

# Roll This Weigh



## Purpose:

- Students will practice estimating and measuring a variety of items in teddy bears, cubes, paper clips, wooden or plastic cubes, metal washers, or any other non-standard unit.
- Explore mass.

## Materials:

- golf ball, marble, block of wood, tennis ball, ping pong ball, ball of clay (one set of items for each group of students)
- Roll This Weigh recording sheet
- balances, scales, and measurement unit such as teddy bears, paper clips, grams, etc.

## Activity:

*This activity may be done as a whole class or with small groups. Be sure to provide enough materials depending on the size of your group.*

1. Divide students into groups of 4 to 5 students. Instruct each group to look at the 6 items provided (a golf ball, a marble, a kickball, a tennis ball, a ping pong ball, and a ball of clay) and predict which items are heavier. Have students list their prediction in order from heaviest to lightest on their recording sheet.
2. Next, have students estimate the mass of each item and record their estimate on the handout.
3. Instruct each group to use the balance scales and units of measure to determine the mass of each. Write the mass on the recording sheet or a large poster.
4. Once students have completed the activity, discuss the results. How close were your estimates to the actual measurements? Did any of the objects' mass surprise you? Why do you think it was difficult to determine the mass of some of the items?

**Extension:** Pass around objects for students to estimate their mass throughout the week. Students should become more accurate with their estimations with extended practice. They will need a lot of practice before their estimates are fairly close.

Name \_\_\_\_\_

## Roll This Weigh



Predict:

\_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ ,  
lightest

\_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_  
heaviest

Unit of Measure: \_\_\_\_\_

ITEM:	Estimated Mass	Actual Mass
Kickball		
Ping Pong Ball		
Tennis Ball		
Ball of Clay		
Marble		
Golf Ball		