



# What is in my Bread?

**This lesson and its partner lesson, *Grain on the Move*, are informed by the big idea of Community. Students learn that grain represents a basic human need and that their community has a role to play in meeting this need for other communities in the world.**

## CLASSROOM TIME REQUIRED

Two 45 - 50 minute sessions and a centre

## LEARNING OBJECTIVES AND OUTCOMES

Students will:

- Understand that bread, a basic need, is made from different grains
- Identify different grains
- Learn that grain is stored in the grain elevators at the Port of Prince Rupert

## MATERIALS REQUIRED

- A variety of grain products (such as slices of bread, buns, crackers, pasta shapes. Ideally these should encompass a range of grains (for example, whole wheat, rye, oat, flax) and different cultures.
- A variety of grains (including red and white wheat, and hulled and pearl barley)
- Pictures of different wheat and barley grains
- A whiteboard, blackboard or flip chart to make a mind map
- A sand box or plastic bin
- Sand toys (shovels, buckets, sieves, and sand wheels)
- The book, *From Wheat to Bread*, by Kristin Thoennes Keller
- The “What is the Grain?” sorting worksheet (see *Attachments* below)

## TECHNOLOGY RESOURCES REQUIRED

A computer and projector (or Smart Board) to display pictures of the wheat and barley grains

## TEACHER PREPARATION

- Gather and bring in to class a variety of breads and crackers made from different grains. (Three or more varieties would be ideal.)
- Become familiar with the book, *From Wheat to Bread*, by Kristin Thoennes Keller.
- Prepare a sensory table by filling a sand box or plastic bin with wheat and barley grains. The table

should include a number of different varieties of each grain, for example:

- Pearl barley and hulled barley
- Western Red wheat, Hard White wheat, and Durham wheat

### CRITICAL VOCABULARY (see Glossary for definitions)

Barley	Covered hopper car	Marine terminal
Berth	Dry bulk carrier	Rail yard
Conveyor	Grain	Wheat

### LESSON DEVELOPMENT

#### Activity 1:

- Show the class the various breads, buns, crackers and/or pasta shapes that you have brought in for them to explore. Invite students to touch and taste the grain products.
- Lead a discussion with the class about bread and grains. (This could be conducted as a brainstorming session using a mind map to record students' ideas. Headings for a mind map can be based on the questions below.) Questions could include:
  - What is this?
  - Are there any special or traditional breads that you make or eat at home (e.g. Ts'msyen fry bread, naan, challah)?
  - Where does bread come from?
  - What is bread made of?
  - Have you ever made bread?
- Explain to the class that bread is made from flour that is made from grain.

#### Activity 2:

- Read and discuss with the class the book, *From Wheat to Bread*, by Kristin Thoennes Keller (or a similar book of your choice).
- Check that students understand the connection between bread and grain by using a mind map.

#### Activity 3:

- Have students visit the sensory table in small groups to explore the shape, colour and texture of the various wheat and barley grains.
- Have students explore how the grains move using sand toys, such as sieves, shovels, funnels, buckets and sand wheels. (The movement of the grain through the sand wheel resembles the movement of grain onto and off of the hopper cars at the port.)
- Referring to the pictures of wheat and barley and with support as required, ask the students to identify the different grains.

#### Activity 4:

- Give each student the "What is the Grain?" sorting worksheet and a small amount of each of the grains that are in the sensory table.

- Have students choose how they will sort the grains. This may include sorting them by type, variety, colour, and/or shape. Let students make their own choices about how they are going to sort, and then have them sort the grains by gluing them to the worksheet. (This could be done in pairs.)
- As a whole class, brainstorm different words to describe the colour and texture of the various grains. Record the students' responses on the whiteboard or blackboard.
- Ask the students to write one or two words on their worksheet to describe each grain that they have sorted.

## ASSESSMENT

- Teacher checks for students' understanding that bread is made out of grain by completing the mind map.
- Students use the sensory table to explore and identify different grains by colour, shape, texture and size. Teacher checks for students' understanding of the different types of grain using the grain worksheet.

## MODIFICATIONS

Students can use approximated writing, copy pre-written words, dictate to a scribe, or write their own label on the grain worksheet.

## EXTENSIONS

### **Art, math and writing activity**

Have students sort the different grains by colour, shape, texture and size. Have students create a picture using the sorted grain and ask them to label and present it.

### **Graphing the Class's Favourite Bread**

Bring into the class a number of different breads and/or crackers. Invite students to take pieces of the bread/crackers to touch and taste. Lead a discussion about the taste, texture and look of the bread. Questions could include:

- How do they taste?
- Do they look/feel/taste different from each other?
- What is your favourite? Why?
- What's your least favourite? Why?

Record information about the favourite breads and use this to make a bar graph.

### **Bread making:**

Make Ts'msyen fry bread with the class, or make pretzels or bread using a bread machine.

## ATTACHMENTS

*"What is the Grain?"* sorting worksheet (see below)

## ***What is the Grain? Sorting Worksheet***
