

# count · play · explore

## DISCOVER THE POWER OF MATH

Early math activities for you and your child to enjoy together.

**Babies Count** - Sing the numbers from 1 to 10 while counting your baby's fingers or toes.

**Toddlers Count** - Say the numbers one to twenty aloud when your toddler washes their hands. Soon they will say the numbers with you.

**Preschoolers Count** - Look at pennies, nickels, and dimes. Group the coins by type. Talk about the value of each coin. Count the number of coins you have of each type.

**Kindergarteners Count** - Give your child 10 pennies and 2 nickels. Ask them to come up with different combinations of coins that have the same value as a dime.

**Grade School Kids Count** - Give your child a variety of coins: pennies, nickels, dimes, and quarters. Ask them how many different ways they can make a dollar.

**Babies Play** - Give your baby an empty container and one filled with toys. Help them move the toys from one container to the other. Talk about moving the toys between the two containers. Describe the toys as you move them together.

**Toddlers Play** - Give your toddler a ruler and help them figure out how many rulers will fit end to end along a favorite toy or piece of furniture.

**Preschoolers Play** - Play store. Use pretend money to "buy" and "sell" something that your child has made: drawings, lemonade, snacks.

**Kindergarteners Play** - Play "More than Five." Roll a dice. Add the number 2 to the number you rolled on the dice. Is that number worth more than five? Play ten times. Tally the number of times the dice plus two more is worth more than five.

**Grade School Kids Play** - Play board games with your child like Sorry! and Chutes and Ladders. It helps children learn about turn-taking, number recognition, and adding. Go to <https://www.earlymathca.org> for free board games related to books!

**Babies Explore** - Let your baby play with a partially full water bottle with a very secure top. Let them explore the sounds the bottle makes as it is moved, the bottle's weight, and how the water moves from side to side.

**Toddlers Explore** - Explore time. Ask your child to clap, hop, or sing for 5 seconds, 10 seconds, and 15 seconds. Time them and talk about whether it seemed like a long or a short time.

**Preschoolers Explore** - Explore the weather. Make a weekly weather chart. Record each day's weather. Predict what tomorrow's weather will be. Why do you think that?

**Kindergarteners Explore** - Bake a favorite recipe with your child. Encourage them to measure the ingredients and talk about measurement together.

**Grade School Kids Explore** - Explore bubbles. Have your child make their own bubble solution: <https://bit.ly/3jmtu7T>. Find out how temperature and humidity affect bubbles.





# STEM FAMILY ACTIVITIES

for independent learning



## WHERE DID THE WATER GO?



### Activity:

1. Have you ever wondered where a puddle goes after it rains and the sun comes out? Which of these statements do you think is true and why?
  - a. The water disappears.
  - b. The water goes right to the clouds.
  - c. The water goes to the air around us.
2. Let's explore! You need an ice cube and a sunny sidewalk (optional: a piece of chalk and a device for timing). Place the ice cube on the sidewalk in the sun. If you have a timer, time how long it takes for the ice to melt completely. Draw a chalk line around the "puddle" created by the melted ice on the sidewalk. Continue to watch the puddle to see what happens. What do you notice? What do you wonder?

### Optional Technology Connections:

Watch the read-aloud of the book "Puddles!" by Kevan Atteberry.  
[tingurl.com/book-puddles](http://tingurl.com/book-puddles)



Use an electronic device to take a time lapse video of what happens to your ice cube in the sun.



3. Extension – Put an ice cube inside a small cup and cover the top of the cup with plastic wrap and secure with a rubber band. Place the cup on the sunny spot on the sidewalk and make observations.



What do you notice?  
Go back to the initial statements. Which one do you think is true and what evidence did you collect?

Go to this website and scroll down to the bottom of the page to find the link to play the "Natural Water Cycle Game"  
[tingurl.com/game-watercycle](http://tingurl.com/game-watercycle)



4. Engineering Challenge: Using materials around your house, create a "shelter" that will slow down the melting of your ice cube. Time how long it takes for the ice cube to melt under your shelter. Redesign and test again.

Here are 16 simple STEM projects focused on fun with water.  
[tingurl.com/STEMwaterfun](http://tingurl.com/STEMwaterfun)



Optional: Go to this link to print a "STEM journal" to record your observations and questions.  
[tingurl.com/STEMjournal12](http://tingurl.com/STEMjournal12)



fresno county  
superintendent of schools

For more resources or support, contact  
Jon Dueck, FCSS STEM Direction – [jdueck@fcoe.org](mailto:jdueck@fcoe.org)  
or visit our website: [stem.fcoe.org](http://stem.fcoe.org)