

Math+Science Connection

Beginning Edition

Building Excitement and Success for Young Children

December 2018

Lakeland Joint School District #272

From the Title I Staff



TOOLS & TIDBITS

Odd or even?

Here's an easy way for your child to distinguish between odd and even. Say an even number (perhaps 6). Have her count checkers into stacks of 2. Every checker has a "partner," so the number is even. Now give her an odd number, such as 7. She'll make 3 stacks of 2, with 1 checker left over. The extra, "lonely" checker means the number is odd.



Our "wonder wall"

Encourage your youngster to think like a scientist on a regular basis by creating a "wonder wall." He could hang up a poster board where family members may post science questions ("Do oceans freeze in winter?") or photos (a close-up of a spider web). Others try to find answers to the questions or write observations about the pictures.

Web picks

☐ Your child can blast slime on a Minus Mission, count money in a Dolphin Dash race, and more at mathplayground.com.

☐ At journeynorth.org/Kids/JNAAbout.html, your youngster will learn about and track migrating animals like monarch butterflies and bald eagles. There's even a link for reporting her own sightings.

Just for fun

Q: How many times can you subtract 6 from 30?

A: Once. After that, it's no longer 30.

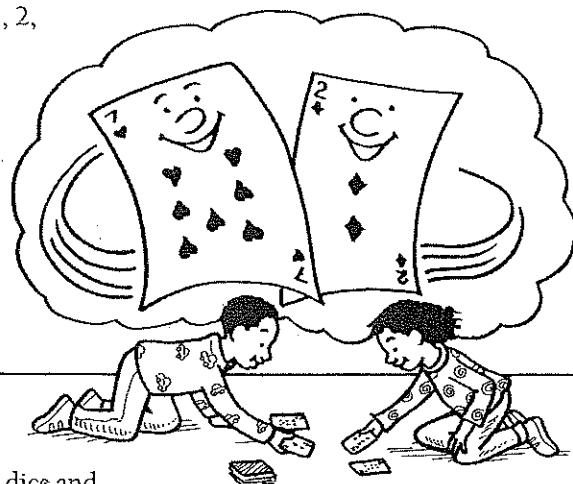


Numbers, take your places!

If your youngster arranges 1, 2, and 3 in different orders, what does he get? Different numbers, of course: 123, 132, 213, 231, 312, and 321! Try these activities that show him how a digit's place determines its value.

Crafty caterpillars

These cute "caterpillars" let your child see tens and ones. Get six craft sticks, and have him glue 10 small pom-poms or dry beans on each. Take turns rolling two dice and using the caterpillars (tens) and loose pom-poms or beans (ones) to make the number rolled. For 6 and 5, he could show 65 (6 caterpillars, 5 pom-poms) or 56 (5 caterpillars, 6 pom-poms).



Digit scramble

Stack a deck of cards facedown (aces, 10s, and face cards removed). Each player draws two cards and turns over one at a time. Decide whether to put each card in the tens or ones place. Then, say your number ("7 tens and 2 ones—72"). Whoever forms the biggest number takes

all the cards. When you've used the whole deck, the player with the most cards wins.

Secret number

Help your youngster divide his paper into columns labeled "Hundreds," "Tens," and "Ones." Secretly think of a three-digit number. He should guess each digit *and* its place value ("Is the digit in the hundreds place worth 500?"), and write each correct guess in its column. When he gets your number, he thinks of one for you.

A texture hunt

With this treasure hunt, your child will rely on her sense of touch to describe properties of objects.

1. Together, make a list of texture words. Examples: rough, smooth, squishy, prickly, hard, soft.
2. Walk around indoors and outdoors.

How many objects can your youngster collect that match each description? She might find a *rough* key, a *smooth* bouncy ball, *squishy* play dough, a *prickly* hairbrush, and a *hard* wooden block.

3. Now let your child display her finds. She could label each item on a separate index card ("A soft cotton ball").



Estimation makes sense

Quick! How many geese are flying overhead? Your youngster can make a reasonable estimate by combining what she sees with what she knows about numbers. Here's how.

Supermarket estimates. While you shop, encourage your child to estimate everything from fruits and vegetables to brands of cereal. *Example:*



"There are about 30 bunches of bananas." Ask how she got her estimate. She might say there are 3 rows on the display and about 10 bunches in each row, and she counted by 10s to get 30. Now have her look at the bananas and count to check her estimate.

Polka-dotted plates.

Help your youngster learn from previous estimates with this idea. Draw

groups of 10–50 colored dots on separate paper plates, and turn the plates dot-side down. Let your child flip over one plate at a time and quickly say how many dots she thinks there are. Then, she could count to see how accurate her estimate was. As she turns over more plates, her estimates will get closer to the mark.

SCIENCE LAB

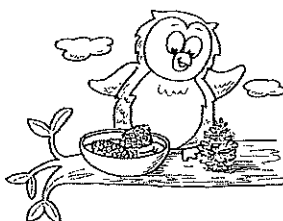
Pinecones: Super seed protectors

This experiment reveals the amazing way pinecones protect the seeds that grow inside them.

