

Home & School

CONNECTION®

Working Together for School Success

March 2019

Harmony Elementary School
Dr. Barbara Griffith, Principal



SHORT NOTES

Display schoolwork

Saving work your youngster brings home is one way to show her that school is important to you. Consider creating a hallway gallery of framed papers and artwork, or store her work in a coffee-table binder. *Tip:* Take photos of her sculptures, dioramas, and other 3-D projects. Display the photos, or add them to her binder.

A list-making habit

Get your child in the routine of making checklists in a student planner or notebook. Suggest that he write down tasks in the order he needs to complete them. Encourage him to check off each item as he tackles it—he will enjoy a sense of satisfaction as his list grows shorter.

Promote a work ethic

A good work ethic, or a belief in the value of hard work, will make your youngster better at any job she undertakes. Develop this trait by giving her regular chores like taking out the recycling or sweeping the floor. Then, let her know how her contribution makes a difference. (“The kitchen looks nice and tidy thanks to you!”)

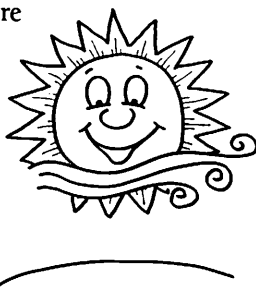
Worth quoting

“Why fit in when you were born to stand out?” *Dr. Seuss*

JUST FOR FUN

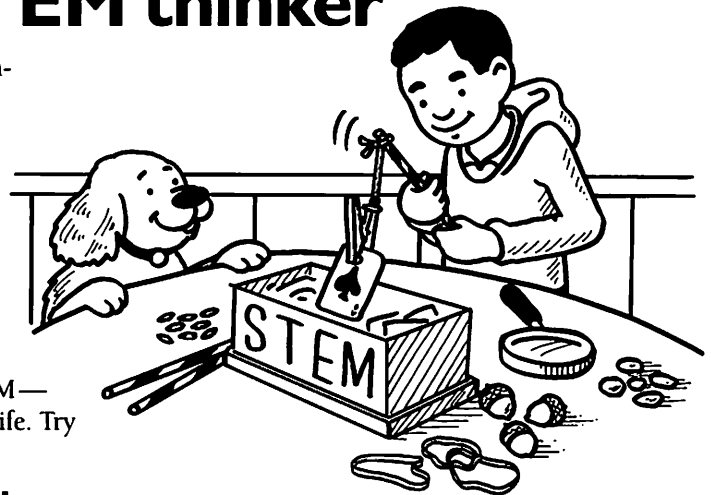
Q: “I pass before the sun but make no shadow. What am I?”

A: The wind.



Be a STEM thinker

With science, technology, engineering, and math jobs in demand, STEM is a hot topic these days. Being a curious, critical, creative thinker who can solve problems will help your child do well in STEM—and in every area of life. Try these ideas.



Wonder out loud

Bring out your youngster’s natural curiosity by discussing what you’re curious about. (“I wonder why rainbows are curved and not straight.”) Then, he could experiment to find out. Perhaps he’ll create his own rainbows using a flashlight, a mirror, and a pan of water.

Make a “tinker box”

Your child will use critical thinking skills by tinkering with natural objects and loose parts. In a shoebox, let him collect items like pebbles, acorns, seeds, straws, rubber bands, and clothespins.

He could add new objects as he finds them. Maybe he’ll design a “claw machine” that picks up small objects or examine an acorn under a magnifying glass.

Promote problem solving

Treat everyday problems as learning opportunities. Say the TV remote won’t work, even though you just replaced the batteries. Have your youngster think of solutions and test them. He might check that the batteries are inserted correctly, try batteries he’s sure are fresh, or turn the TV off and on again. ♥

Parent-child chats

Regular conversations with your youngster keep the two of you close—and build her language skills. Here are suggestions for making chats more meaningful.

