**Cross Cultural Coffee Curriculum – Estimation and Measuring**

**Essential Question:**

**Standards:**

**Objectives:**

SWBAT accurately follow instructions

SWBAT Measure specific amounts of substances

SWBAT Identify how both Americans and Ethiopians use measuring and estimation skills in unique ways

SWBAT Apply estimation skills when appropriate

**Tools/Materials:** (enough for each group of students to use)

Coffee Pots

Filters

Ground coffee

Water

Measuring cups

Roasted coffee (unground)

Mortar and pestle

Hot plate

Pot/pan

Cups

Sugar

**Procedure**

1. Introduce lesson by explaining the importance and connection of measuring and estimation in day to day life in America. Ask students- How can one measure if they do not have measuring instruments such as a measuring cup? Collect responses verbally or written.
2. Break students into groups and ask them to make a small amount of coffee the America way (follow the instructions on the ground coffee container). Use the American-coffee pots to do this. Set coffee aside for future comparison.
3. Given the framework laid out by the American Coffee instructions ask students to make coffee the Ethiopian way, by estimating. Ask them to first grind the coffee by hand, then boil the coffee in a pan over a hot plate. (if hot plates are unavailable use the American coffee pots). Encourage the students to experiment on how much coffee should be used.
   1. Ethiopian coffee is normally brewed much stronger and for much longer than American coffee, this is caused by adding more coffee grounds than Americans would and boiling it for much longer.
4. Ask students to add sugar and taste their creations.
5. In journals or work books ask students to reflect on their own lives when it is useful to use exact measurements and when it is useful to estimate. What are the advantages and disadvantages of each.

**Attachments:**

Fulbright Hayes Coffee Video

**Links for further learning:**