

Home & School

CONNECTION®

Working Together for School Success

January 2019



Harmony Elementary School
Dr. Barbara Griffieth, Principal

SHORT NOTES

A fresh start

Help your youngster begin 2019 on a positive note. As she returns to school after winter break, have her ease back into familiar routines. She may need gentle reminders to resume habits like setting an alarm before bed, packing a snack in the morning, or showing you papers from her backpack after school.

Everyday fitness

To inspire your child to lead an active lifestyle, look for ways to fit physical activity into his day. For instance, turn on upbeat music and dance while the two of you do chores. Or he could do jumping jacks while waiting for the microwave to beep.

DID YOU KNOW?

Laughing releases feel-good hormones that relieve stress. Take time each day to enjoy a good laugh with your youngster. Write a joke on a sticky note, and put it on her placemat at the dinner table. Share a funny video you find, or play a game that will make everyone laugh, such as charades or Pictionary.

Worth quoting

"Children are our most valuable resource." *Herbert Hoover*

JUST FOR FUN

Q: What has one eye but can't see?

A: A sewing needle!



Read to succeed

Whether your child is solving a word problem in math or following instructions for a science experiment, strong reading skills play an important role. Here are activities to build his comprehension as he learns in three key subjects.

Math

Suggest that your youngster read a math story problem aloud and then retell it in his own words—leaving out the numbers! This allows him to focus on what the problem is asking him to do before he tries to solve it. *Example:* "A panda had a lot of bamboo. Then he ate some. Now he has less. How much bamboo does he have left?" He'll know that he needs to subtract.

Science

Diagrams, charts, tables, and other graphics help your child "see" science concepts. Encourage him to create his own visual aids. If he's reading about the

layers of the Earth, maybe he will draw a diagram and label the *crust, mantle, outer core, and inner core.*

History

Your youngster will go back in time by reading historical fiction about topics he studies. He'll feel as if he's walking the streets of ancient Greece, for instance, while also getting background information on people, places, and events. He might try a series like *Magic Tree House* (Mary Pope Osborne) or *Blast to the Past* (Stacia Deutsch and Rhody Cohon).♥



Stay in touch with teachers

Think of communication with your child's teacher as an ongoing conversation. Consider these tips.

● **Share the good.** Let the teacher know that your youngster enjoyed working on a project or that you liked the class play. Email her, or send a note to school with your child.

● **Work through problems.** If the teacher contacts you with a concern about your youngster, first listen to what she has to say. Respond calmly, and ask what you can do at home to help. Then, follow up with the teacher regularly to see how things are going.♥



What does respect mean?

Showing respect will be easier for your youngster if she knows what respect sounds like and looks like in everyday life. Try these ideas.

Make a “quote board.” Have your child label a poster board or a bulletin board “The Sounds of Respect.” When a family member hears respectful language, she can write it on a sticky note and add it to the board. For instance, your youngster might



overhear a teller at the bank say, “Thank you for your service” to a customer in a military uniform. Or maybe you’ll notice that your child asks her brother respectfully, “Could you please sing more quietly while I finish my homework?”

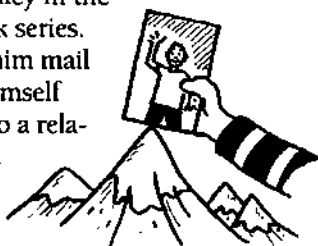
Draw a comic strip. Brainstorm ways people show respect, such as by keeping commitments or respecting others’ wishes. Then, your youngster can create a comic strip that illustrates one of the examples. Perhaps she’ll draw one panel that shows her arranging a get-together with a friend, a second panel where a different friend invites her to a movie she’s anxious to see, and a third with her sticking to her original plans.♥

ACTIVITY CORNER

Adventures by mail

Your child can explore the world without leaving home! This activity turns him into a “flat traveler”—like Flat Stanley in the popular book series.