● **Phrase questions thoughtfully.** Questions that require more than a one-word answer will lead to more informative answers. Try “What made you laugh today?” rather than “Did you have a good day?”

● **Show you’re paying attention.** It’s easy for busy parents to respond out of habit without focusing on what youngsters are really saying. Instead, look your child in the eye, and stop to consider her words. She’ll know that what she has to say matters to you. ♥



Learning to be patient

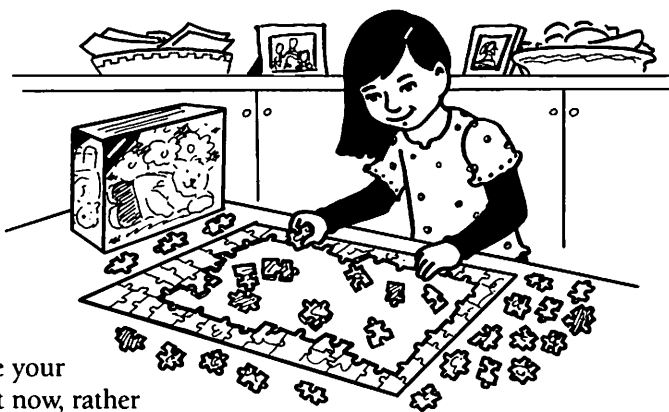
Patience is a skill that can be learned. Kids who develop it tend to have greater self-control and even do better in school. Foster patience in your youngster with these tips.

Live in the moment. Encourage your child to enjoy what's going on right now, rather than looking forward to what will happen next. For example, she could look out the window at the sunset while she waits for you to get off the phone. Or if she's having trouble falling

asleep because she can't wait to visit her friend tomorrow, she might focus on how warm and cozy she feels in her bed now.

Enjoy the payoff. Have your youngster think of something that took her a while to master, such as learning to read music. Then, remind her of how good she felt when she succeeded. Share an example from your life, too. *Idea:*

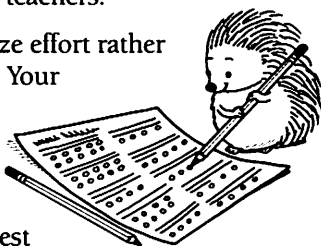
Let her take on an activity or a project that requires patience, like growing a plant or putting together a jigsaw puzzle. ♥



Top tips for standardized tests

How can you help your child do well on standardized tests? Consider this advice from teachers:

- "Emphasize effort rather than scores. Your youngster will feel more confident and relaxed on test day if he knows that doing his best is what counts the most."



- "Have your child do any practice tests or packets that the teacher sends home. Ask him about the material, and look over the work to be sure it's complete."

- "Make sure he gets enough sleep, at least 9–11 hours, each night. He'll be more alert and focused during the test."

- "Give your youngster a balanced breakfast on test day so he has energy and isn't distracted by a growling stomach. Whole-wheat toast, fruit, and yogurt make a brain-boosting combination." ♥

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Q & A

Autism: Support for parents

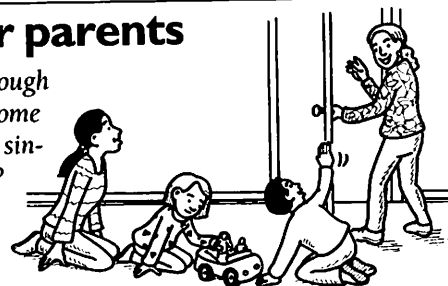
Q: My daughter has autism, and although she's making good progress, she has some behavioral challenges. I'm a working single parent—how can I handle the demands?

A: To take the best care of your daughter, you need to also take care of yourself. If possible, try getting up before she does.

Take a warm shower, and enjoy a cup of tea. You'll feel calmer and ready to start the day on a positive note, which can help her behave better.

Also, look for people who will stay with your child while you recharge. You might run errands or try a new hobby. Ask friends, family, and neighbors if they're able to help or know anyone who can.

