

# CURIOUS GEORGE: BUILD A WALL Lesson Plan

During this lesson, children explore the following engineering concepts:

- Materials and design are both important to the strength of a structure.
- · Building a sturdy structure requires planning and testing.

As children go through the activities, they will be using the following science skills:

- Asking questions
- Planning and conducting experiments
- Making predictions
- · Testing and retesting
- Making and sharing observations

### **Materials**

Books
Blocks
Clothespins
Materials for wall building (e.g., craft sticks, egg cartons, clay, play dough, small
rocks, pieces of cardboard or poster board, paper tubes, paper cups, etc.)
Newspaper sheets
Ramp
String or clothesline
Tape
Toy car

## Directions

## 1. Watch the Curious George video, "Keep Out Cows."

Explain to students that in the video, Curious George wants to stop Leslie and the other cows from munching on the flowers. He decides to keep the cows out by building a wall. Ask students to notice why George uses newspapers for his wall. (Note: you may

want to explain that the narrator says, "No doubt in a cow's stomach—or two" because a cow's stomach has four compartments.)

## 2. Make newspaper walls.

- Tie a length of string between two tables or chairs (the string should be I-2 feet from the ground).
- Let children use clothespins to attach newspaper pages to the line.
- Ask: When George made a newspaper wall like this, did it keep the cows away from the flowers? Why not?
- Explore the concept further by asking: Would this wall keep a toy car from getting through? Test it out by setting up a ramp near the wall and releasing a car from the top of the ramp.
- Ask students: How can we make this wall stronger? Try out the solutions they suggest, testing each with the toy car. Encourage students to suggest as many different solutions as possible, such as: tape the bottom edge of the newspaper to the floor, place blocks or books on the bottom edge, or build a block wall behind the newspaper.

## 3. Design and build.

- Have students work in groups. Invite them to build the strongest wall they can.
   The wall should be about as long as a ruler.
- Display various materials and let groups decide which one they will use: craft sticks, egg cartons, clay, play dough, small rocks, pieces of cardboard or poster board, paper tubes, paper cups, etc.

### 4. Discuss and problem solve.

- As the groups work, circulate to watch, listen, and engage children in conversations.
- You may want to say: Tell me about your design. Why did you select these materials?
   Why did you think they would make a sturdy wall? How did you make them work together? What other materials would make your wall even stronger?

## 5. Test for stability.

- Challenge students to develop a fair test to compare the strength of the different walls they have constructed. For example, place an identical ramp at the same distance from each wall and use the same vehicle as the moving force.
- Let students rebuild or reinforce their walls as needed, then retest.
- Encourage students to talk about the elements that made their walls strong.

### Extend with Books

Encourage students to use these books as they continue to learn about construction.

Building a House by Byron Barton (Mulberry, 1990)

From the foundation to the walls to the roof, simple pictures and text tell how a house is built.

Building Our House by Jonathan Bean (Farrar, 2013)

Based on a true story, a mom, dad, and kids all work together to build their very own house.

How a House is Built by Gail Gibbons (Holiday House, 1996)

Meet all the people, from the architect to the plumber, who use their skills, machines, and tools to build a house.











