

Out of the Blue

RIF EXTENSION ACTIVITIES FOR EDUCATORS

STEAM-THEMES: SCIENCE, TECHNOLOGY, ENGINEERING, ART, MATH

SCIENCE

SINK OR FLOAT

Materials: 2 clear bowls, water, salt, 2 sets of similar objects (shells, pebbles, etc.)

Hypothesis: More items will float in the salt water than in the fresh water. (If students are old enough, let them develop their own hypotheses.)

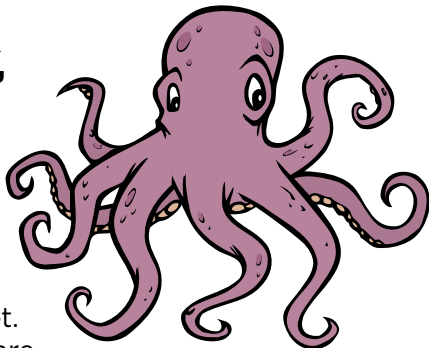
Procedure: In bowl one, dissolve 1/2 cup salt in 1 1/2 cups of hot water. In bowl two, put 1 1/2 cups of plain water. Allow students to alternate dropping similar objects into each bowl at the same time. Record observations. Is the hypothesis true? Why or why not?

Conclusion: Salt makes the water denser, allowing more items to float. Fresh water is less dense, so many items sink. (Older students should develop their own conclusions.)

TECHNOLOGY, ART, SCIENCE

TRASHY WATERS

The giant octopus in the story is caught in fishing net. Thousands of nets are lost or discarded in our oceans every year, trapping and killing marine life. Research other threats to the ocean. Make a poster or brochure to show these threats. How can we help stop this kind of pollution?



ENGINEERING, SCIENCE, TECHNOLOGY, MATH

OCEAN OBSERVATIONS

Ocean engineers track ocean activity and you can too! Go to www.ndbc.noaa.gov. Click on a buoy near your area. Record the temperature of the water, maximum wave height, and wind speeds. Compare that data with at least 4 other buoys. What can you conclude from the data you collected?

ART, SCIENCE

TIDE POOL PICTURE

Materials: white paper, crayons, water color paint, paintbrush, liquid glue, sand, scissors

Draw a tide pool shape; cut it out. Use crayons to draw marine life in the pool. Use blue watercolor paint and brush over the crayon drawings. Paint sand along the edges of the pool with brown watercolor. When paint is dry, brush liquid glue along the brown edge. Sprinkle with sand. Shake off excess.

MATH, SCIENCE

GLOBE CATCHERS

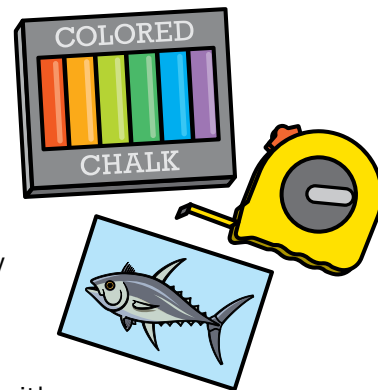
With a partner, toss a globe replica back and forth 10 times. Each time, record if your fingers touched water. Tally the results. What can you tell about how much of the earth's surface is covered in water?

MATH, SCIENCE, TECHNOLOGY, ART

LIFE-SIZED LESSON

Materials: measuring tape, sidewalk chalk, picture of sea creature

Choose a large sea creature; find out how big it is. Using a measuring tape, go outside and measure the length on a hard surface. Use chalk to draw the creature. How many students can fit inside the drawing? What would you do if you came face to face with this creature?



Reading Is
Fundamental