Finally, consider joining an autism support group. Connecting with other parents who face similar challenges will make you feel less alone, and you'll get information and advice for helping your daughter. Check online, or ask your child's doctor for referrals. ♥



ACTIVITY CORNER

Pump up your memory

A good *working memory* lets your youngster switch back and forth between tasks and do work that involves more than one step. Sharpen his memory with these activities.

Story chain

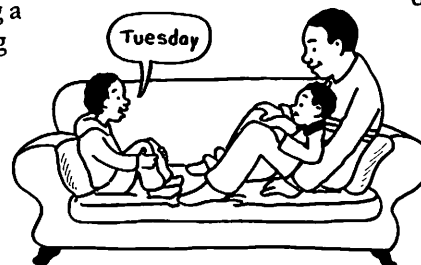
Build a "repeating story" by remembering what everyone before you has said. One person starts with a sentence like "I'm riding a _____ to the _____," filling in the blanks. ("I'm riding a kite to the moon.") The next person repeats the sentence and adds his own sentence. Continue until someone

skips a sentence, says them out of order, or can't remember one.

The last time I...

When was the last time you used a ruler or saw frost on a window? This game strengthens your child's power of recall. Take turns calling out a question, such as "When did you last eat an egg?" To answer, everyone needs to think about details and context.

("We had tacos in school on Monday. So it must have been Tuesday, when I got the salad bar and put hard-boiled egg slices on my lettuce.") ♥



Math+Science Connection

Beginning Edition

Building Excitement and Success for Young Children

March 2019



TOOLS & TIDBITS

Number "cake walk"

Play this game to help your youngster show numbers in different ways. Have him number paper plates 1–10 and put them randomly in a circle on the floor. Turn on music while he and his friends walk around the circle. Now stop the music—players freeze and hold up fingers to equal the number they're closest to. For 6, your child might show 3 fingers on each hand.

Animal field trip

Your child can learn about animals by visiting a farm or zoo, where many babies are born in spring. Encourage her to ask workers questions about the animals.



Together, observe mothers caring for their young, listen for animal sounds, and talk about what they're eating.

Book picks

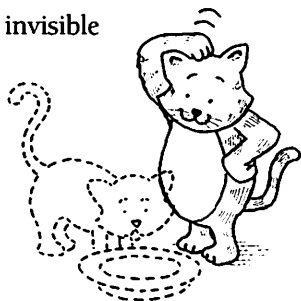
■ The little inchworm in *Inch by Inch* (Leo Lionni) measures everything in his path, from a flamingo's neck to a heron's leg. But how could he measure a hummingbird's song?

■ Your youngster will discover the science behind the projects in *Crafty Science* (Jane Bull). Includes more than 20 ideas, from a "swirling snowstorm" to a "meringue mountain."

Just for fun

Q: What do invisible cats drink?

A: Evaporated milk!



Subtraction strategies

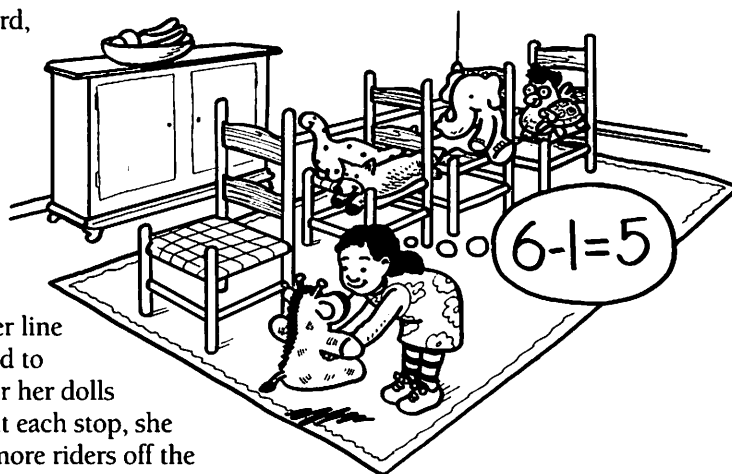
Counting backward, finding the difference, and doing "take-away" are all ways your child can solve subtraction problems. Try these hands-on activities.

