A Purple Cow

Objective

Students will read and discuss a poem about a purple cow. Students will examine the colors in paintings and in fruits and vegetables. Students will cut out pictures of fruits and vegetables from magazines and place them on a color wheel. Students will discuss the health benefits of different colored fruits and vegetables and eat a rainbow salad. Students will identify the geometric shapes of fruits and vegetables.

Background

You won't find a purple cow on an Oklahoma farm, but you will find other things in many shades of purple. Much of the hay that cows eat is made from alfalfa and clover which have purple flowers in the springtime. Purple vetch is a plant that is common in Oklahoma fields. Plums, grapes and eggplant are purple-colored fruits that can be found on some Oklahoma farms.

Grape-growing is one of our state's fastest-growing agricultural enterprises. Oklahoma grapes are grown for eating fresh and for wine and juice. People have been eating grapes since prehistoric times. Raisins are dried grapes. Grapes were probably first produced deliberately in Asia Minor by burying fresh grapes in the hot desert sand. The grapes used to make raisins are different from table grapes. Another kind of grape is used to make grape juice, and many different kinds of grapes are used to make wine. All kinds of grapes can be grown in Oklahoma. Grapes are rich in antioxidants, which help prevent some disease.

Nutrition experts tell us we should eat fruits and vegetables of all colors every day.

Color	Fruit or Vegetable	Health Benefits
Red	apples, beets	May help fight some cancers; helps fight colds; helps keep the heart healthy; helps us see at night.
Orange	oranges, carrots	May help fight colds; aids in developing a healthy heart; may help prevent cataracts; cleans digestive system.
Yellow	lemons, squash	Aids in scrubbing out the body and may prevent high blood pressure.
Green	lettuce, peppers	May help fight some cancers; helps prevent cramps of legs and ars; helps us see at night; cleans out digestive system.
Purple	eggplant, grapes	May help fight some cancers; helps in development of red, strong blood that carries oxygen from the lungs.

Oklahoma Academic Standards

PRE-KINDERGARTEN

Speaking and Listening: R.1,2,3,4. Phonological Awareness: 2. Geometry: 1.1. Data: 1.1

KINDERGARTEN

Speaking and Listening: R.1,2,3,4. Phonological Awareness: 2.Life Geometry: 1,2,6. Data.1.1

GRADE 1

Speaking and Listening: R.1,2,3,4. Geometry: 1.4. Data: 1.1 Visual Art: 1.1,2

<u>GRADE 2</u>

Speaking and Listening: R.1,2,3,4. Print Concepts. Fluency: 1,2. Geometry: 1.2. Data: 1.2 Visual Art: 1.1,2

Materials

- prints or slides of artists' paintings, especially still life paintings of fruits and vegetables
- fruits and vegetables in different colors
- magazines or seed catalogs with pictures of fruits and vegetables for students to cut out

Procedures

- 1. Read and discuss background and vocabulary.
- 2. Read and discuss the following poem, by Gelett Burgess.

The Purple Cow

- I never saw a purple cow, I never hope to see one; But I can tell you, anyhow, I'd rather see than be one.
- 3. Show the examples of artists' paintings.
 - -Students will name the colors found in the paintings.
 - -Discuss colors in nature.
- 4. Show the examples of fruits and vegetables.
 - -Students will name the colors.
- 5. Discuss why colors look different under different kinds of light.
- 6. Provide magazines and seed catalogs.
 —Students will cut out colored photos of fruits and vegetables and paste them on the color wheel included in this lesson. See background for examples of fruits and vegetables in each color.
- 7. Discuss the health benefits of eating the different colors of fruits and vegetables. (See background.)
- 8. Serve a rainbow salad with fruits and vegetables of different colors cut into bite-sized pieces.
- Students will vote on their favorite colors, fruits and vegetables.
 Students will graph the results of the votes.
- 10. Students will identify shapes in fruits and vegetables.
 - -Students will graph the shapes.

Extra Reading

Ada, Alma Flor, Subizarreta, Rosa, and Simon Silva, *Gathering the Sun: An Alphabet in Spanish and English*, Rayo, 2001.

Carle, Eric, The Artist Who Painted a Blue Horse, Philomel, 2011.

Clark, Emma Chichester, *I Never Saw a Purple Cow and Other Nonsense Rhymes*, Walker, 2000.

Freedman, Deborah, Blue Chicken, Viking, 2011.

Vocabulary

agriculture—the science or occupation of cultivating the soil, producing crops, and raising livestock alfalfa—a deep-rooted plant of the legume family with purple flowers and leaves like clover that is widely grown for hay and forage

color — an aspect of light (as red, brown, or gray) or sight that allows one to tell otherwise identical objects apart from each other cow — the adult female of cattle or of any of various usually large animals farm — a piece of land used for growing crops or raising livestock

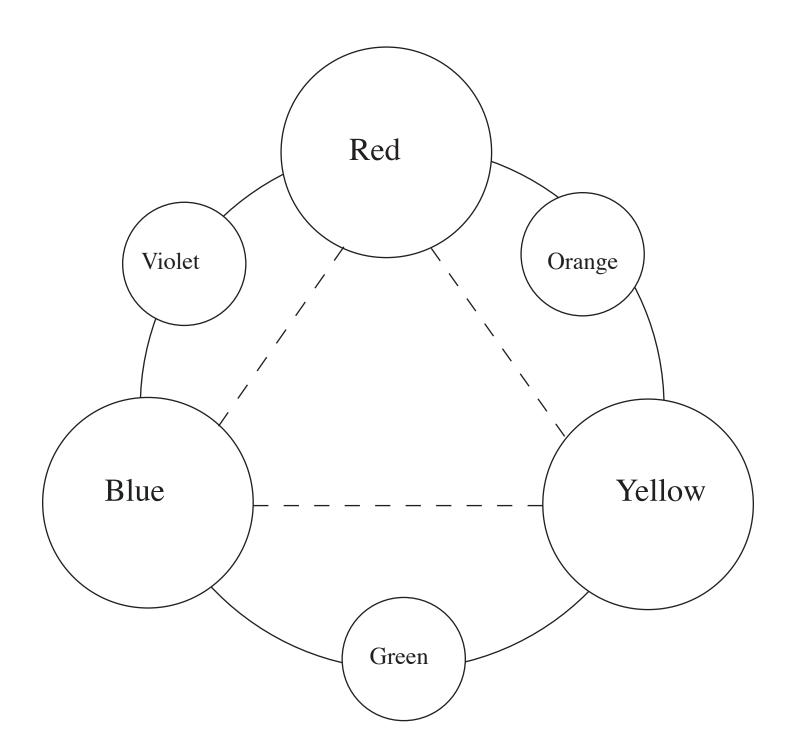
fruit—a juicy plant part used chiefly as a dessert grape—a smooth-skinned juicy light green or deep red to purplish black berry eaten dried or fresh as a fruit or fermented to produce wine

light — something that makes vision possible **shade** — the darkness or lightness of a color **vegetable** — a leafy plant (as the cabbage, bean, or potato) usually without woody tissue grown for an edible part that is usually eaten as part of a meal

<u>Color Chart</u>

Name

Cut out colored pictures of fruits and vegetables from magazines. Paste the pictures in the correct circles on the color wheel.



Oklahoma Ag in the Classroom is a program of the Oklahoma Cooperative Extension Service, the Oklahoma Department of Agriculture, Food and Forestry and the Oklahoma State Department of Education.