**Lesson Title: Nuts for Nuts**

**Length: (30 minutes)**

**Standard(s) Addressed: 6.RP.A.3, 7.RP.A.3, 7.NS.A.3**

**Materials:**

1. Two graduated cylinders (one should be 10 mL)
2. Water (in pitcher or faucet)
3. Two sets of different sized nuts (1/4” and 1/2”) made of the same material.
4. Digital scale

**Outline:**

1. Place 10 1/4” nuts in the larger graduated cylinder.
2. Add 10 mL of water to the cylinder.
3. If the nuts are completely covered, record the volume. If the nuts are not completely covered by water, add another 10 mL of water and record the volume.
4. To find the volume of the nuts, subtract the volume of water from the recorded volume.
5. Repeat the process for the 1/2” nuts.
6. Find the ratio of volume of the larger nut to the smaller nut.

**Questions:**

1. What should the ratio of the masses be? (Test your hypothesis.)
2. What would be different if we used nuts made of different materials?