Empty the bus

Let your youngster line up chairs and pretend to drive a school bus for her dolls or stuffed animals. At each stop, she should help one or more riders off the bus and count backward from the total. *Example:* If she starts out with 6 passengers and unloads 1 at the first stop, she would say, "6, 5...there are 5 passengers left. $6 - 1 = 5$."

Pair 'em up

Making pairs is an easy way to find the difference. Each of you should choose a color of play dough, then toss a die and create that number of play dough "marbles." Now your child can pair each of her marbles with one of yours. Say she made 5 and you made 2—the number of unpaired marbles (3) is the difference



(because $5 - 2 = 3$), and she earns 3 points. The first player to get 20 points wins.

Take-away sticks

Line up 20 craft sticks, and stack a deck of cards facedown (face cards removed, ace = 1). On each turn, a player flips over a card (7), takes that number of sticks, and says how many sticks are left ($20 - 7 = 13$). She keeps the sticks, and it's the next person's turn. To win, get the last stick by exact count ($3 - 3 = 0$). *Note:* If you draw a card and can't remove that many sticks, your turn ends. ♠

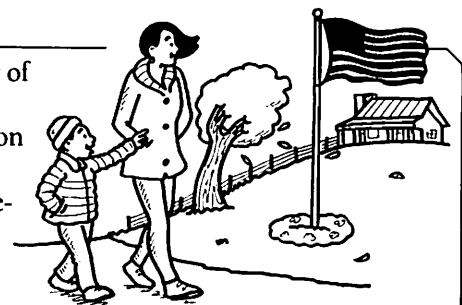
Blowing in the wind

Your youngster will discover the power of wind with this demonstration.

Let him select a few small objects (cotton ball, ribbon, button, rock) and place them at one end of a cookie sheet. Have him predict which items will be easiest to move to the opposite end by blowing through a straw. Now he can test his prediction.

What does your child notice? Lighter objects (cotton ball, ribbon) are easier to blow, while heavier ones (button, rock) take more effort. They need a stronger "breeze" to push them and make them move.

Then, go for a walk on a windy day. Your youngster can observe which objects blow (flag, leaves) and which ones are too heavy for the wind to push (house, car). ♠

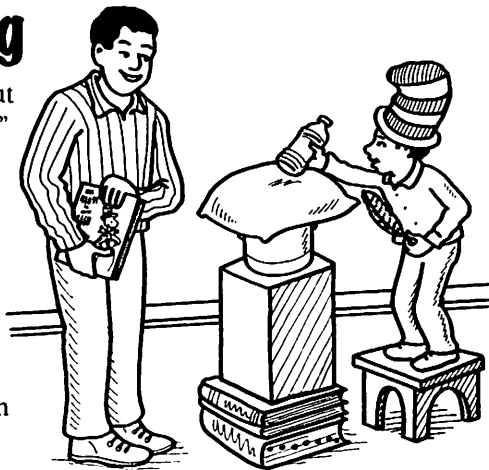


Dr. Seuss engineering

“Thing 1” for your youngster to know about engineering is that anyone can do it. “Thing 2” is that it’s fun! Here are engineering challenges inspired by Dr. Seuss, whose 115th birthday is celebrated on March 2.

Read: *The Cat in the Hat*

Try: How many objects can your child stack before his tower topples over? He’ll find out with this Cat in the Hat-style engineering feat (no fishbowl or cake allowed!). Encourage him to consider the size, shape, and weight of each item, then decide where each should go. For



example, he’ll probably want bigger, heavier objects (dictionary, cooking pot) toward the bottom and smaller, lighter ones (pillow, empty water bottle) near the top.

