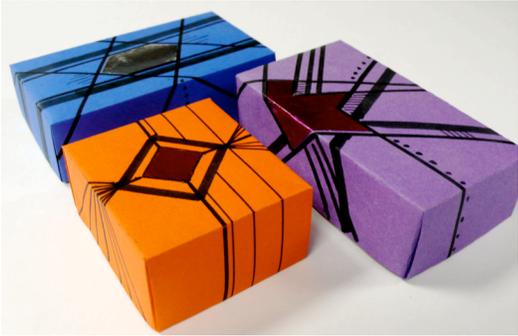




# Box Design

**GRADE: 6 and up    TIME: one session**

Developed by Linda Pfisterer, Art Specialist



<p><b>KIT INCLUDES:</b></p> <ul style="list-style-type: none"> <li>• lesson plan</li> <li>• transparencies (8)</li> <li>• color wheel</li> <li>• procedure boards</li> <li>• vocabulary board</li> <li>• rulers</li> </ul>	<p><b>MATERIALS:</b></p> <ul style="list-style-type: none"> <li>• construction paper: 4.5" x 8" light and dark values of: red, blue, orange, purple, and green</li> <li>• rulers, scissors</li> <li>• black ink pens (2) wide and thin</li> <li>• metallic paper, 1" square, or use old wrapping paper</li> </ul>
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**LESSON DESCRIPTION:**

Students learn about careers in art and the design and color choices they must make as they construct custom boxes with lids. These boxes can be used as containers for gifts.

<p><b>VOCABULARY:</b></p> <p>color schemes: monochromatic analogous complementary</p> <p>design: symmetrical, radial, asymmetrical</p>	<p><b>ART ELEMENTS:</b></p> <p><input checked="" type="checkbox"/> Line <input checked="" type="checkbox"/> Shape/Form <input checked="" type="checkbox"/> Color <input checked="" type="checkbox"/> Value <input checked="" type="checkbox"/> Texture <input type="checkbox"/> Space/Perspective</p>	<p><b>ART PRINCIPLES:</b></p> <p><input type="checkbox"/> Pattern <input type="checkbox"/> Rhythm/movement <input type="checkbox"/> Proportion/Scale <input checked="" type="checkbox"/> Balance <input type="checkbox"/> Unity <input checked="" type="checkbox"/> Emphasis</p>	<p><b>CONTENT CONNECTIONS:</b></p> <p>Math – measurement fractions</p> <p><b>THEMES:</b> gift giving, containers construction</p>
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**OBJECTIVES AND ASSESSMENT CRITERIA:**

1. Students will learn that box design is an art career in graphic design and advertising.
2. Students will make color scheme and line design choices for a box decoration.
3. Students will accurately use fractions and a ruler to make the box bottom smaller than the lid.
4. Students will demonstrate good craftsmanship in measuring, folding, and constructing a box.

**PREPARE:**

1. Read over the lesson and make some boxes to understand the process and ensure student success.
2. Collect construction papers with two values of one color. Light and dark blue, for example.
3. Cut papers 4.5" x 8" for the rectangle box and 4.5" x 6" for a square box.
4. You may want to make the rectangle box one day, and a square box the next. Nesting boxes would be an extra math challenge for students on another day.

## ENGAGE AND EXPLORE:

Use the overhead transparencies and read the dialog below.

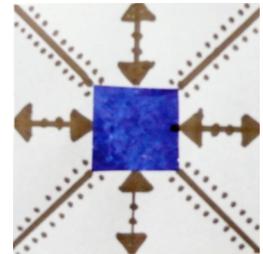
1. Graphic artists are the people who design the outside containers of the products you buy. Think of your favorite soup can. Are some soup can designs more appealing than others? It is the job of the graphic design artist to create a simple design that makes you want to buy the product.
2. A logo is a simple design that designates a particular product. Running shoes have logos that allow you to know the brand of the shoe at a glance. This is like a moving advertisement for a particular shoe. If the logo is a good design, you will recognize it quickly. Thus it is important for the graphic artist to work hard to create a good design.
3. Many products have designs on the packaging box. Sometimes stores use special gift boxes which tell you that the gift comes from one particular store. The box you design today will have a simple line logo design.
4. To decorate your box, consider three types of design organization: symmetrical, radial and asymmetrical.

