

# The 100 Apple Solar System

*(From "Touching the Future—Linking the Classroom with Space")*

## **PURPOSE:**

Students will gain an understanding of mass distribution in the Solar System

## **MATERIALS:**

Crumpled paper (represents 99 apples)

Large box or bag

One real apple

Paper or plastic plate - a colored one works best

Knife to cut the apple

## **PROCEDURE:**

1. Fill the box with 99 crumpled pieces of paper (approximately apple sized). Tell the students that this represents 99 apples.
2. Cut the apple into 7 equal parts. Do the entire cutting on the plate.
3. Put 6 of the apple slices into the box. Tell students that these slices, along with the other 99 apples represent the mass of the Sun.
4. Cut the remaining slice into 10 equal pieces.
5. Tell the class:
  - The first 7 pieces represent the mass of Jupiter.
  - The next 2 pieces represent the mass of Saturn.
6. Cut the final piece in half.
7. Tell the class:
  - One half represents Uranus; the other half represents Neptune.
8. What is left? The residue left on the plate and knife represents the mass of all of the Inner Planets, Pluto, asteroids, and comets!