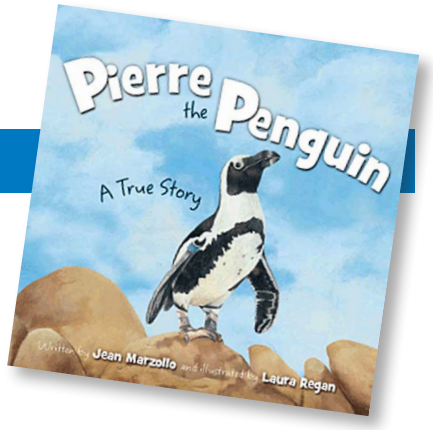
# Pierre the Penguin




## RIF EXTENSION ACTIVITIES FOR EDUCATORS

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

### SCIENCE

### PIERRE'S FEATHER EXPERIMENT

Materials: 2 zip-up plastic baggies, ice, feathers

Place ice in one plastic bag. Seal tightly. Let kids take turns holding it. How does it feel? Put feathers in the other bag. This time, give children the bag of feathers to hold first, then put the ice on top of it. How does that feel? How is it different from holding just the bag of ice? Based on your experiment, why does Pierre need his feathers? What do people use to keep warm?

### TECHNOLOGY

Visit the "Live Penguin Cam" at the Monterey Bay Aquarium to see some penguins in action! Feeding times are listed on the site.

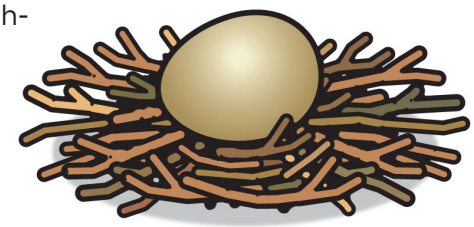
**www.montereybayaquarium.org/efc/efc_splash/splash_cam.aspx**

### ENGINEERING

### ROCK ON!

Materials: small rocks, sticks

Some kinds of penguins build small nests by loosely stacking up rocks and sticks. Watch this video of Gentoo and Macaroni penguins building nests at the Tennessee Aquarium: **www.youtube.com/watch?v=ye-6qv6j358**. Let children construct their own nests out of rocks and twigs. How high can they build a nest with nothing to hold it together? For a fun, edible variation, let children build nests of pretzel sticks and marshmallows using only their "beaks" like the penguins in the video.



### ART

### CLASSROOM WADDLE

Materials: bulletin board paper, pencils, crayons or markers

Create a classroom *waddle* (the name for a group of penguins on land). Use bulletin board paper to trace each student's body while students fold their arms like wings. Let each student decorate their body outline like a penguin—but don't add any names! Put the waddle of penguins on display. Let students try to guess the identity of each student "penguin."

### MATH

### HOW DO YOU MEASURE UP?

Materials: large sheet of paper, crayons or markers, yardstick or measuring tape

Penguins come in many sizes. Pierre, an African penguin, was 18 inches (one and a half feet) tall. An Emperor penguin can grow up to four feet! Create a life-sized Emperor penguin on a large sheet of paper. Allow students to take turns coloring in the penguin. Have each student stand beside the penguin and measure their height. Create a class graph and discuss the data. How many people are taller than the penguin? Shorter? Was anyone exactly the same height?