

Estimation, Height, Weight

by Jessica Wesaquate and Andrea Rogers

Strand:

Measurement

Grade Level:

Four

Pre-requisite Knowledge:

Methods of measurement, estimation techniques, problem-solving, background on tipi

Objectives:

Students will be able to observe how a tipi raising is done.

Students will be able to use estimation techniques to estimate the height and weight of the poles from the video.

Students will be able to estimate the weight of canvas in the video, as well as estimate the weight of the traditional buffalo robe.

Materials:

tipi raising video clips, handout (using below information), pencils, paper

Have the students watch all of the tipi raising videos. Explain to the students that you are going to explore the height and weight of the tipi using estimation.

Activity:

As a class, or in groups, have students estimate what the height of the poles might be in the videos. If you were to line up all the poles in a row, how long would they be (using your estimated number)?

Have students estimate the weight of one pole. In total there are thirteen poles, using the estimation the students came up with, how heavy would the poles be altogether? There are several ways they can determine this weight (addition, multiplication, etcetera).

Have the students look at the weight of the canvas. Traditionally First Nations groups used buffalo robes. What do the students think would be heavier? Have students estimate how heavy the canvas might be? Now that the students have estimated what the 13 poles and the canvas weigh, have them determine the estimation of the weight of the poles and canvas together.

Give students an example of how much one buffalo hide weighs in kilograms. Since it took more than one buffalo hide to make a tipi, have students estimate, as well as solve how heavy seven buffalo hides would be. Ten? Twelve?

Plains Indians first developed the tipi. Depending on tribe size or size of family the tipi required anywhere from 8-20 buffalo hides.

Work Cited:

King, Anna-Leah. Tipi Skylight: Teacher Resource. First Nation Curriculum Separate School Board

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