



# PENGUINS AND THEIR YOUNG

TEACHER'S GUIDE

LAWRENCE HALL OF SCIENCE  
UNIVERSITY OF CALIFORNIA  
AT BERKELEY

# Activity 1

## Session 1

### What You Need

#### For the whole group

- 1 freezer, large enough to hold the milk carton(s) and cups (see below)
- 1 waterproof black marking pen
- 1 sturdy, waterproof tray for every 8–12 children

#### For each group of four children

- 1 large dishpan about 20" x 15" x 5", or use a water table
- 1 empty half-gallon milk carton, or 1 loaf pan
- 1 towel

#### For each child

- 1 small plastic cup (3–8 oz.)  
*optional*
- 1 change of clothing

## Session 2

### What You Need

#### For the whole group

- 1 Emperor Penguin poster  
*optional*
- 1 black waterproof marking pen, or black crayon
- 1 ice chest (If there is no freezer you can use at school, make the ice at home and take it to school in an ice chest. An ice chest is also useful if the school freezer is far from your classroom.)
- Pictures of animals that live on ice, such as polar bears, seals, and walrus

#### For each group of four children

- 1 large dishpan about 20" x 15" x 5", or use a water table
- 1 block of ice in a half-gallon milk carton, or loaf pan (from Session 1)
- 1 towel

#### For each child

- 1 cork about 2" high
- 1 plastic fish about 1" long
- 1 chunk of ice in a small plastic cup (from Session 1)  
*optional*
- 1 change of clothing
- 1 black crayon

## Session 3

### What You Need

#### For the whole group

- 1 Emperor Penguin poster
- 1 roll of masking tape
- 1 marker

#### *optional*

- 1 full-length mirror
- 1–3 rolls of adding machine tape

#### For each child

- 1 sheet of paper about the size of the child
- An assortment of crayons

## Activity 2

### Session 1

### What You Need

#### For the whole group

- 1 Emperor Penguin poster
- Several feathers (Buy the feathers at a craft store or have the children bring them from home.)
- 1 ice chest

#### For each child and yourself

- 1 glove, mitten, or large, thick sock
- 1 ice cube

### Session 2

### What You Need

#### For the whole group

- 1 each of the following patterns: Pattern A (penguin beak), Pattern B (penguin wing), and Pattern C (penguin foot). (Master drawings are on page 27. A perforated copy for you to tear out is at the back of this guide on page 61.)
- 1 tray
- 1 large pair of scissors
- Enough newspaper to cover the work table(s) and tray

#### For each child and yourself

- 1 brown or white paper lunch bag
- 1 sheet of black paper (9" x 12")
- 1 black marker, or pencil
- 1 orange or yellow crayon
- 1 container of glue

#### *optional*

- 1 white crayon, or piece of white chalk, if you use brown bags and want to color the penguin's stomach

## Session 3

### What You Need

#### For the whole group

- 1 Emperor Penguin poster
- Several Baby Emperor Penguin drawings on pages 29 and 67
- Several Emperor Penguin Egg drawings on pages 28 and 63
- 1 or more Baby Penguins Activity Sheets on pages 31 and 69
- 1 sheet of white paper, a white sheet, or a pillowcase (18" x 24", or larger)
- 1 sheet of blue paper, or a blue sheet, or rug (36" x 48", or larger)
- 1 sheet of yellow or orange paper (9" x 12")
- 1 large pair of scissors
- 1 Pattern D (fish) on pages 27 and 61

#### For each child and yourself

- 1 paper-bag penguin, or 1 child-designed penguin
- 1 pinch of cotton or pillow stuffing (you need an extra pinch for the drama)
- 1 container of white glue
- 1 hollow plastic egg large enough for a paper baby penguin to fit inside (you need an extra egg for the drama)

## Session 4

### What You Need

#### For the whole group

- 1 black adult-size jacket or sweater
  - 1 pillow in a white, preferably king-size, pillowcase
  - 1 piece of white yarn, or a sash long enough to tie around a child's chest
  - 1 plastic egg
- optional*
- 1 toy penguin

### Activity 3

## Session 1

### What You Need

#### For the whole group

- 1 sheet of blue paper (12" x 18")
- 1 tray
- 1 bag of fish-shaped crackers

## Session 2

### What You Need

#### For the whole group

- 2 bags of fish-shaped crackers

#### For each child and yourself

- 1 sheet of blue paper (8½" x 11")
- 1 paper cup (5 oz. )

## Activity 4

### Session 1

### What You Need

#### For the whole group

- Several sturdy, waterproof trays
- An assortment of interesting objects that hold water, such as balloons, large half shells (scallop, clam, or abalone), plastic cups, plastic bags, plastic sand molds, and rubber gloves. (Each child chooses one object. Have extra balloons in case each child chooses a balloon.)
- 1 twist-tie for each balloon and rubber glove

#### *optional*

- 3 bottles of food coloring—one bottle of each of the following colors: red, blue, and yellow

#### For each group of four children

- 1 large dishpan about 20" x 15" x 5"
- 1 towel

### Session 2

### What You Need

#### For the whole group

- Several sturdy, waterproof trays
- An assortment of frozen objects, still in their containers, from Session 1
- 1 large dishpan about 20" x 15" x 5"
- 1 towel

#### *optional*

- 1 ice chest

## Session 3

### What You Need

#### For the whole group

- 2 large bowls
- 1 ice chest

#### For each child and yourself

- 2 small plastic cups (3–8 oz.)
- 6 or more ice cubes from an ice tray  
(ice cubes should be about the same size)

## Session 4

### What You Need

#### For the whole group

- Enough fruit juice for each child to have two 3 oz. cups
- 1 waterproof marking pen
- 1 freezer
- 1 tray

#### For each child and yourself

- 1 paper cup (3 oz.)
- Several berries, slices of banana, and/or orange or apple sections with no seeds

## Session 5

### What You Need

#### For the whole group

- 1 freezer, or ice chest

#### For each child and yourself

- 1 cup of frozen juice and fruit from Session 4