First, let him mail a photo of himself and a letter to a relative or friend who lives out of town. He



could write questions that will help him learn about the place, perhaps about the weather, language, foods, geography, or landmarks.

The person should mail back answers, along with photos and even tourist brochures or postcards. For instance, his aunt may snap a picture of your child’s photo on a snowy mountain or in front of a famous skyscraper.

Suggest that your youngster put everything in a scrapbook that he can read to remind him of the places “he” has been. Then, he can send his photo on another adventure with a different long-distance relative or friend!♥

OUR PURPOSE

To provide busy parents with practical ideas that promote school success, parent involvement, and more effective parenting.

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PARENT TO PARENT

Participating in class

My son, Sam, has always been a quiet kid. This year, his teacher told me that he rarely speaks up in class and prefers to work alone. So together, she and I came up with strategies to help Sam participate more.

Now as part of Sam’s homework, he decides on one question or comment about the material to share in class the next day. Practicing what he plans to say prepares him to speak up. Also, when the teacher assigns group projects, she tries to put Sam on a team that includes at least one student he knows well.

The teacher reports that Sam is speaking up more often. And the other day, he came home excited about a great idea his partner had for the diorama they’re working on together.♥



Q & A

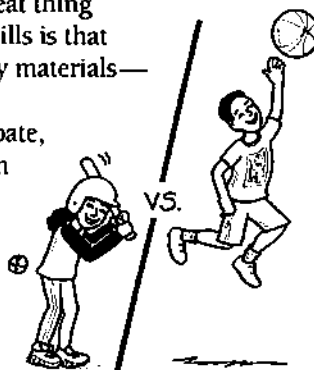
Sharpen critical thinking

Q: At a recent curriculum night, the principal talked about critical thinking. Are there fun ways to work on this at home?

A: Absolutely! And the great thing about building thinking skills is that your child doesn’t need any materials—just her brain.

Try holding a family debate, with a twist. Ask a question like “Which is better, basketball or baseball?” Let each person answer, then argue in favor of the sport she *didn’t* choose. Your

youngster will need to think critically to take a view that’s the opposite of her own. For instance, a baseball fan might say that basketball is more fast-paced and exciting.



Or encourage your daughter to look at familiar situations in new ways. Have her pick a situation or an event (say, a snowstorm). Now take turns looking at it from others’ perspectives. How would a truck driver, a toddler, or a squirrel feel about the snow?♥

Math+Science Connection

Beginning Edition

Building Excitement and Success for Young Children

January 2019



Harmony Elementary School
Dr. Barbara Griffieth, Principal

TOOLS & TIDBITS

Use your head

Encourage your youngster to do simple

math problems in his head. For instance, say, "Aunt Christine and Uncle Larry are coming over. How many people will be here?" He might think, "There are 4 of us. My aunt and uncle are 2 more. $2 + 4 = 6$." Mental calculations will prepare him for math he'll do at school and home.

Powers of observation

Sharpen your child's observation skills with this idea. Secretly select a magazine photo that shows something from



nature, such as an animal, an apple, or an ocean wave. Cut out a small piece of the picture, and see if your

youngster can guess what it is. If she sees black and white stripes, she might say it's a zebra or a skunk.

Book picks

■ Your youngster can count change along with Pauline and John-John as they sell ice-cold drinks in *Lemonade in Winter: A Book About Two Kids Counting Money* (Emily Jenkins).

■ *Over and Under the Snow* (Kate Messner) reveals nature's wonders in keeping animals safe and warm all winter in a hidden world beneath the snow.

Just for fun

Q: Why are fish so smart?

A: Because they live in schools.



365 days of math

It has up to 31 numbers, and we use it every day of the year. What is it? A calendar! Hang one where your child can see it, and try these activities.

Calendar jar

Place a clear jar and a bag of small items (cotton balls, jelly beans) near the calendar. Each day, your youngster should fill the jar with the number of objects matching the date. For example, she would add 6 cotton balls on January 6. The next day, she would dump those out and count in 7 cotton balls for January 7. She'll build number sense as she counts and sees what different amounts look like each day.



