivery Score:

NAME: _____

DATE: _____

LANGUAGE STUDIO 5: GEOLOGY

Listening Note Guide

Directions: Fill in the information below as your classmates present their magazines.

Presenting Group: _____

Something I thought was interesting is:

_____

_____

_____

_____

Something I'd like to know more about is:

_____

_____

_____

_____

One question I have is:

_____

_____

_____

_____

Listening Note Guide

Directions: Fill in the information below as your classmates present their magazines.

Presenting Group: _____

Something I thought was interesting is:

_____

_____

_____

_____

Something I'd like to know more about is:

_____

_____

_____

_____

One question I have is:

_____

_____

_____

_____

Listening Note Guide

Directions: Fill in the information below as your classmates present their magazines.

Presenting Group: _____

Something I thought was interesting is:

_____

_____

_____

_____

Something I'd like to know more about is:

_____

_____

_____

_____

One question I have is:

_____

_____

_____

_____

Listening Note Guide

Directions: Fill in the information below as your classmates present their magazines.

Presenting Group: _____

Something I thought was interesting is:

_____

_____

_____

_____

Something I'd like to know more about is:

_____

_____

_____

_____

One question I have is:

_____

_____

_____

_____

Listening Note Guide

Directions: Fill in the information below as your classmates present their magazines.

Presenting Group: _____

Something I thought was interesting is:

_____

_____

_____

_____

Something I'd like to know more about is:

_____

_____

_____

_____

One question I have is:

_____

_____

_____

_____

Presentation Self-Assessment

Directions: Fill in the number of smiley faces that represent your self-assessment for each category.

I presented a beginning, middle, and end.

I used pictures, drawings, or other visual aids to enhance my presentation.

I looked at my audience.

I spoke loudly and clearly.

I answered questions from the audience.

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Schools

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Language Studio 4

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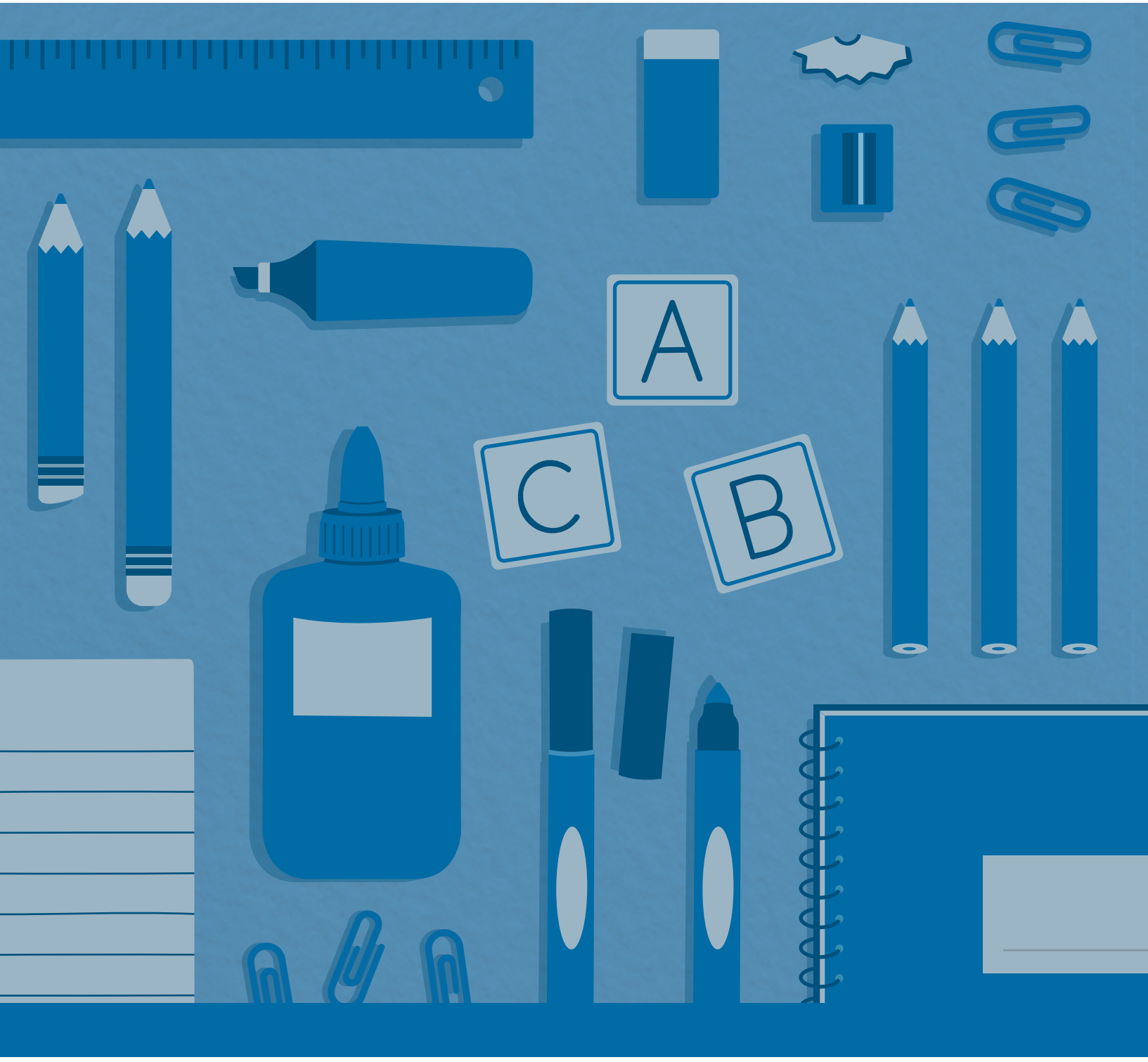

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