**SYMMETRICAL DESIGN** is where the lines and shapes are the same on both sides of a central line like a mirror image.



Symmetrical design

**RADIAL DESIGN** is where lines and shapes spread out from a central point. (It is a comfortable balance, like symmetry.)



Radial Design

**ASYMMETRICAL DESIGN** is where two sides of a design are not the same, but have equal weight.



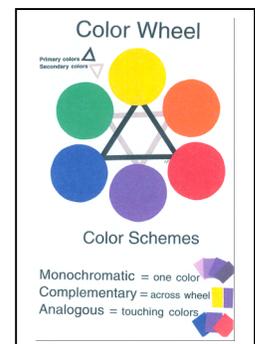
Asymmetrical Design

5. Think of a color scheme for the box. Use the color wheel to choose from 3 color schemes, monochromatic, analogous and complementary.

**MONOCHROMATIC** – light and dark values of one color (i.e., red and pink)

**ANALOGOUS** – 2 or 3 colors that touch each other on the color wheel (i.e., red and violet, green and yellow)

**COMPLEMENTARY** - colors found across the color wheel (i.e., red and green)

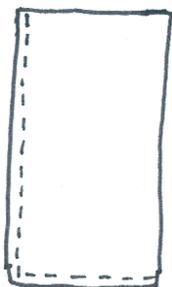


6. After thinking of your color scheme and the type of design you want, you are ready to begin construction of the box.
7. (Teachers: Use this ruler to teach the fractions in inches. Use a washable marker as needed.) Find the inch marks,  $1/2$ ",  $1/4$ " and  $1/8$ " inch marks. Teach and practice this concept before moving to the construction step. This will allow freedom to experiment with box sizes later.

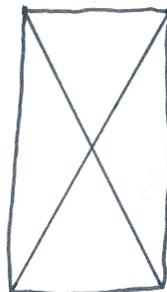


## CREATE:

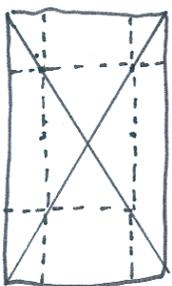
8. **Constructing the box:** Use the color scheme of choice to select two 4.5" x 8" papers.



a. Choose 2 paper colors. Pick the color for the box bottom and **measure and cut off 1/8"** on two touching sides of one paper. Mark it with "B" for bottom. **Do this to only one paper.**



b. Use the ruler to find the paper centers. **Draw diagonal lines**, corner to corner.



c. **Fold all four sides** to center X, keeping the outside edges even. Use the edge of a pen to crease the folds. **Craftsmanship is important**, so work very carefully.

d. **Repeat the above directions** with the second paper. Remember which box you cut smaller because that will be the bottom of the box. Put it aside. Take the box top and flatten the folds so you can begin the design. **Review the design choices.**

f. Begin the design by cutting a **simple geometric shape from metallic paper** and gluing it where you want the **focal point** to be. If the design is symmetrical or radial, the focal point would be in the middle. If the design is asymmetrical, the design would be placed off to one side. Use the ruler to begin the line design. Let the lines go to the edges of the paper so the design continues on the side of the box. Make thick and thin lines for variation. **Add texture** with carefully placed dots. Use the ruler as a guide as free hand drawing is not as effective in this instance.



Cut and glue focal point.

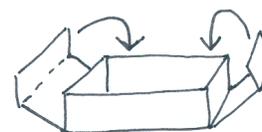


Use the ruler to draw the design. Draw wide and thin lines. Dots add texture.



h. Assemble the boxes by gluing the two end tabs together. Then bring the outside flap up and over. Glue down. If the flap is a fraction too large, slice a tiny piece off.

g. On both short sides of the box, cut along the fold to the intersecting line. Make only two vertical cuts on each side.



