# POP! TEACHER RESOURCE

Lesson Plan

## Mass vs. Weight

Lesson Plan for *Measuring Weight*
Grade 1

**Objective**
To help students use a Venn diagram to understand the similarities and differences between mass and weight.

**Things Needed**
- *Measuring Weight* book
- Whiteboard
- Access to the "Measuring Weight" web page on the Pop! website: https://popbooksonline.com/lets-measure/measuring-weight

**Before the Activity**
Open the "Measuring Weight" web page in your internet browser. Pull up the "Watch a Video" tab. Draw a Venn diagram on the whiteboard. Label one circle "Mass." Label the other circle "Weight."

**Activity**
Explain to students that the circles on the board are a Venn diagram. People can use Venn diagrams to compare and contrast two concepts. Each circle stands for one of the two items being compared. In this case, one circle stands for mass, and the other stands for weight. You will read a book about these two concepts. Students should listen for ways that mass and weight are similar and different.

Read *Measuring Weight* out loud, including the glossary. After each chapter, ask students the following questions:
- What did this section tell us about mass?
- What did this section tell us about weight?

Write students' answers in the appropriate circles on the Venn diagram. Use these sample answers as a guide:

- Mass: Mass is the amount of matter in an object (p. 4). Mass can be measured in kilograms (p. 11).
- Weight: Weight is a measure of how heavy something is (p. 6). Heavy objects weigh more than light objects (pp. 6–7). Weight depends on gravity (p. 7). People measure weight in pounds and ounces in the United States (p. 8). People also measure weight in kilograms (p. 11). People measure weight with scales (p. 12). People can stand on a scale to find their own weight (p. 12).

Then, have students read the caption and watch the video on the "Watch a Video" tab on the Pop! website. Ask the following questions and write students' answers in the appropriate circles:

- What did we learn about mass from this website? (Possible Answer: The mass of an object does not change depending on where the object is.)
- What did we learn about weight from this website? (Possible Answers: The weight of an object changes depending on where the object is. Weight is affected by gravity. Weight is the force of gravity affecting an object. People and objects would weigh less on the moon.)

Point to where the circles in the Venn diagram overlap. Explain to students that this place shows the information that is true about both mass and weight. Ask students the following question:

- What is true about both mass and weight? (Answer: Both mass and weight can be measured in kilograms.)

Erase that piece of information from both circles and rewrite it in the place where the two circles overlap. Explain to students that the Venn diagram now shows both the similarities (in the overlapping area) and the differences (in the rest of each circle) between mass and weight.

**Evaluation**

Could students identify the similarities and differences between mass and weight? Could they use the structure of a Venn diagram to help them?

**Standards**

This lesson plan may be used to address the National Science Education Standards' Content Standard B, grades K–4, and the Common Core State Standards' reading standards for informational texts, grade 1 (RI 1.1, 1.3, 1.4).