

How Much Does It Weigh?

Strand:	Measurement and Geometry
Topic:	Measurement weight in pounds
Primary SOL:	2.8 The student will estimate and measure b) weight to the nearest pound.

Materials

- How Much Does It Weigh? recording sheet (attached)
- Scales: balance scale, weight scale, and pulley scale.
- One object between 1 and 3 pounds for each pair of students
- Item to weigh (*Before the lesson, ask each student to bring in an item from home that can fit in their book bags; have some extras in case students forget.*)
- Weights: pound
- Overhead projector or document camera

Vocabulary

instrument, pound, scale, weight

Student/Teacher Actions: What should students be doing? What should teachers be doing?

Note: Before the lesson, ask each student to bring in an item from home that can fit in their book bags. Have extras available in case students forget.)

1. Write the word “weight” on the board, and ask students to think about what this word means. Have students share their ideas with a partner in a think-pair-share strategy. Have each pair work with another pair to come up with a definition of what they think weight means. After allowing groups time to come up with a definition, ask groups to share their definitions and records students’ ideas on the board. Once all groups have shared, provide a definition of weight as presented in a student mathematical dictionary.
2. Show students a weight or an object that weighs 1 pound. Pass the weight or object around so students can each have the opportunity to hold the weight or object. This provides students with the idea of what the weight of a pound feels like.
3. Provide pairs with an object that weighs 1 or more pounds. Then have students estimate the weight of their item; have students record their estimation on the record sheet.
4. Ask, “How do you think you can find the actual weight of your item?” Look for a response of a scale. If students do not make the connection, ask, “How does the doctor find your weight?”
5. Share with students various types of scales: a balance scale, a weight scale, and a pulley scale. Ask, “What types of items do you think would be weighed on each type of scale?” Share responses.
6. Display the measurement of each scale on an overhead projector or document camera and show students how to read the measurement on each scale. Provide students opportunities to read various measurements on each scale.

7. Set out two of each type of scale. Distribute the How Much Does It Weigh? recording sheet. Have students use each type of scale to measure the item they brought from home and record the weight on their recording sheets. To help with classroom management, assign groups to start at a specific type of scale.
8. To close the lesson, share some student notices and wonders after they have explored using the scales to weigh their item.

Assessment

• Questions

- Did anyone's item weigh exactly 1 pound?
- Why do you think it is important to include the unit—pounds—when we are measuring something?
- How did you make your estimates, what strategies did you use?
- Did anyone's object weigh close to your estimate?

• Journal/writing prompts

- You are cleaning out your desk. Estimate and record the weight of five objects you found in your desk. Which object do you think has the greatest weight? Why?
- You are at the store and need to buy 2 pounds of apples, but the scale is broken. What else could you use to help you estimate 2 pounds? Explain how you know.

• Other Assessments

- As the students rotate through the various scales, check for students' accuracy with reading the weight.
- Conference with students to be sure they have a benchmark understanding of a pound.

Extensions and Connections (for all students)

- *Note: Before the lesson, ask each student to bring in an item from home that can fit in their book bags. Then have students work in groups together to estimate all items together and then actually weigh the items.*
- Provide students other opportunities to practice reading the various types of scales, possibly through a measurement Olympics.
- If students show mastery of pounds, introduce them to the concept of an ounce being a smaller measurement of weight.

Strategies for Differentiation

- Use familiar objects when discussing pounds to help students further develop a benchmark object or reference.
- Help students see counting patterns when reading a measurement on a scale (tens, fives and twos).
- Redirection and corrective feedback should be given throughout lesson.

Note: The following pages are intended for classroom use for students as a visual aid to learning.

How Much Does It Weigh?

Name _____

I weighed _____.

I estimate that my item weighs about _____ pounds. I think this because ...

Actual Measurements

Balance Scale _____ pounds



Weight Scale _____ pounds



Pulley Scale _____ pounds

