



# Summer Survey

*a three or four day lesson*

*for 45 minute to one hour classes*



## Standards met: CCSS 7.sp.3, 7.sp.4

### **Draw informal comparative inferences about two populations**

*Prerequisite skills: In 6th grade, students will have learned how to summarize numerical data sets in relation to its context. (6.SP.5 a-d)*

### **Project inspiration:**

Being partnered with the Alaska Native Tribal Health Consortiums' HIV/STD PREVENTION PROGRAM I was introduced to the importance of epidemiology as a career in the modern world. Taija, from the ANTHC, offered to help introduce and conclude a very hands-on math lesson on that subject.

### **Materials:**

Survey Data Sheets (*attached*), Summer Survey Rubric (*attached*), Poster paper, Coloring supplies

### **Necessary Vocabulary:**

Epidemiology, info-graphic, inference

### **Project Overview:**

-Each day, below, consists of one or more major activities, and can be worked into your daily routine as appropriate. Students will need to be introduced to the above vocabulary words, either ahead of time, or as an introductory activity.

(Day 1) All students will receive a **Summer Survey Data Sheet** and a **Summer Survey Rubric**. Taija will present a guest lecture and game on Epidemiology. Students will, in groups (3-4), devise a battery of ten yes/no questions concerning popular summer activities (i.e. did you go fishing this summer? Did you spend more than half of your summer in a different state this summer?) They will record these questions on the **survey data sheet**.

As homework for the week students will be responsible for asking these questions to at least two different populations of no less than 50 people each. For example this could mean students on-team/off-team, boy/girl, or 7th graders/8th graders. Students will record this data on their **survey data sheets**.

(Day 2) Further define and discuss the word, inference. Have students practice making inferences. Groups will draw an inference from their data sets comparing their two populations. They will then begin to create an info-graphic that represents their inference.

Finishing the info-graphic can be assigned as homework\*\*\*

(Day 3) Students will present their info-graphics to the class and will answer questions concerning their studies and conclusions. After the presentations, discuss as a class, the Summer Survey Project. (Consider asking: what did we learn about our classmates that we might not have known before, where there any inferences that seemed to represent unreal or absurd connections, which inferences seemed the most valid.) Taija may be present to help raise relevant discussion.

\*\*\*Lesson planning is based on one hour class periods, for 45 minute classes an extra day will almost certainly be necessary between days 2 and day 3, above.

### **Assessments and Artifacts** (*see attached samples*)

Students will be recording data to their surveys on data sheets, and creating 1 info-graphic per group, with a two-paragraph description.

### **Extensions and Enrichment** (*choose one or more*)

Students will create a variety of graphic displays including a info-graphic. They will draw several possible inferences and explain why they chose the inference they did for their info-graphic. After which students will present their findings in an exhibition format with the entire team, or parents in attendance, and will provide a brief Q&A concerning their study and inferences.