

How Tall Are You?

Reporting Category	Measurement
Topic	Comparing two objects, using nonstandard units of measure, according to height (taller, shorter)
Primary SOL	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, and block.
Related SOL	K.8

Materials

- Strips of adding machine tape cut somewhat longer than the tallest student in the class
- Sticky tape
- Sheets of butcher paper cut somewhat longer than the tallest student in the class
- String
- Scissors
- Story about height

Vocabulary

measure, length, height, taller, shorter, ruler

Student/Teacher Actions (what students and teachers should be doing to facilitate learning)

1. Share a story that relates the concept of height. Discuss the word *height*, and explain that we can measure a person's height by using the same tools we use to measure the lengths of objects. Ask students to estimate how tall they think they are—their height.
2. Call two students to stand back to back at the front of the class. Have the class compare the heights of the two students, using the comparison words *taller* and *shorter*. Repeat the activity until everyone has been given a turn.
3. Distribute strips of adding machine tape. Group students into pairs, and have one partner use a strip of tape to measure the height of the other partner. Instruct students to tear the paper as close to the measured height as possible. Then, have the partners reverse roles. Once students have put their names on the tapes, gather the students together in a group, and ask them to order the tapes by height. This works smoothly if students line up along a wall from tallest to shortest and then place their tapes in order on the wall, using sticky tape. Lead students in making comparisons, using the terms *taller* and *shorter*. (You might wish to emphasize that every student in the class is growing at different rates and that the shorter people might become the taller ones in a year or so.)

Assessment

- **Questions**
 - “How would you measure how tall your teacher is?”
 - “Do you think you are taller or shorter than 10 glue sticks? Why do you think that?”
- **Journal/Writing Prompts**
 - “Draw something that is taller than you. Draw something that is shorter than you.”
 - “Draw a picture of your family members in order from the taller members to the shorter members.”
- **Other**
 - Place students in pairs, and have partners trace each other’s outline, using sheets of butcher paper. Once the tracing is done, have them use their hands as a nonstandard unit of measure to determine how tall they are. Ask comparison questions to determine whether students understand the terms *taller* and *shorter*.
 - Have students measure the length of one of their arms, using string. Have them cut the string to that length. Give each student a piece of paper divided into fourths. Have students use their strings to find four objects in the classroom that are longer than their arms. Have them draw the objects and label their drawings. Then, have them find four objects that are shorter than their arms, draw these objects on the other side of their papers, and label. If time permits, give them the challenge of finding one object that is the same length as their arms. This object can be drawn and labeled on another sheet.

Extensions and Connections (for all students)

- Let students identify items throughout the classroom according to these three categories: Taller Than Me, The Same Height As Me, and Shorter Than Me. This can also be done at home.