Number of the day

Have your child look for creative ways to use each day's date. On January 20, she could set a timer and read for 20 minutes. On the 24th, you might bake 2 dozen (24) cookies together. And on the 30th, suggest that she build a Lego castle with 30 bricks.

Special countdown

Let your youngster place stickers or draw pictures on special dates like birthdays, holidays, and school events. Then, she can keep track of how many days are left until each date. Perhaps today is the 8th, and her birthday is on the 18th. She could count on from 8 to 18 or use subtraction ($18 - 8 = 10$) to discover that her birthday is in 10 days. 🦋

On the lookout for winter

"I found an icicle!" "There's frost on that leaf."

Go on a walk with your youngster to search for signs of winter. Before you head out, let him predict what he will see. He might list snow, ice, bare branches, acorns, nests, animal tracks, and even people wearing winter coats, hats, and gloves.

He can bring his list on your walk and mark off each item he notices. Along the way, he could add other winter sightings not on his list—perhaps berries, shovels, or smoke from a chimney.

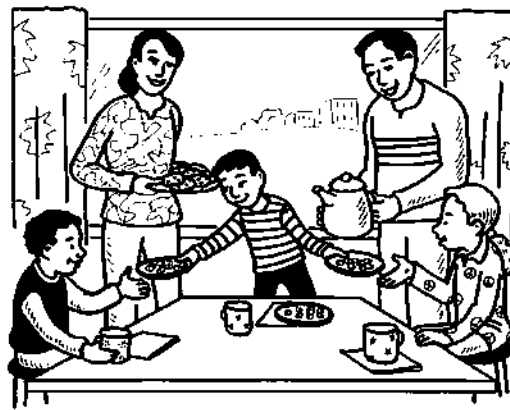
Idea: As your child warms up indoors after your outing, encourage him to draw or paint a wintry scene that includes all the signs he saw. 🦋



Is it equal?

The concept of *equal* is important to kids from an early age — especially when it comes to sharing treats! Here are ideas for helping your youngster explore equal groups and equal parts.

Hot cocoa party. Let your child invite friends over for hot cocoa and snacks. He can divide up a bowl of mini-marshmallows to make equal groups. If he has 25 marshmallows and 2 guests (plus himself), how many marshmallows will he give each



person? Suggest that he deal them out to everyone, then put away any leftovers. He'll see that each friend gets 8 mini-marshmallows and 1 is left over.

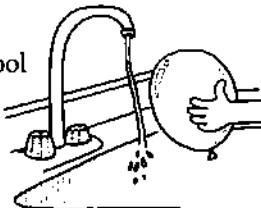
Shape puzzles. Help your youngster cut circles and squares out of construction paper. Now have him cut some shapes into 2 equal parts (halves) and others into 4 equal parts (fourths or quarters). Mix up all the parts, and use teamwork to put the shapes back together. Be sure to use fraction words! You might say, "I have *one-half* of this red circle. Do you

have the other *half*?" Tip: Once he's comfortable with halves and fourths, he could cut shapes into thirds, too.

SCIENCE LAB Watch water bend

Energize your youngster's excitement for science with this experiment that shows how *static electricity* can bend water.

You'll need: wool hat (or other wool clothing), inflated balloon, sink



Here's how: Have your child put on the hat and rub the balloon over it quickly while she counts to 20. Run a slow, steady stream of water from the sink, and let her immediately hold the balloon as close to the water as she can without touching.

What happens? The water curves and bends toward the balloon!

Why? Rubbing the balloon over the wool hat creates static electricity. Negative particles (electrons) from the hat move to the balloon, "charging" it. Water has both electrons and positive particles (protons). The negatively charged balloon attracts the protons in the water, pulling them toward the balloon.