Read: *One Fish, Two Fish, Red Fish, Blue Fish*

Try: Challenge your youngster to engineer a fishing rod that will hook paper fish. He might suspend a string from a pencil and attach a magnet. Now let him cut out fish shapes from construction paper and slide a paper clip on each one. Can

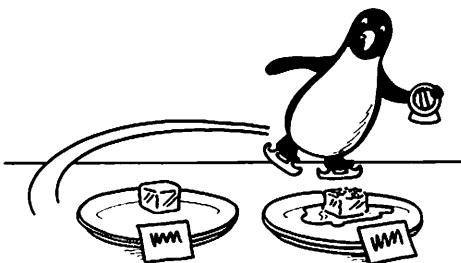
he catch one fish? How about two? Suggest that he redesign his rod to hook even more fish at a time.

SCIENCE LAB

Ice cube race

In this cool experiment, you and your youngster can “race” to melt ice cubes.

You’ll need: two ice cubes, two plates, measuring spoon, salt, timer



Here’s how: Each of you should put an ice cube on a plate. Have your child measure $\frac{1}{4}$ tsp. salt on her cube, and leave your cube alone. She can set a timer and check the cubes every five minutes, until they begin to melt.

What happens? Her cube wins! The ice cube with salt melts the fastest.

Why? Ice melts when it gets above freezing (32 degrees). But salt has special properties that help ice melt faster. That’s why we put salt on icy sidewalks and roads—even when it’s below freezing, the ice or snow will begin to melt.

MATH CORNER

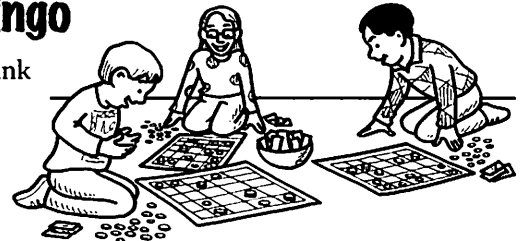
Coin value bingo

Empty the piggy bank and play this game that helps your child identify coins and their values.

Set up: Each player makes a big 5 x 5 bingo card and puts his choice of any 1, 2, or 3 coins (pennies, nickels, dimes) onto each square. On separate slips of paper, write the following numbers: 1, 2, 3, 5, 6, 7, 10, 11, 12, 15, 16, 20, 21, 25, and 30. Put the slips in a bowl.

Play: Let your youngster draw a slip and call out the number. Players clear any one square on their board whose coins total that value. *Example:* If the number is 15, your child could clear a space with 3 nickels ($5 + 5 + 5 = 15$) or with 1 dime and 1 nickel ($10 + 5 = 15$).

Win: The first player to clear 5 spaces in a row—horizontally, vertically, or diagonally—wins and calls the numbers for the next round.



Q & A Be upbeat about math

Q: I’ve never felt very confident about math, but I know I’m supposed to be positive about it for my daughter. What should I do and say?

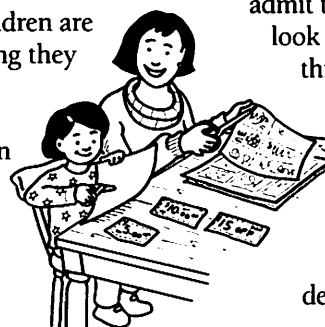
A: You’re right. When parents have a good attitude toward math, children are more likely to see it as something they can do—and to learn more.

Throughout the day, notice ways you use math, and mention examples to your youngster. You might show her coupons you’ve clipped and say, “I love how math helps me save money.” And be sure to ask her,

“How did math help you today?” Maybe she used measuring cups in the sand and water table at school, for instance.

Also, if you’re not sure about a math concept, such as kilometers vs. miles, admit that to your child. Then, look it up together, and talk through a problem as you solve it.

You may discover that you can do math confidently after all—and you’ll help your daughter develop a love of math.



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Math+Science Connection

Intermediate Edition

Building Understanding and Excitement for Children

March 2019

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Dr. Barbara Griffith, Principal

INFO BITS



Prime detectives

A prime number is only divisible by 1 and itself. How many can you and your youngster spot when you're out together? You might see a sign for Route 29 or pass exit 11 on the highway. Let her list the numbers on a notepad—then come up with more primes on her own.

