

## Grade 2 Week 9

### **WHERE'S THE BALL?**

When different size objects settle, which ones end up on top? If we bury the ball in rice, how can we bring it back to the top again without touching it?

#### **Materials:**

quart size glass jar with lid  
small ball or walnut  
uncooked rice

#### **Procedure:**

1. Fill the jar 1/4 full with rice.
2. Put the ball on top of the rice and close the lid.
3. Turn the jar over to make the ball disappear (add more rice if the ball cannot be covered).
4. Shake the jar up and down.
5. Record your observations.

#### **Questions:**

1. What happened to the ball?
2. What causes the ball to come back to the top?
3. What other objects can you use to test this theory?

How it works: All matter occupies space. No two pieces of matter can occupy the same space at the same time. Often there are small spaces between the objects. The smaller the objects are, the closer together they fit. (The smaller the objects, the smaller the spaces between them.) In this activity, as the container is shaken, settling takes place. The grains of rice settle, fitting closer together. This forces the larger object, the ball, to the top.