

Millie's Chickens

RIF EXTENSION ACTIVITIES FOR EDUCATORS

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



SCIENCE

EGG-CELLENT OBSERVATION

Materials: jar of warm water, eggs, magnifying glasses

Have each student examine an egg with a magnifying glass. (Warn students to handle eggs with care!) What observations can they make about the texture and composition of the eggshell? Discuss whether they think the eggshell is porous. Can air penetrate the shell? Place the egg in warm water. Have students observe the following: Does it sink or float? Are there bubbles? If so, where are the bubbles concentrated? As a class, discuss what the bubbles mean. Why would an egg need to be porous?



TECHNOLOGY, SCIENCE

A BABY CHICK IS BORN

Show students the effort it takes for a baby chick to hatch from an egg with this video: www.msi.chicago.org/experiment/videos/the-hatchery. These chicks probably spent time in an *incubator*. Explain to the students what an incubator is and how it works. Why would an incubator be useful? Did you know scientists have determined that chickens actually dream when they're asleep? Have students write a story from the point of view of a sleeping chicken waiting to hatch. What's it like inside the egg? Can you hear the other people or animals outside your shell?

ENGINEERING, SCIENCE, TECHNOLOGY

ROLLING ALONG

Have students place an egg—gently!—in the center of the table. Give the egg a slight push. Students should observe how the egg rolls. Have students describe how the shape of the egg affects how it rolls. Based on what you see, can you think of any advantage to an egg's unique shape? Do some quick research to see if your ideas were right.

ART

CHICKEN SCRATCH

Materials: sturdy paper, crayons, black paint, liquid dish soap, paint brushes, toothpicks

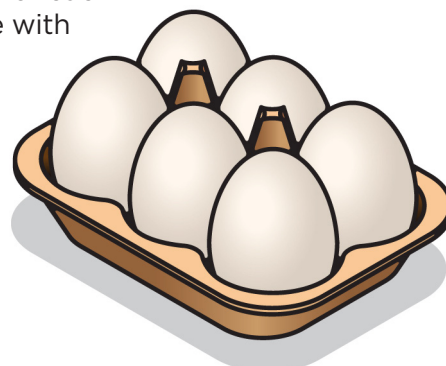
Have students fill the paper with a colorful design, making sure to fill in all the white space with crayon. Next, mix a few drops of dish soap into some black paint. Paint the entire picture with the black paint mixture and let dry. Show students several different pictures of chickens for inspiration. Using toothpicks, students should scratch a picture of a chicken onto the paper.

MATH, SCIENCE

EGGS-ACT SAME SIZE?

Materials: 12 eggs, ruler, string, marker

With a marker, number a dozen eggs 1-12 on the outside of the shells. Model how to measure a vertical line by placing string on top of an egg and wrapping vertically around until the string ends meet. Keeping a finger at the meeting point, lay the string down on a ruler to measure. Repeat the process measuring horizontally. Let students gently measure 4 eggs using this method. Have them record their measurements and observations. For an additional activity, let students weigh the eggs using paper clips to represent 1 gram. Does the size of each egg correlate with its weight?



Reading Is Fundamental