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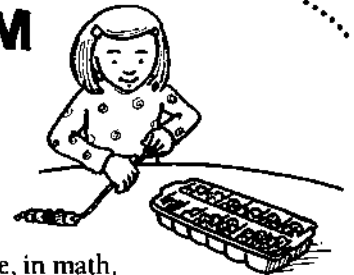
Q & A Fine motor skills and STEM

Q: My daughter loves STEM lab at school! Her teacher mentioned that the kids are working on fine motor skills there along with STEM projects. How could my child practice those skills at home?

A: Your daughter's teacher knows that hand strength and coordination are important in STEM. For example, in math, your youngster needs to count and sort small objects and to measure accurately. She also uses fine motor skills for science and engineering activities, such as planting seeds, pouring liquids, and gluing together craft sticks to build bridges. Finally, technology tasks like typing and using a mouse require good hand control.

To practice, let your daughter see how high she can stack pennies, then count the coins as she drops them one by one into a piggy bank. Or have her sort beads by color, using tweezers to place them into separate sections of an ice cube tray, and string them onto yarn in a pattern.

Also, ask her to help with household STEM-related activities like gardening, scooping and measuring ingredients for recipes, and typing emails to her grandparents. She'll build fine motor skills while discovering that STEM is important in real life.



MATH CORNER What number is missing?

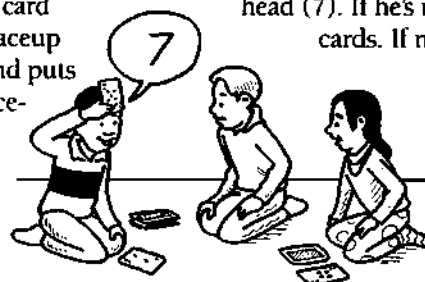
Let your child practice finding *addends* (a number added to another number) with this game.

Materials: deck of cards (face cards removed, ace = 1)

One person deals 1 card facedown and 1 card faceup to the other players, and puts the rest of the cards facedown in a pile. Then, each player puts his facedown card against his forehead (without looking),

number side out. The dealer tells the player the sum of his two cards. So if he sees a 7 on a player's forehead and a 2 on the table in front of him, he would call out "9" (because $7 + 2 = 9$). Now the player has to say the number on his forehead (7). If he's right, he keeps both cards. If not, he returns them to the bottom of the pile.

Switch dealers every round, and play until all the cards are gone. The player with the most cards wins.



Math+Science Connection

Intermediate Edition

Building Understanding and Excitement for Children

January 2019

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INFO BITS

Guess my coins

Play 20 Questions to help your youngster remember coin values and practice adding them. Give a clue, such as "I have 3 coins in my pocket that total less than \$1." She can ask up to 20 yes-or-no questions to determine which coins you have. Examples: "Are any 2 coins the same?" "Is the total less than 50 cents?"

Snowflake geometry

Here's a fun fact about snowflakes: Each central angle measures 60° .



Can your child figure out why? (The 6 points are arranged in a circle, a circle is 360° , and $360^\circ \div 6 = 60^\circ$.) Let him put black paper in the freezer for 2 hours, catch snowflakes on it, and observe them under a magnifying glass. Or he could make craft-stick snowflakes and measure the angles with a protractor.

Book picks

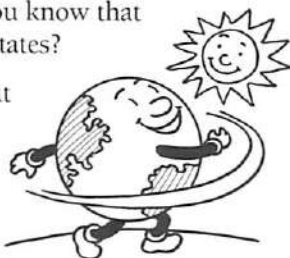
There are about 1 million granules of sugar in $\frac{1}{4}$ cup! Your child will learn this and other fascinating facts in *Millions, Billions, & Trillions: Understanding Big Numbers* (David A. Adler).

A jumping spider in space? *Nefertiti the Spidernaut* (Darcy Pattison) is the true story of a spider who visited the International Space Station for a science experiment.

Just for fun

Tom: Did you know that the Earth rotates?

Annie: Yes, it makes my day!



