CUNEIFORM HANDS-ON ACTIVITY

When engaging in the IEEE REACH hands-on activities contemplated in the IEEE REACH lesson plans please proceed with caution and use all reasonable safety measures. All IEEE REACH hands-on activities are designed for classroom use only, with supervision by a teacher or an adult educator. Please be advised that IEEE shall not be responsible for any injuries or damages related to the use of these lesson plans or any activities described herein.

Cuneiform was one of the first writing systems, developed 5,000 years ago in Mesopotamia to record information on clay tablets. By asking students to record current complex material on a clay tablet, they will see that information needs to be simplified and codified in order to be recorded and transmitted.

**Supplies per student/team:**
- Lump of modeling clay, or Play-Doh™
- Flat wooden ruler, or a flat popsicle stick, or a sharp pencil, or similar tool for marking clay
  (Search Amazon for "clay sculpting tools" for ideas and choices.)
- One piece of paper and a pen

**Procedure:**
Each student/team is given a message.* (See Below)

Students will have 15 minutes to record the message on a clay tablet.

Students then exchange tablets and try to “read” each other’s work.

Students may work individually or in teams.

In order to accomplish this task effectively, and in the time frame allotted, students will have to simplify the information. To do so, they will first need to develop their own coding system for the information.

**Messages:**
*See the following pages, which include a total of five ancient Mesopotamian recipes. These are actual recipes recovered from ancient cuneiform tablets, some with slight modifications. These make for fun messages for this exercise.

**Activity:**
Give each student, or team, a lump of clay or Play-Doh™ and a clay marking tool as described above. Share one of the below recipes with each student or team (*the message). Explain the task, that each student/team will have 15 minutes to record the recipe they are given on the clay by using the tool/s provided. (They are making a clay tablet in 15 minutes.) When the 15 minutes are up, the clay tablet they made will be given to a different student/or team for them to "read" the information recorded on the clay. The goal is to ensure that the information provided on the clay table is "read" accurately by the other students.

Note: Students will have to shape the clay into a form that would work best for recording the recipes. Additionally, the students may want to consider creating a "coding system" that can be used by the other students to "decipher" the message. The coding system may be written on the piece of paper, however, it must be completed within the same 15 minute time frame allowed for putting the message on the clay tablet.
**Dried Fruit Compote**
1 cup dried figs, quartered
1 cup dried cherries
1 cup dried apricots, sliced
4 tablespoons molasses
Combine all of the ingredients in a saucepan, cover with water, and bring to a boil. Simmer until tender.

**Palace Cake**
3 cups dates, finely chopped
1 cup raisins
2 teaspoons ground fennel
1 cup cottage cheese
2 sticks of butter
2 eggs
1 cup milk
2 cups flour
Combine ingredients in cake pan. Bake in oven for 45 minutes or until done.

**Date Porridge**
2 cups milk
1 cup barley flour
1 cup chopped dates
Place the barley flour in a saucepan. Slowly whisk in the milk, stirring constantly. Bring to a boil, reduce the heat, and cook for 5 minutes. Add dates and serve.

**Home-made Pita Bread**
1 pound of wheat flour
1 cup of water
1 teaspoon of salt
Mix the water, flour, and salt together slowly. Then knead the dough and form it into flat round patties. Cover the dough with a cloth and let it sit overnight. The next day, bake it in an oven at 350°F for 30 minutes or until done.

**Goat Stew**
1 baby goat, butchered
2 onions
4 leeks
6 cloves of garlic
Place all ingredients in large pot and cover with water. Boil until meat is tender.