You'll need: two dry pinecones, bowl, measuring cup, water, timer

Here's how:

Have your child place one pinecone in the bowl and one on the counter. Now he should add 2 cups of water to the bowl and set a timer for 30 minutes. When the timer goes off, he can remove the wet pinecone from the bowl and compare it with the dry pinecone on the counter.



What happens? The dry pinecone is unchanged, but the wet pinecone closes up.

Why? Pinecones protect the seeds inside them. One way they do this is by closing up in wet weather. When it's dry, they open and release their seeds so new pine trees can grow.

Tip: Take a walk after it rains or snows, and let your youngster observe the closed-up pinecones on the ground.

OUR PURPOSE

To provide busy parents with practical ways to promote their children's math and science skills.

Resources for Educators,
a division of CCH Incorporated
128 N. Royal Avenue • Front Royal, VA 22630
800-394-5052 • rfecustomer@wolterskluwer.com
www.rfeonline.com
ISSN 1942-910X

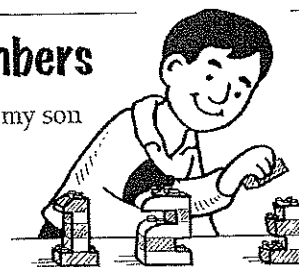
PARENT TO PARENT

I can write my numbers

At dinner one night, I noticed my son Liam curling his spaghetti into numbers. I asked where in the world he got the idea to do that. He said his class is learning to write numbers. They form them with different materials, and the noodles reminded him of the yarn they used that day.

Now Liam and I look for more ways to practice writing numbers at home. He loves building numbers with Legos. He also "wrote" numbers with a glue stick and sprinkled on glitter. And after his bath the other night, I walked into the bathroom to find the numbers 0–9 written in fog on the bathroom mirror.

This weekend, there's a chance of snow, and Liam has his fingers crossed that he'll get to write in the snow with a stick.



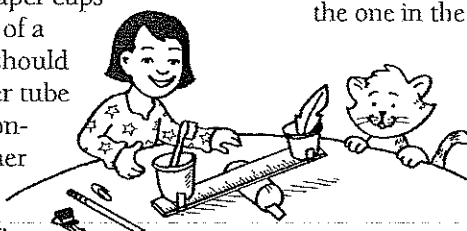
MATH CORNER

Comparing weights

"My paperweight is heavier than my gymnastics medal!" This homemade balance scale lets your child explore measurement by comparing weights.

Make a scale

Have your youngster tape two small paper cups to opposite ends of a ruler. Next, she should tape a toilet paper tube to a table (horizontally). Now ask her to balance the ruler on the tube.



Weigh objects

What does your child want to weigh? Suggest that she gather small items like a toothbrush, a leaf, and a pencil. She can choose two at a time, predict which is heavier, and put one in each cup to find out. The object in the cup that drops down toward the table is heavier than the one in the cup that goes up. If the scale balances, their weights are equal.

Idea: As she tests the items, she could line them up from lightest to heaviest.

Reading Connection

Tips for Reading Success

December 2018

Beginning Edition

Lakeland Joint School District #272

From the Title I Staff

Book Picks

Read-aloud favorites

■ *Mary Had a Little Glam* (Tammi Sauer)

A famous nursery rhyme gets a makeover in this story. Mary can't help offering fashion advice to her classmates (who include familiar characters) at Mother Goose Elementary School. Soon she has added a bit of glamour to everyone, including the class pet.



■ *Rabbit & Robot: The Sleepover* (Cece Bell)

Rabbit has planned every detail of his sleepover with Robot, right down to which veggies they'll have on their pizza. But when things don't go smoothly (Robot prefers hardware on his pizza), the friends must rely on Robot's stellar logical thinking skills. The first book in the Rabbit & Robot series.

■ *The Story of Snow: The Science of Winter's Wonder* (Mark Cassino and Jon Nelson)

Does your child know that a snowflake is a crystal? In this nonfiction book, she'll discover how a snowflake forms and then changes as it passes down through the clouds. Plus, she'll find instructions for catching snowflakes to observe.



■ *More Spaghetti, I Say!* (Rita Golden Gelman)

Minnie will eat spaghetti with just about anything—ice cream, marshmallows, and even pickles. Her friend Freddy tries to distract her from her pasta obsession so she'll play with him, but he makes a big mess in the process. (Also available in Spanish.)



Support for beginning writers

Your little author probably has plenty to say, but she may need help getting started or putting all of her ideas on paper. Lend a hand with these strategies.

Create a word bank

Before your youngster writes a story, help her list words she might use. If she's writing about the winter carnival at school, the list may contain *hot chocolate*, *photo booth*, and *gingerbread*. She can refer to her list as she writes so she remembers everything she wants to mention.