A graph tells a story

Like a picture, a graph can be worth a thousand words! That's because it provides a lot of mathematical data at a glance. Encourage your child to use graphs like these to tell stories.

Sports scores

Now that the regular football season is over, suggest that your youngster make a bar graph showing wins and losses. He should write team names across the bottom and numbers representing games (1–16) up the left side.

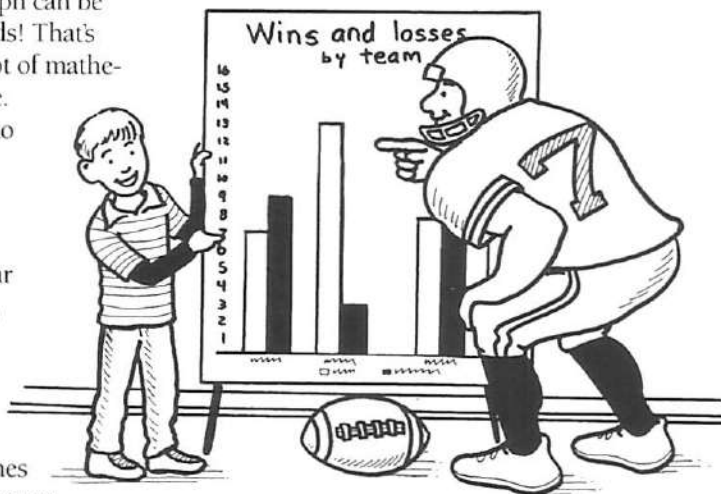
For each team, he could fill in a green bar for wins and a yellow bar beside it for losses. Then, ask him questions like "How many more wins did your favorite team get than mine?"

Screen-time patterns

A line graph shows patterns over time. Each week for a month, encourage your child to graph the time he spends using electronics and the time being physically active. He could title his graph "Screen

time vs. active time," then label the bottom with dates and the left side with time in 15-minute intervals. Have him plot each day's activities with a dot where the date intersects with the correct amount of time—and connect the dots as he goes.

After each week, he could report his findings. ("Screen time dropped steadily, and active time went up slightly. The biggest difference between screen time and active time on a single day was 1 hour and 15 minutes.")



Engineer a sled

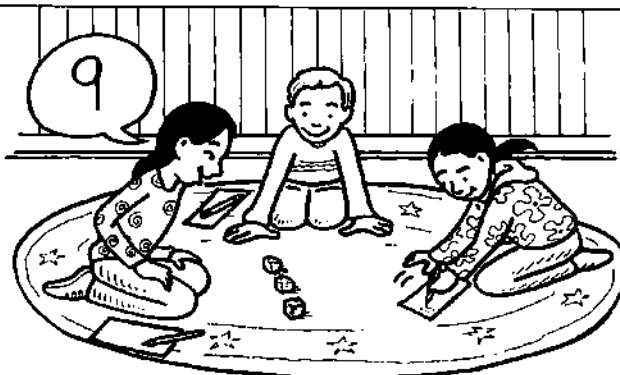
Whoosh! What makes a sled zoom down a hill? Your youngster can test friction by engineering an indoor "sled."

Let your child wrap three index cards (sleds), each in a different material (plastic wrap, foil, waxed paper). On an uncarpeted surface, she can prop an upside-down cookie sheet against a stack of books. Have her predict which sled will slide the farthest off the ramp. Then, she can test each one and measure. (The material with the least friction—or resistance when sliding over a surface—will travel the farthest.)



The rules of divisibility

How can your child tell if a number will divide evenly into another number or if she'll get a remainder? Help her work on division and discover *divisibility rules* with these ideas.



Divisibility rules

- A number is evenly divisible by:
- 2, if it's even
 - 3, if the digits add up to 3, 6, or 9
 - 4, if the last 2 digits are divisible by 4
 - 5, if the last digit is 0 or 5
 - 6, if it's divisible by 2 and 3
 - 8, if the last 3 digits are divisible by 8
 - 9, if its digits add up to 9

Know the rules. Ask your youngster to divide a few random numbers by 2. What do the ones that divide evenly have in common? (They're all even numbers.) Now let her do the same with 5. (They all end in 0 or 5.)