Be a citizen scientist

Does your child know that scientists sometimes rely on everyday citizens to help them gather data? Enter your zip code at scistarter.com to find citizen-science projects your family might participate in. Maybe you'll take and upload photos of plants growing alongside trails or report bumblebee sightings.



Book picks

With whimsical rhymes and illustrations, *A Fraction's Goal—Parts of a Whole* (Brian P. Cleary) uses strawberry plants, soccer players, and other familiar examples to explain fractions.

Make a tornado in a bottle or a CD hovercraft with the experiments in *Awesome Science Experiments for Kids: 100+ Fun STEAM Projects & Why They Work!* (Crystal Chatterton).

Just for fun

Q: You throw me out when you need me. You bring me back when you don't. What am I?

A: An anchor.



Addition: Beyond 2 + 2

Now that your youngster has mastered basic addition, encourage him to explore it in more complex ways. Try these activities that help him think flexibly about addition.

Add or multiply?

Baking cookies? Let your child see if there will be enough for everyone! Say there are 4 rows of 3 cookies on the baking sheet. Would he add $3 + 3 + 3 + 3$ or multiply 3×4 to get 12?

Help him think about multiplication as a shortcut for repeated addition. Get paper and pencils, and race to solve problems like 5×31 or 3×89 . The catch? One of you multiplies while the other adds, switching roles for each problem. He'll see that you get the same answer—but multiplication is usually faster and easier.

Break it up

Have your youngster take bigger numbers apart to solve addition problems in



his head. For $72 + 14$, he could break 72 into $70 + 2$ and 14 into $10 + 4$. He'll get four numbers that are easy to add mentally ($70 + 10 + 2 + 4 = 86$).

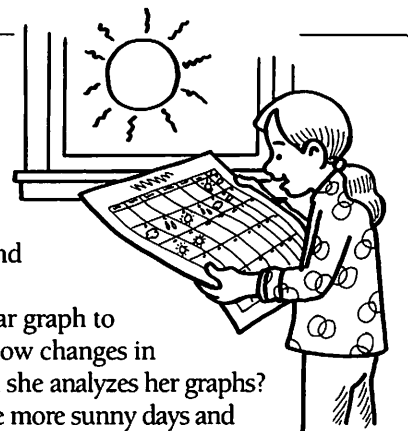
Play this dice game for practice. Take turns rolling four dice and using the numbers to form a double-digit addition problem. Say you roll 3, 5, 5, and 6. Make $35 + 56$, then take the numbers apart and solve ($30 + 50 + 5 + 6 = 91$). Your answer is your score. Keep adding each new roll to your total. The player with the highest score after five rounds wins.

Weather watch

As winter turns to spring, what weather patterns will your child discover? Encourage her to observe, record, and analyze the March weather with this idea.

First, help her make a calendar page for the month. Each day, she can draw a symbol to match the weather (sun, cloud, raindrop) and record the high temperature.

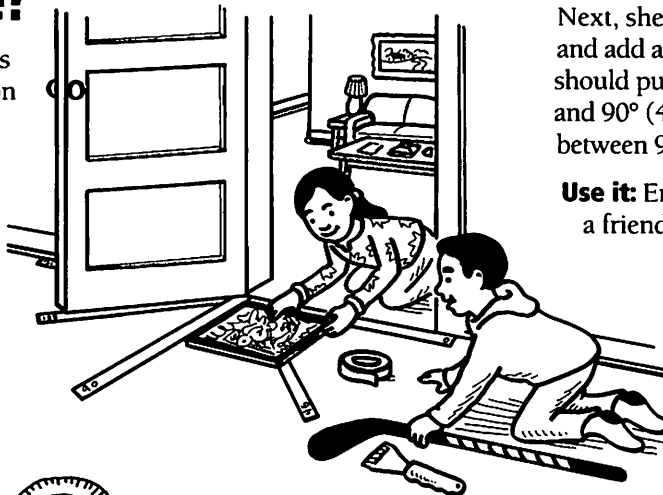
At the end of each week, she could make a bar graph to compare types of weather and a line graph to show changes in temperature. What trends does she notice when she analyzes her graphs? For example, she'll probably observe that there are more sunny days and higher temperatures as it gets closer to spring.




