

Wheat Lesson Ideas

Mathematics

1. Introduce the concepts of acre, bushel, pound, etc., using the “Wheat Trivia” information page and other information found in the packet.
2. Create a logic problem that teaches students the sequence of events that occur in a combine during harvest. Study the history and components of a modern combine.
3. Learn how the price of wheat is determined. What do farmers do to maximize their profit?
4. Create math word problems or logic problems related to wheat.

Science

1. Analyze the parts of a wheat plant and learn their names.
2. Grow wheat and study its life cycle.
3. Research and study how local climate and soil types determine what types of wheat are grown in certain areas.
4. Use wheat for a variety of plant science experiments.
5. Study the machinery used to plant, cultivate and harvest wheat. What machinery is used in the process of making wheat flour from wheat grain?
6. Study the science of silo designs. Why do grain operators need to be concerned about spontaneous combustion? What is done to prevent it?
7. Plant wheat seeds at different depths. How does seed depth affect plant growth?
8. Germinate wheat seeds on wet sponges or petri dishes with moist paper towels. Examine the sprouts and tiny root hairs.
9. Perform various chemical analyses of wheat flour such as starch and protein content. Compare whole wheat flour to white bleached flour or ground wheat germ.
10. Study the science of making bread rise. What is the importance of gluten and yeast in the bread-making process?
11. Build molecular models of simple and complex carbohydrates. Relate this information to wheat.

Nutrition

1. Create a unit with the theme “Healthful Eating.” Include the growing of wheat and production of wheat products in your unit.
2. Have students make a creative menu that includes the proper amounts of each type of food in the food pyramid. Have students think of creative ways to include wheat products in their diet.

3. Study the composition of wheat. How many grams of carbohydrates, protein, fat, etc. does a slice of white bread contribute to one's diet? How about a slice of whole-wheat bread?
4. Have students bring in empty food containers whose labels list the primary ingredient as wheat. Discuss the other ingredients in the products.
5. Discuss how wheat can be a major source of fiber in one's diet. What is the importance of a high-fiber diet?
6. Have a wheat tasting party. Have students try a variety of ethnic foods whose primary ingredients are wheat.
7. Have students create a new wheat product. It can be a new type of a common product such as cereal or bread or a brand new product such as "frozen wheatcicles."
8. Schedule a day where your students will eat lunch in your classroom. Before they eat, have them determine which parts of their lunches are made from wheat. Have them discuss what it would be like to have a lunch without wheat.

History/Social Science/Geography

1. Using a map of the United States, have students learn where different types of wheat are grown and where wheat shipping ports are located.
2. Study the history of wheat and how it became a commercial product in the United States.
3. Study the history of wheat in California.
4. Determine whether or not wheat is grown in your county. Find out why this is so.
5. Study the import/export operations of California wheat.
6. Examine how wheat production affects political decisions made in the United States.
7. Examine the federal regulation put on wheat and wheat flour production.
8. Analyze how important wheat is to the economy of the United States.

Language Arts

1. Read the story of the "Little Red Hen." Discuss the process of growing wheat to produce bread. Discuss how everyone should contribute to keeping a healthy environment so enough food can be produced for all people.
2. Write a poem about people's dependence on wheat and/or the history of wheat.
3. Collect books that highlight wheat or a wheat product. Read them aloud to students while they grow wheat in the classroom.
4. Create a bingo game using wheat vocabulary words. Have students make their own bingo cards using wheat vocabulary you provide. Read a definition and ask the students to cover up the appropriate word. Students who get "bingo" can win a healthy snack made from wheat.

Art

1. Make a collage of wheat products.
2. Have students draw and label the parts of a wheat kernel.
3. Using stalks of wheat have students weave bookmarks or wall hangings.
4. Dip heads of wheat or entire wheat plants into paint and make wheat prints on paper lunch bags. Have students use these bags for school lunches.
5. Create a mural that shows the sequence of wheat from the field to final product—cakes, tortillas and pasta.
6. Have students use photographs of wheat fields to create realistic charcoal or pastel drawings.

Other Ideas

1. Research the different types of wheat and their uses.
2. Create a cooperative research lesson using the material provided in this packet.
3. Create a classroom or family scavenger hunt revolving around wheat.
4. Thresh wheat by hand and grind it into flour.
5. Bring in different types of wheat flour and wheat products such as wheat germ, couscous, whole-wheat flour, gluten, etc. Have students participate in a guessing game as to each item's name and function. Reveal the true identities and discuss the uses for each item.
6. Have a student cooking session where each group of students creates a different wheat product—bread, pasta, tortillas, pancakes, dumplings, doughnuts, etc. Have students create a name and advertisement for their product.
7. Create a trivia game associated with wheat. See trivia sheet (enclosed)
8. Visit a local wheat farm or mill. Observe the wheat being grown or processed.
9. Visit a local grocery store. Explore the variety of products made from wheat.
10. Invite a wheat farmer to your class to discuss his/her operation.

