Balancing & Weighing
integrated art/science lessons
second grade

Developed by ESD 105
Art Integration Mentor
participants
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Art Integration Mentor Project
The ArtFusion Art Integration Mentors (AIM) project, in collaboration with Allied Arts of Yakima, has provide regional classroom teachers with in-depth art integration training. AIM engages classroom teachers in the arts by providing hands-on visual arts experiences that teach them the elements of art and principles of design. Teachers team up with a regional art mentor who assists the teacher in developing and implementing an integrated art lesson to their students. Teachers demonstrate an understanding of the elements of art and principals of design which allows them to instruct students on those skills through integrated arts instruction. Find more information at http://www.artfusion.us.

What is Art Integration?
Arts integration is instruction that integrates content, skills and specific state outcomes from the arts—dance, music, theater, and the visual arts—with other core subject area outcomes. Arts integration occurs when there is a seamless blending of the content and skills of an art form with those of a co-curricular subject.
Within the AIM project, art integration involves teachers of non-arts subjects working alongside arts specialists and teaching artists to create collaborative lesson plans that infuse the visual arts into non-arts subjects such as math, science, language arts and social studies. In arts integrated classrooms students score higher on achievement tests and demonstrate an increase in critical thinking skills, self-confidence and retention. Visit our Arts Education Research page for more information.
Lesson Title - Symmetry, Line and Color with Butterflies in Balancing

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Grade - 2

Art EALRs - 1: The student understands and applies arts knowledge and skills in visual arts
Visual Arts Component - 1.1: Understands and applies arts concepts and vocabulary, 1.2: Develops arts skills and techniques, 2.1: Applies a creative process in the arts, 3.1: Uses the arts to express and present ideas and feelings

Art GLE - 1.1.1-line, 1.1.6-color, 1.2.1-Skills and Techniques, 2.1.1-Creative process, 4.1.1-Connections-arts disciplines, 4.2.1-Connections-other content areas

Integrated Subject - Mathematics 1

Subject EALR - The student understands and applies the concepts and procedures of mathematics.

Visual Art Objective - Create a representation of a butterfly using line and color to show symmetry and balance.

Integrated Subject Objective - Students will identify symmetry.

Vocabulary - symmetry, line, color, symmetrical balance

Materials - white construction paper, pencil, colored pencils or crayons, orange butterfly figure, printed assessment, pictures, or books of butterflies showing pattern and color would be helpful.

Historical Connection

Andy Warhol Butterfly Painting

http://www.popmonk.com/artists/andy-warhol/andy-warhol-painting-1.htm
1. Show several pictures of butterflies to the students. A good online resource is butterflypictures.net. A prompt to the students would be “what do you notice about the butterflies?” Direct students to notice symmetry, lines and color if needed. After showing real photographs of butterflies show the students Andy Warhol’s famous butterfly painting. http://www.popmonk.com/artists/andy-warhol/andy-warhol-painting-1.htm

2. Review types of lines previously taught, such as straight, thick, thin, curve, loopy, vertical, zig zag, horizontal, exterior and interior.

3. Analyze pictures of butterflies and identify types of line found in the wings

4. Review color concepts previously taught, such as primary colors, complementary colors, warm and cool, contrasting, intensity and value.

5. Analyze pictures of butterflies again, this time identifying types of color found in the wings. (Lesson could stop at this point and continue the next science time)

6. Begin by having the students trace around the orange butterfly figure and cutting it out.

7. Have the students fold the butterfly in half then carefully trace the medial fold line with a pencil.

8. Teacher models several line types showing symmetry on butterfly.

9. With a regular lead pencil have the students draw lines across the butterfly, keeping in mind symmetry. Encourage the students to include several different line types. Do a quick check to insure students have accurately used symmetry.

10. Teacher models coloring butterfly symmetrically using colored pencils or crayons.

11. Students color butterflies symmetrically using colored pencils or crayons.


Assessment Criteria
Did they use more than one type of line?

Can they identify types of line used?

Did they use symmetry in their drawing?

Did they use symmetry in their coloring?

Can they justify their use of color?
Project Example
**Elements of Art**

The elements of art are the components that artists use to create visual art.

**Line** - The path of a point through space. There are many different types of lines, i.e. thick, thin, short, vertical, horizontal, boken, etc. Contour lines show the edges of an object, either exterior or interior.

**Shape** - Two-dimensional area enclosed by a line: geometric (square, rectangle, star, etc.) and organic (closed curved lines).

**Form** - Three-dimensional object that has height, width and depth, i.e. sphere, cube, prism, cylinder, cone, etc.

**Color** - The visible range of reflected light made up of hue (color name), intensity (brightness or dullness) and value (lightness or darkness).  
Tint = color with white, Shade = color with black

**Value** - The lightness or darkness of a line, shape or form.

**Texture** - The perceived surface quality of an artwork, i.e. hatching, cross-hatching, scribbling, stippling, etc.

**Space** - The area around, below, above, and within and artwork; the illusion of depth or space on a flat surface, i.e. overlapping, 1-point perspective, positive and negative space, etc.

Visit the ArtFusion website at www.artfusion.us for more information

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**Principles of Design**

The principles of design describe how the elements of art listed above can be arranged and organized.

**Repetition and Pattern** - The repeated use of an art element to create a pattern.

**Contrast** - Emphasizing differences in art elements, i.e. light/dark, rough/smooth, etc.

**Emphasis and Dominance** - Emphasizing a focal point or highlighting an art element in a artwork.

**Variety** - Combining art elements differently to create interest, detail and focus.

**Balance** - The distribution of art elements to provide visual weight in an artwork (symmetrical, asymmetrical and radial)

**Movement/Rhythm** - Creating a sense of direction to move the viewers eye across an artwork.

**Proportion** - The relationship of art elements to the whole artwork and to each other.

**Harmony/Unity** - Emphasizing specific aspects of art elements to unify elements in an artwork.

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