End tabs

Flap



\*\*\* This special gift box can contain a gift from the heart. It could be a "**promise box**" where the message you write can promise to do something for someone. It could hold a poem, a thought or an object you have made.

## CLOSE:

Follow up: **Math problems:**

- Change the size of your box by changing the size of your paper.
- Choose an object and construct a box to fit it. Use the ruler to make measurements.
- Make nesting boxes by making each box slightly smaller or larger.
- Recycle greeting cards: make the front of the card the box top, and the back of the card, the bottom.

**ASSESSMENT:**

Teacher administered assessment tool

DN	OK	UP	Lesson _____ Teacher _____																				
			Grade _____ Date _____ Number of Students _____																				
			Using the thumbs up, ok, and down technique, ask your students the following questions and record their answers. (K=knowledge, S=skills, C= creativity, A=attitude, E=engagement)																				
			1. Can you name an art career? (K)																				
			2. Can you name the color scheme you chose for your box? (K)																				
			3. Did you use a fraction measurement to make the bottom box smaller? (K,S,E)																				
			4. Did your box show good craftsmanship: tight folds and accurate corners? (S,E)																				
			5. Can you name which type of design you used? (K,S,C,E)																				
			6. Did you add an imaginative touch to your art? (C)																				
			7. Did you actively listen and follow directions? (A)																				
			8. Did you do your best during this lesson? (E)																				
<u>Teacher self-critique</u>																							
8. My teaching of this lesson:																							
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> <td style="text-align: center;">6</td> <td style="text-align: center;">7</td> <td style="text-align: center;">8</td> <td style="text-align: center;">9</td> <td style="text-align: center;">10</td> </tr> <tr> <td colspan="7" style="text-align: center;">needed improvement</td> <td colspan="3" style="text-align: center;">was highly successful</td> </tr> </table>				1	2	3	4	5	6	7	8	9	10	needed improvement							was highly successful		
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needed improvement							was highly successful																
9. What would I do differently next time?																							

**ALIGNMENT:**

<p><b>Alignment of Standards:</b>          Art: A1,2,3,4,7; B4; C5; D6,7,8          English: A, C, D          Math: A, B, C, D,E</p>	<p><b>Alignment of GLE's:</b>          L.A.: R2.6          Math: 4N9, M2.2, M3.2.1, M7.2.2          M7.2.3</p>
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**CREDITS:**

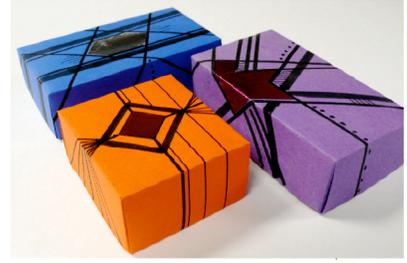
Project ARTiculate is supported by the Fairbanks North Star Borough School District, the Alaska Arts Education Consortium, and a U.S. Department of Education Development and Dissemination Grant



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Today we learned about a career in graphic design. We looked at design color choices before constructing our custom boxes with lids. We used the ruler for measurement and as a straight edge to design the box top. We chose a color scheme and a design organization such as symmetrical, radial and asymmetrical for the box.

This is the type of work a graphic artist would do.



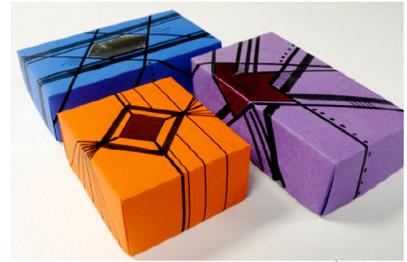
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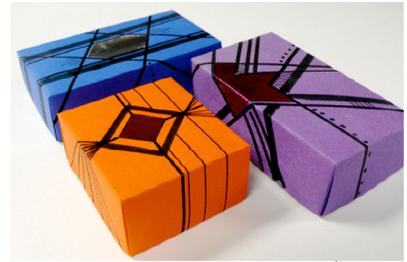
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