

Chromolithography

Four Cs Connection: Communication, Creativity

Learning Objective: 1. Students will create a simple lithography print. 2. Students will explain how the process of lithography works. 3. Students will determine what images make the most memorable impression on fellow students.

Engage: Ask students what kinds of food are found in their home. Is some food in packaging (boxes, cans, tins)? Do they know what brands of foods are commonly in their home? Why do they remember?

Explore: Show students examples of vintage print advertisements for food products. Notice how some are black and white, while others have one or two colors, and some are full-color.

Explain: The Industrial Revolution and expansion of roads and railroads helped products move across large distances. Foods could be packaged for preservation and shipped further than the local markets, which is where people shopped for perishable food. Mass production of products led to competition, and producers had to attract potential customers' attention.

To attract attention to their product, manufacturers made labels for the product and advertisements for distribution. To print many copies quickly and cheaply, lithography was used. Wax crayons were used to apply an image to limestone, and after an acid wash, oil-based ink would stick to the wax residue, but not the plain limestone, which attracted water (and oil and water do not mix). Paper pressed against the stone would take up ink in the shape of the original wax drawing.

Elaborate: Give each student an unglazed stone tile and a crayon. Using the crayon, students should make a simple drawing (animal, stick figure, etc.) on the stone.

After the drawings are complete, have the students paint the stone with water-based paint (food coloring works too) and lay a slightly damp piece of paper on top. The students should use a spoon to press the paper to the stone firmly in all areas. When this is done, students can remove the paper and hang it to dry. The waxy image will be blank against the colored background of water-based color. This is similar to lithography, in that colors only stick to oil- or water-based media, but not both.

Evaluate: Ask students why the print is blank where the wax drawing was, and colorful in the background. Can they think of a way to make the wax drawing leave a colorful image (use oil-based ink)? What is a benefit of printing as compared to drawing when making hundreds or thousands of copies?

Extension: Have students use lithography to design a print advertisement. Which ones appeal to students the most? Which ones are remembered in a couple of days? Why?

Materials:

One unglazed stone tile per student

Wax crayons, one per student

Paper, slightly damp

Metal spoons, one per student

Water-based ink, food coloring, or paint

Buyer-Focused Agricultural Labels (and others things from 1918)

Four Cs Connection: Critical Thinking

Learning Objective: Students will judge agricultural labels based on six label design traits: 1. Buyer-focused, 2. Short brand name with easily-recognized lettering, 3. Brand name and label illustration send parallel messages, 4. Label shows what is inside the crate, 5. Label is artistic and shows value and worth of the product, 6. State the source of the item.

Engage:

Ask students what makes a great label.

Explore:

Have students list ideas for what constitutes a great label.

In small groups, students agree on a list of criteria for a great label.

Explain:

Students research examples of labels that represent each of the criteria. For example, if one of the criteria is to use bright colors, then the students should find a label that uses bright colors.

Elaborate:

In groups, students select one person to present their criteria for a great label and the example labels of each criteria to the whole class.

Students write questions to ask other groups about their criteria.

Evaluate:

Each student receives colored sticker dots to vote on labels that best represent their established criteria.

Students justify their voting on the labels.

Materials:

Colored sticker dots (five colors, one of each color per student)

Poster paper (five)

marker

Reading Connection: Grafton, C.B. (2000). *Full-color fruit crate labels*. Mineola, NY: Dover Publications, Inc.

A Picture of Healthy Eating

Four Cs Connection: Critical Thinking, Creativity

Learning Objective: Students will describe how the USDA food guides are used to help consumers choose a healthy diet.

Engage: Ask students, “How do we know what we should be eating?”

Explore: Split students into groups. Provide each group with one of the food guide images. Have one student be the note taker while they all discuss what they’re being told about healthy eating by the image they’ve been given. Also, have them think about what they aren’t being told.

Explain: Have students research their group’s food guide to provide some additional information about what that guide is/isn’t saying.

Elaborate: Working independently, have each student create their own food guide that they think would help people eat more healthfully.

Evaluate: Ask students to present their food guides to the class, including a description of their guide and how their guide would do a good job of communicating a healthy diet to consumers. Have students take their guides home and ask their parents to help them implement their guides to improve eating habits for the whole family (explain that they don’t need to make a complete change, but rather pick one small change that they think could implement). After a few days, ask students about the changes they’ve been implementing at home; if it’s easy or difficult to make the change(s); the benefits of making such changes; etc.

Materials:

Print copies of the listed food guide images from <https://www.choosemyplate.gov/brief-history-usda-food-guides>:

- 1940s: A Guide to Good Eating (Basic Seven)
- 1992: Food Guide Pyramid
- 2005: My Pyramid Food Guidance System
- 2011: MyPlate

A piece of lined paper (one per group)

One piece of white paper per student

Crayons, markers, or colored pencils

Reading Connection: