

# We See The Light!

**Principle:** Form & Value in 2D

**Concept:** Light creates shadows and changes “values”, making objects look three-dimensional instead of flat.

**Objective:** “We See The Light” is largely a “technical” lesson designed to teach students to see “value” changes. The lesson shows how dramatic lighting gives an organic shape fullness and 3-dimensionality by establishing light, medium, and dark values across the surface of the shape. Students will create two drawings of the same still life, one in lead pencil and one with colored pencils.

<b>Supplies:</b>	<ul style="list-style-type: none"><li>✓ Enough apples and/or pears to place one on each table</li><li>✓ Black velvet for displaying fruit</li><li>✓ Flashlight or small desk lamp for each table</li><li>✓ 8x11 White Paper – 2 sheets per student (extras for errors)</li><li>✓ Drafting Pencils</li><li>✓ Colored Pencils</li><li>✓ “Odd Velvet” – book in the Duniway library</li></ul>
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<b>Pre-Class Prep:</b>	Provide 4 apples or 4 pears from home.
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<b>Set-up:</b>	<ul style="list-style-type: none"><li>• Place an apple or a pear on top of a large book or shoe box that has been covered in black velvet in the center of each table. Light the fruit with the directional desk lamps to dramatically light up one side of the piece of fruit.</li><li>• Distribute drawing paper, pencils, colored pencils for each student.</li></ul>
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**Prints:**

**Samples:** See Fourth Grade Art Folder

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**Lesson:** The purpose of this lesson is to introduce the students to the concept of “value,” which is simply how light or dark the color of an object appears. By the end of this lesson, students should understand that light shining on a object will:

- cause the object to cast a shadow
- change the value of the object’s surface color, giving an object a “light” side and a “shadow” side.
- make the side facing the light “warmer” and the side away from the light “cooler” in color temperature.
- make an object look 3-dimensional, rather than abstracted or “flat”.

**Demonstration:** Read the book to the students.

Use the lesson plan samples to show the difference between flat “abstracted” objects and those that look real. Point out how it is the light shining on the objects in the samples that makes them look full and rounded out. Ask the students if they can tell what direction the light is coming from. Have them tell you how they can tell. Hopefully their answer has something to do with the fact that one side is lighter than the other! Describe and point out how the “value” of the color of an object changes when it is in the light. Specifically, point out how the value has changed from light to medium to dark as you look across an object from its lit side to its shadow side (use the sample that has that shown on it and then ask the students if they can see it for themselves on the pictures that don’t have it spelled out)

**Students:** *Have the students put their names on the backs of their papers.*

**Drawing a Value Study** Have students do a value study of the apple or pear on their table. Start by turning on the lights on their tables and turning off the overhead lights so they can easily see the dramatic light on their fruit. Ask them to draw an outline of the shape of the fruit that is about **twice its actual size**. Drawing big will give them enough surface to really see and produce the changes in value they will be shading in. Now, have them draw a horizontal line across their papers and behind the fruit, but not directly under it (this is the “horizon line” – see sample). Next have them begin shading in the fruit, getting the values right by shading darkest on the shadow side and near the bottom where it sits on the table and lighter or with a “medium value” in the middle, and then lightest on the side closest to the light. Finish by shading in the shadow of the fruit on the tabletop and then signing their names.

### **Painting a Value Study with Colored Pencils**

Now you’ll introduce the idea of value changes using color. Note that color experiences value changes, just like the black and white images in the samples. Also point out that “color temperature” changes from warmer near the light to cooler in the shadows, again using the samples. Then, have students use their pencils and a second piece of paper to lightly draw another outline of their fruit with its horizon line behind it, just like they did for the first picture. Then, have students choose two colored pencils: a cool dark color (purple, blue, green) and a light warm color (yellow, lt. orange, peach, pink, lt. red). These colors will begin the dark and light sides of their second picture (they do not have to be realistic colors – purple and pink apples are O.K.). As they get to the middle of their fruit, they should overlap their two colors (note that this is where their fruit has its *medium* values, and they may need to use less pressure to get the right value, since they’re overlapping two colors).

Have them color in the table top with a medium value of any color they choose. Have them color in the shadow cast by the fruit onto the tabletop and underneath itself with a cool dark color. Leave the background white.

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## **Instructions for Instructors**

### **Vocabulary:**

**Value** - how light or dark a color

**Shadows** - the shaded area in the picture; the area not exposed to the light.

**Horizon Line** - the line where the sky meets the earth. In this lesson the horizon line is the line that defines the back edge of the table the fruit is sitting on.

### **Realistic vs. Abstract Styles**

**2-Dimensional** - the object looks as flat as the paper and lacks depth.

**3-Dimensional** - the object looks more realistic because of shadowing and highlighting. It has the illusion of depth.

**Color Temperature – warm colors:** red, yellow, orange. **cool colors:** blue, green, violet