

## Lesson Plan

**Teacher's Name:** Jennifer E. Litts

**Subject:** Mathematics

**Date:** March 23, 2009

**SOL(s):**

K.8 The student will identify the instruments used to measure length (ruler), weight (scale), time (clock: digital and analog; calendar: day, month, and season), and temperature (thermometer).

K.10 The student will compare two objects or events, using direct comparisons or nonstandard units of measure, according to one or more of the following attributes: length (shorter, longer), height (taller, shorter), weight (heavier, lighter), temperature (hotter, colder). Examples of nonstandard units include foot length, hand span, new pencil, paper clip, block.

**Objective(s):**

Students will compare the weights of two classroom objects and try to determine which feels like it weighs more, less, or about the same.

**Materials Needed:** Know about Weight by Henry Pluckrose, common classroom objects around the room, dry erase board, markers, large white paper for chart

**Group Size:** Whole group

**Duration:** 40 minutes

**Set/Introduction: (build background, make connections)**

Ask students if they can remember going to the multipurpose room a few months ago to having their sight, hearing, and other things checked. Do they remember using the scale? What did the scale tell them? (weight) Do any of the students recall their weight or know it from weighing themselves from home?

**Statement of Objectives to Students:**

Today we are going to begin learning about weight. We will read a book about weight and then use our bodies like scales to try to measure if some things are lighter or heavier than others.

**Input: (Step-by-Step Procedure, Questions, Activities)**

1. Assemble the students on the carpet in front of the dry erase board. Ask them opening questions about being weighed and what they know about weight.

Tell them that we will be learning about one way to measure weight using something called a balance scale.

2. Introduce Know about Weight by Henry Pluckrose to the students. Ask them if they know what some of the photographs show and what some of the scales might be used for.
3. After reading the book, assign each student a partner and have them sit next to their partner.
4. Before giving each pair a set of objects, have one pair come up to demonstrate. One student will feel one object and the other student will feel the other. Then they will trade with their partner. After each child has felt the objects, they will decide which object they both feel weighs more. To test their idea, one child will take both objects at once; one in each hand. Then the other child will try. Be sure to encourage students to use the words “lighter,” “heavier,” and “about the same.”
5. Pass out objects to the pairs and allow them to investigate the weight of the objects. If certain pairs work quickly and there is time, allow pairs to trade objects with other pairs.
6. Show students the balance scale. Demonstrate how students can make their bodies like a balance scale by lowering the hand which is holding the heavier object and raising the hand with the lighter object. Ask one pair to put one of each of their objects on either side of the scale to see the balance scale in action.
7. Ask each pair to show their objects. One will act as the human balance scale to show their prediction to the class, and the other will place the objects in the scale.
8. As students test their objects, add the heavier object to the “winner” bracket of the chart. After each pair has gone, ask two pairs to bring up their heavier object to battle the other pair’s heavier object.
9. Repeat this process until all of the brackets are filled and there is a winner!

**Enrichment/Reteaching:**

Make pairs which are mixed-ability and ask students who typically have more difficulty learning concepts to act the part of the balance scale for their pair. This will hopefully help them to make a stronger connection to the concept.

**Assessment Activity:**

Formative Assessment: Students will be assessed on their ability to recognize which object in a pair is heavier and to move their bodies like a balance scale to represent the relationship of heavier and lighter objects.

**Closure:**

Ask students to describe what it means when something is said to be lighter or heavier than another object. Ask students what they can use to weigh things (scale); what is the special name for the kind of scale we used today (balance scale)? Remind students that balance scales are one way we can determine the relationship of weight between two objects. Tell the students that they will be using balance scales again in the next lesson, but instead of just comparing what things weigh, we will try to measure the weight.