# Pictometry on Line Lesson

## Part 1 (Grades 5-8)

**Objectives:** The student will

- Use the basic tools of the pictometry on line software
- Practice collecting measurements
- Use measurements to construct a scale model

## Standards (Pa)

- 3.4.5.C1 Explain how design process is a purposeful method of planning practical solutions to problems
- 3.4.6.C2 Explain how models are used to communicate and test design ideas and processes
- 3.4.6.D2 Use computers appropriately to access and organize and apply information

### Materials:

- Computers
- Worksheet
- Pen or pencils

### Methods

### Part 1

- 1. Introduce the basic tools of the pictometry software (distance, height, area, elevation and location)
- 2. Type in the school address
- 3. Complete data table with measurements

## Part 2

- 1. Introduce scale models
- 2. Students will select a structure (bridges) to gather measurements using software
- 3. Students will construct model of structure

### Assessment

- 1. Worksheet completion and answers (part 1)
- 2. Construction of scale model (part 2)

### **Student Worksheet**

## Part 1

Location:

- 1. Height of Flag pole
- 2. Height of school building
- Elevation of Building Flag Pole
  - Playground
- 4. Area of the school building
- Choose 2 locations and measure distance between Location a Location b Distance

## Part 2

Choose a local bridge to measure for your scale model

Location of bridge

Latitude and Longitude of Bridge

Length

Height

Width

Area

Elevation

Type of bridge