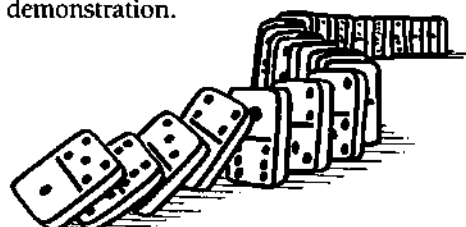
Avoid the remainders. Play this game where the low score wins. The first player rolls 3 dice to form a 3-digit number (say, 612). She says a number (2–9) that she thinks will divide into it evenly, then divides to check. If there's no remainder ($612 \div 9 = 68$), her score is 0. If there is ($612 \div 8 = 76$, remainder 4), the remainder (4) is her score. Once a player has 10 points, she's out. The last player left wins. 🎲

SCIENCE LAB



Dominoes: A chain reaction

Every time the sun warms the Earth or batteries power a flashlight, energy is being transferred. Your youngster will see energy transfer in action with this demonstration.



You'll need: dominoes, flat surface

Here's how: Have your child line up dominoes a short distance apart from each other. Using his finger, he should push the first domino into the one behind it.

What happens? The dominoes topple over, one after the other.

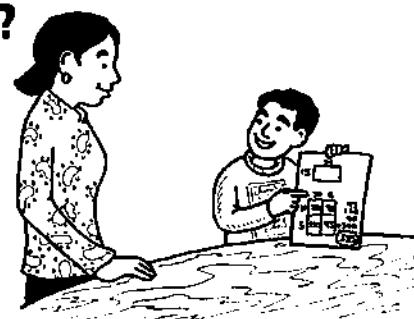
Why? The dominoes have *potential*, or stored, energy. When your youngster pushes the first domino, the potential energy turns into *kinetic* energy (energy of motion). A chain reaction resulted as energy transferred from one domino to the next, on down the line. 🎲

Q & A Math "tricks"—or not?

Q: My son is learning about fractions in school. I remember a trick I used when I was his age called the "butterfly method." Should I teach it to him?

A: Instead, why not ask your son to teach you methods he's learning in math? They may be different from the way you learned. But if he can explain how to do the procedures and tell you why they work, then they will be effective for him.

The downside to tricks and shortcuts like the butterfly method is that youngsters may skip the understanding and learning—and go straight to the answer. Your son needs an understanding of math concepts to know whether answers are in the right ballpark. Plus, future math lessons will make more sense if he gets the "why" behind what he's doing now. 🎲



MATH CORNER

Find the (decimal) point

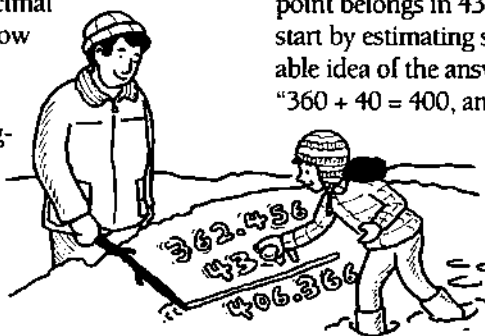
One of the most important things for your child to remember when she adds and subtracts decimal numbers is to line up the decimal points correctly. Show her why with this activity.

Give your youngster an addition or subtraction equation with decimal points, leaving the decimal point out of one number.

Supply the answer—but it's up to her to figure out where the decimal point goes! Example: $362.456 + 4391 = 406.366$.

Where does she think the decimal point belongs in 4391? Suggest that she start by estimating so she'll have a reasonable idea of the answer. She might think, " $360 + 40 = 400$, and 40 is close to 43, so I'll try 43.91." Then, she can add to check:

$$\begin{array}{r} 362.456 \\ + 43.91 \\ \hline 406.366 \end{array}$$



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