BLM 2 – Jennifer's Salmon Stand

Jennifer was planning to raise money for a school trip. She had an opportunity to set up a food sale at a school track and field event. Her grandfather, a fisherman, suggested that she should offer different types of salmon at her table. He even promised to give her the fish and help her prepare it in a variety of ways.

Jennifer had a problem: Would the kids like her salmon? How much should she ask her grandpa to catch? How should it be prepared?

What other problems could she potentially foresee with this business idea?

Jennifer talked to her math teacher about her plan and her need to find out how her classmates might respond. Because her school had several grades and many students (the population: the whole group you are interested in), she decided to do a survey in her own classroom (a sample: counting part of the population) to help her answer her questions. A census (a census: counting the whole population) did not make sense because it would include everyone in the school (population) and would take a lot of time and effort.

Steps and Questions for Discussion:

- Ask everyone in your class to mark down their favourite preparation of salmon. Let them choose from only three options: a) salmon jerky b) smoked salmon c) baked salmon.
- Write the results down on a tally sheet.
- Use the results to predict the how many people at the track and field event will choose each flavour.
- Engage the students in the class about the kinds of people that will be at the track and field event.
- Discuss as a class or in groups whether or not your class is a good sample for Jennifer to study.
- Could she survey a different sample of students in her school to get a result that will be closer to the population that will be attending the track and field event?
- Does it make sense for Jennifer to use a sample instead of asking the population of the school?
- Is a large sample more likely to be better than a small one?