

The Way Back When

Overview: Students will compare bread making production in the past and today using systems mapping. Which (if either) is more sustainable? Which is more efficient? How could we make it a causal loop?

Grade: 3

Unit: The Way Back When

Idea: Civilization developed through advances in technology and ideas

Lesson Objectives:

- Explore systems and technology advances through the bread making process.
- Compare and Contrast.

Systems Tool(s):

- Sustainability Compass
- Behavior Over Time Graphs
- Systems Mapping/Causal Loop Diagrams

Resources/Materials:

- Sourcebook Volume 2 – page
- Bread Handout (see next page)
- Compare/Contrast Organizer
- Sticky notes

Outline:

1. Gather class with a brief vocabulary review game (5 minutes)
2. Introduce “A Loaf of Fun” by setting a purpose for reading. (5 minutes)
 - a. Do you know how bread is made? Where it comes from?
 - b. Let’s read to learn about the process used to make bread today.
3. Read “A Loaf of Fun” to self. (5 minutes)
4. Read aloud - briefly discuss confusing parts (5-7 minutes)
5. Gather in back corner, discuss compare/contrast. (5-7 minutes)
6. Read bread worksheet aloud, discuss confusing words. (5-10 minutes)
7. Break into pairs to answer questions and fill out worksheet. (20 minutes)
8. Gather in groups to create systems for bread making. (remainder of class)
 - a. Use sticky notes (like TOAST activity from Compass Ed)
 - b. See how complete we can make it. Once we have made bread, how does it return to the earth? Does it? What resources do we use? Can we make a closed loop? Which system takes longer (has more steps), today or the past?

Lesson created by: Katelyn McDonald, 2015, while serving as Primary Teacher at Wells International School, Thailand



Bread has been one of our main forms of food since ancient times. In museums around the world you can see loaves of bread that were made and baked over 5,000 years ago! Wheat, the grain used to make bread, has been found in pits where human settlements flourished 8,000 years ago.

In the Stone Age, people made solid cakes from stone-crushed barley and wheat. Wheat and other grains were harvested, dried and then smashed up or ground by rocks and millstones. It would then have been mixed with a liquid, usually water, to make a paste and cooked on hot rocks. A millstone used for grinding corn has been found that is thought to be 7,500 years old. Many historians and anthropologists believe that the ability to grow wheat and make bread helped contribute to communities living in one place, rather than moving around.

1)How has technology advanced our ability to make bread?

2) How can we compare and contrast the systems for making bread in the past and making bread today? Use the compare/contrast organizer to show one thing that is similar at two things that are different.