# How It Feels To Be A Structure

Application of Architectural Concepts



## Age Level:

Third grade and up

## Subjects:

Math Science Social Studies Language Arts Visual Arts

#### Time:

One 45-minute session

### Materials:

• One copy of the sheets on "How it Feels to be a Structure," for each student.

## **Learning Objectives:**

- To gain an understanding of mathematical principles through sensory perception.
- To relate mathematics to real-life observations.

#### Architect:

As you do each exercise with the students, reinforce what they are doing by showing pictures of buildings that demonstrate the same structural principles the students are acting out. Work with the teacher to make sure the students are experiencing the concepts appropriate for their age group.

This activity is so much in the province of the architect that it will be difficult to prevent it from becoming a lecture. Plan with the teacher to keep the experiential quality paramount and to be sure it is appropriate for the grade level.

#### **Teacher:**

This is a great activity for the students to get up and move around the classroom. Work with the architect to make sure there is enough wall space for students to reach and open floor space for groups to demonstrate larger structural components.

You may feel uneasy about this activity and hope the architect will take it over. However, the architect needs you to aid in keeping the presentation appropriate to

the grade level and to have the students experience the concepts, so they are understanding them by actually feeling and visualizing them.

Don't hesitate to add comments and suggestions as you see how the students are responding.

#### Rationale:

Concepts concerning the structural properties of various geometric shapes and how this knowledge relates to the buildings they experience every day are very difficult for students to grasp.

However, the human body is a wonderful structural example. When students are involved in activities that use their bodies to actually "feel" how it is to be a beam, a column, a truss, etc., and that is related to the buildings they live in, or other architectural examples, they quickly become excited about how structures work.

## **Presenting the Activity:**

Initiate a discussion about the relationship between the human body and architectural structures. Use the sheet, "How it Feels to be a Structure," as a guide.

Note: An excellent supplement to this lesson is the book, "What it Feels Like to be a Building." by Forrest Wilson (Preservation Press, National Trust for Historic Preservation, 1735 Massachusetts Ave., NW., Washington, DC., 20036.)

