

# SCIENCE @ THE LIBRARY

## DENSITY BLOCKS

See how the density of a block affects its ability to float.

### **MATERIALS:**

Density blocks, each a cubic inch, but made of different materials (oak, pine, PVC, acrylic, aluminum, copper, steel and brass).

Container of water

Pan balance

### **WHAT TO DO:**

Line up the density blocks by what you think is the heaviest to the lightest.

Measure (weigh) them on the pan balance to confirm or dispute your guess, then readjust the line up if needed. This measurement gives you the mass of the block.

Pick up each individual block and predict which blocks will sink and which blocks will float in a container of water. Write down your prediction in the data table. This is your hypothesis.

Test your hypothesis by placing each individual block into the container of water.

Record your observations.

### **QUESTIONS:**

Does density affect the ability of the object to float?

Does mass affect the ability of the object to float?