What's your angle?

This handy “doorway protractor” lets your youngster measure angles found on household objects. Here's how.

Make a protractor: Ask your child to lay a strip of masking tape under a closed door and label it 0°. Then, have her open the door to form a right angle (an “L”) with the wall—that's



where she'll place a strip labeled 90°. Next, she can open the door all the way and add a strip labeled 180°. Finally, she should put a strip halfway between 0° and 90° (45°) and another halfway between 90° and 180° (135°).

Use it: Encourage your youngster and a friend to collect small objects with different-size angles (book, snow scraper, hockey stick). Now they should estimate an angle on each item and line it up with the 0° tape to check their estimates. For instance, a book will turn out to have 90° angles at the corners. 

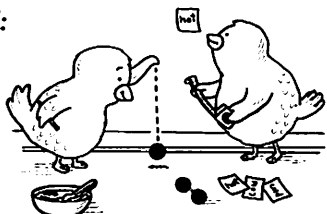
SCIENCE LAB

Hot and cold bouncy balls

Which bounces higher—a hot bouncy ball or a cold one? This experiment will give your child the answer.


You'll need:

four same-size bouncy balls, bowl, water, microwave, tongs, pencil, sticky notes, measuring tape



Here's how: Have your youngster put two balls in the freezer for 1 hour. You can heat a bowl of water in the microwave for 2 minutes, put the other two balls in the hot water for 5 minutes, and remove them with tongs. Now let your child put a sticky note on a wall, as high as he can reach. He should hold each ball at that height, one at a time, and drop it. Use a sticky note to mark the spot on the wall where each ball bounces. Label it “hot” or “cold,” and ask him to measure the height of each note.

What happens? The hot balls will bounce higher than the cold ones.

Why? Molecules move faster when they're heated. The fast-moving molecules in the hot balls give them energy, so when they hit the ground, they bounce back higher. 

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Q & A

Capture-the-flag coding

Q: I hear a lot about coding these days. How can I help my son try it when I have no experience with programming computers myself?

A: Coding is all about using clear, logical step-by-step instructions to accomplish a task. Helping your son with it is easier than you think—and you don't even need to start with a computer. Try this version of Capture the Flag as an “unplugged” introduction to coding.

Hide a “flag” (washcloth, dish towel) in one room. Have your child start in another room, and give him spoken directions to find it. Like a computer, he can only move exactly as you direct him. Be specific: “Move forward 10 steps.” “Turn right.” “Move forward 2 steps.” When he reaches the flag, swap roles, and let him “code.”

Now it's time for him to try coding on a computer! Visit a website like code.org or codecademy.com to get him started. 



MATH CORNER

A Pi Day party

March 14 (3/14) is Pi Day! That's because 3, 1, and 4 are the first three digits of Pi, a number whose digits never repeat and never end. Your youngster can discover Pi by throwing a family party.

Together, plan a menu with round

foods—maybe English muffin pizzas, carrot “coins,” and apple pie. Also, choose games with circles (ring toss, Twister, hula hoop contest).

As you eat and play, have your child use yarn to find the

circumference (distance around) of each circle, then measure its diameter (distance across) with her ruler. For each circle, she should divide the circumference by the diameter. What does she notice?

She'll discover what mathematicians figured out long ago: Regardless of a circle's size, its circumference divided by its diameter is approximately 3.14. For example, say a 30.5-cm piece of yarn fits around her pizza, and its diameter measures 9.7 cm ($30.5 \div 9.7 = 3.14$). 