

# Three Little Pigs

Students learn about shelters and simple building techniques, as seen through the fairy tale, The Three Little Pigs.

TECHNOLOGY TOPICS	PROCESS SKI	LLS	GRADE LEVELS
Design Resources	Designing Collecting Information Testing		K-6
TIME REQUIRED			
Advance Preparation	Set Up	Activity	Clean Up
5 minutes	5 minutes	45 minutes	5 minutes
SUPPLIES			

- Shredded green cellophane spring basket "grass" (or other straw-like material: yellow yarn, shredded paper, drinking straws, etc.) (2 cups per group)
- □ Popsicle sticks or tongue depressors (20 per group)
- □ Wooden blocks or LEGOs (50-100 per group)
- □ Clay (1 stick per group)
- □ Hair dryer (1 per class)

# ADVANCE PREPARATION

 Create a graph on a flip chart or chalkboard, like Master A at the end of this document. Or copy Master A onto a transparency.

#### **SET UP**

Set out the prepared supplies for each group.

# INTRODUCING THE ACTIVITY

Let students speculate before offering answers to any questions. The answers at the right are provided primarily for the teacher's benefit. Ask the students the following questions in **bold**. Possible student answers are shown in *italics*.

Read aloud a version of The Three Little Pigs.
Present the problem-solving situation: "Your job is to help the three little pigs build three houses (one at a time).
Each one should be stronger than the one before it, just like the three little pigs did."

### What did the three little pigs build their houses out of?

Straw, sticks, and bricks.

We will build our houses out of grass, Popsicle sticks, and blocks (or clay).

## CLASSROOM ACTIVITY

Each student follows the directions below.

### **Procedure for Three Little Pigs**

- Have children predict which of the three houses will best withstand the wolf's blow, (hair dryer) best.
  - Record predictions on a chart labeled: straw house, stick house, and block house (across the top); and prediction, Trial 1, Trial 2, and Trial 3 (down the side). (See Master A)

Note: Students may record the results in words or pictures.

- 2 Trial 1: Supply children with grass and 6 Popsicle sticks.
  - Each group constructs a structure.
  - Test the structure by allowing the wolves (their partners) to stand equal distances from their desks and blow-dry the house.
  - · Record the results on the chart.
  - Discuss. (How did the wolf's blow affect your three-little pigs' survival?)
- 3 Trial 2: Repeat Trial 1; but use 20 Popsicle sticks instead of grass.
  - Record the results on the chart.
  - Discuss.
- 4 Trial 3: Again repeat Trial 1; but use blocks or clay instead of sticks.
  - Record the results on the chart.
  - Discuss.

### CLASS

Ask for student observations.
There is no correct answer. Let students guide the discussion and present their hypotheses before discussing explanations.

Which house did the best?

What do you think made the houses strong or weak?

Why would you build a house out of grass?

#### **EXPLANATION**

In-depth background information for teachers and interested students.

#### Suggested Reading:

Celsi, Teresa; Cushman, Doug <u>The Fourth Little Pig</u>. Steck-Vaughn:199) ISBN: 0811467406

Peet, Bill. Chester the Worldly Pig. Houghton Mifflin:1978 ISBN: 0395272718

Scieszka, Jon; Smith, Lane. <u>The True Story of the Three Little Pigs by A. Wolf.</u> Viking Books:1989 ISBN: 0670827592

Young, Ed. Lon Po Po. Philomel Books:1989 ISBN: 0399216197

Hoberman, Mary Ann. <u>A House is a House for Me</u>. Puffin Books: 1982 ISBN: 0140503943

The House that Jack Built. Various authors.

# OPTIONAL EXTENSIONS

Have the students brainstorm other building materials that would work well. Have the students bring materials from home, such as paper towel tubes, egg cartons, etc. and build houses of their own design. Test these new houses.

### **CROSS-CURRICULAR CONNECTIONS**

ART	Have students make pig and wolf masks.		
	Have your students perform the "Three Little Pigs" for a school play.		
LANGUAGE ARTS	Have the students read other fairy tales with wolves in them. (e.g., The Three Pigs, Little Red Riding Hood, Peter and the Wolf, The Fourth Little Pig, etc.)		
	<ul> <li>Discuss the stereotype of the wolf (big and bad) in each story.</li> </ul>		
	<ul> <li>Discuss personification in storytelling.</li> </ul>		
	<ul> <li>Have the students write a fairy tale from the wolf's point of view.</li> </ul>		
NUTRITION	Have the students discuss where pork comes from.		
	Have the students examine and discuss examples of food high in protein. (e.g., soybeans, meats, etc.). Have students research what protein is used for in the body.		
MUSIC	Play a recording of "Peter and the Wolf" to your students. Have the students try to identify the animals by the sounds the musicians make with their instruments. Have the students match pictures of musical instruments to the sounds.		
LIFE SCIENCE	Discuss "endangered species" with your students, and why the Timber Wolf is on the list. Have the students research efforts people have taken to reintroduce wolves back into the wild (Yellowstone Park).		

### MATH Have the students count the number of sticks

and/or blocks it took to build their house. Graph

the data.

Go on a walk. Look for shapes and patterns in

buildings.

#### **SOCIAL STUDIES**

Have the students study the various types of dwellings people use for shelter around the world. Have them report on different materials used to make shelter.

### **Three Little Pigs**

Picture from http://pbskids.org/lions/huff/	Straw House	Stick House	Block House
Prediction			
Trial 1 - Results			
Trial 2 - Results			
Trial 3 - Results			

Master A ©2005, OMSI