Hold a writing "conference"

Offer to read a story your child is working on, and point out places where you want to know more. You could ask, "What did the little girl feed her horses for breakfast?" or "What color are the horses?" Encourage her to add the answers, then read it again. She'll see that details make a story more interesting.



Read a picture book

A favorite book can provide a "blueprint" for your youngster's story. Suggest that she use a character, the setting, or the format for inspiration. For example, reading *If You Give a Mouse a Cookie* (Laura Numeroff) could lead her to write "If I Give My Dog a Tennis Ball." Maybe the tennis ball will make her dog want to play with a baseball, then a soccer ball, and then a basketball!♥

Keep the conversation rolling

Build your child's speaking and listening skills with the roll of a die! Pick a topic (perhaps the day he was born), then take turns rolling a die and following these directions.

Roll a 1: Add a statement. ("We couldn't wait to meet you.")

Roll a 2: Ask any family member a question. ("How big was I?")

Roll a 3: Add a statement *and* a question. ("Wow, I was tiny. Who came to visit?")

Roll a 4: Share your opinion. ("You were adorable.")

Roll a 5: Move on to a related subject. ("Mom, what were you like as a baby?")

Roll a 6: Wild card—do any of the above.

Idea: Carry a die with you in the car for fun on-the-go conversations.♥



"I predict that..."

"What do you think will happen next?" Asking your child to predict the path a story might take can boost his comprehension. When you read aloud, try these ideas.

Picture mysteries. Cover up the words every few pages, and have your youngster predict what's going to happen based on the illustrations. Encourage him to point out clues. Maybe a picture of ducks waddling toward a family picnic makes him think the ducks will try to eat the food. Now read on so he can see if his prediction is right.



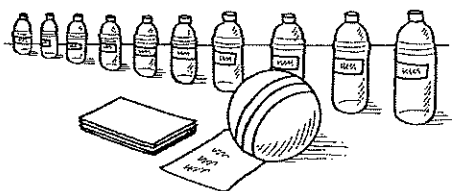
Secret predictions. Keep paper and pencil handy for each of you while you read. At any time, either of you can say, "I have a prediction!" Then, stop reading, and secretly write or draw what you believe will happen next. As the story continues, place a check mark next to each prediction that comes true. At the end of the story, explain why you made each prediction, and tell which ones were correct. ♥



Bowling for sight words

This version of bowling lets your youngster practice reading *sight words*—common words that early readers learn to recognize at first glance.

Materials: sight word list (from the teacher or sightwords.com/sight-words/dolch/), marker, 10 index cards, masking tape, 10 half-filled water bottles, ball



Help your child write one word on each index card and the same words on separate strips of tape. She should stack the cards facedown and label each bottle with a piece of tape.

Next, line up the bottles in a row (with a few inches between each one), and have players stand 6 feet away. Take turns drawing a card, reading the word, and rolling the ball toward the matching bottle. If you knock it down, keep the card and remove the bottle. Now it's the next player's turn. Collect the most cards to win. ♥

OUR PURPOSE

To provide busy parents with practical ways to promote their children's reading, writing, and language skills.

Resources for Educators,
a division of CCH Incorporated
128 N. Royal Avenue • Front Royal, VA 22630
800-394-5052 • rfeustomer@wolterskluwer.com
www.rfeonline.com
ISSN 1540-5648

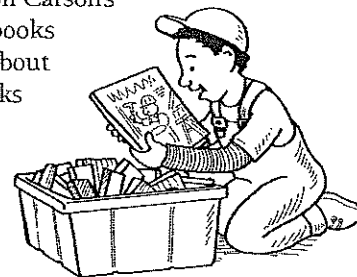


Surprise, there's a book!

During a recent visit to my son Carson's classroom, I noticed baskets of books everywhere. There were books about money and shapes in the math center, alphabet books beside a basket of magnetic letters, and biographies of artists near an easel.

When we got home, I looked around and thought, "Where can we add books?" It turns out there were lots of places! Carson wanted to put library books about construction into his block bin. When I found a book about fossils at a flea market, I added it to his box of dinosaurs. And Carson decided that his toy kitchen was the perfect place for a kids' cookbook.

Now I regularly leave "surprise" books for my son to find—and sometimes he does the same for me. I've noticed him building a construction site with blocks and matching toy dinosaurs with the photos in the fossil book. I love that he's making connections as he plays. ♥



Lists are practical—and fun

A list is a great example of real-life writing. Show your child how useful writing is with these suggestions:

- Let your youngster help you make a grocery list. She can refer to the advertising circular to spell what you need (milk, rice).
- Before you travel, have her list items to pack. For a winter break trip to her grandparents' house, she might write *toothbrush* and *teddy bear*.
- Suggest that your child make a to-do

list for her day: "Go to school. Feed the dog. Read a book."

- Work together to create a guest list for a holiday meal or a list of gifts she could make for relatives.
- Weave list writing into playtime. Have your youngster design a sign listing the flavors in her pretend ice cream shop or the services offered at her imaginary pet-sitting business.

Idea: Encourage your child to illustrate her lists. ♥

