

MoNA

Museum of Northwest Art

Age: Fourth Grade

Lesson Duration: 90 Minutes

Subjects: Art & Design

Hologram Mobile Sculptures Inspired by Sally Webber

A HANDS-ON ART ACTIVITY
DESIGNED BY DAVID HANCOCK

Description

During this lesson, students will learn how 3-dimensional holograms are created and how they can be used for art. Using the light art of Sally Webber as inspiration, each student will create a 3-D hologram mobile using transparency sheets separated with beads along two skewers and balanced with wire.



Educator Example

Materials

- *Descent* by Sally Webber (included at the end of lesson)
- Video: How 3D Holograms Work
- Transparency sheets cut in half: 4 pieces per student
- 8" bamboo skewers: 2 per student
- Permanent markers in a variety of colors
- Plastic beads in a variety of colors
- Thin metal wire
- Hole puncher

Instructions

- 1)** Introduce the concept of 3D holograms to students by using [this video on how they are made.](#)
- 2)** Show students *Descent* by Sally Webber and use VTS (Visual Thinking Strategies) to discuss the work further.
 - VTS is an inquiry-based method of facilitating discussion. Tips and resources on VTS and more information on the artist are included at the end of this lesson.
- 3)** Pass out supplies and instruct students to draw a shape on the transparency sheet using permanent markers in contrasting colors.
 - This first shape should be roughly the size of the transparency sheet
- 4)** Next, lay the second transparency on top and repeat drawing the shape in a smaller size. Students may use the same or different colors for this second sheet. The only requirement is that it is proportioned to fit inside the first shape.
- 5)** Repeat the process until you have completed 4 transparency sheets with each shape proportioned to be smaller than the first.
- 6)** Use a small hole puncher to punch holes in the two top corners through all four transparencies lined up together, from biggest to smallest shape.
- 7)** Slide the first transparency sheet along both skewers, leaving about an inch of skewer sticking out to tie the wire too. Then follow the transparency with four beads.
 - The students can pick colors to create a pattern. Repeat the process until all four transparencies are separated by 4 beads each.
- 8)** Finally, cut two pieces of wire. Wrap the end around the end of one skewer and then wrap it around the alternate end of the opposite skewer diagonally.
- 9)** Repeat with second wire with the ends of the skewers not used in the previous step. Then twist the two wires where they intersect in the middle to create a hanging loop.

Relevant Vocabulary

- ✓ Hologram
- ✓ 3-Dimensional form
- ✓ Contrasting colors
- ✓ Illusion
- ✓ Proportion
- ✓ Transparency
- ✓ Pattern



Learning and State Standards

Fulfills **Washington State Arts Learning Standards:**

- **VA:Cr2.1.4** (Explore and invent art making techniques and approaches)
- **VA:Cr2.2.4** (When making works of art, utilize and care for materials, tools, and equipment in a manner that prevents danger to oneself and others)

Visual Thinking Strategies

MoNA's Education programs utilize Visual Thinking Strategies (VTS), which is a research-based teaching method that promotes aesthetic development, including critical thinking and communication skills. Here in the MoNA, we use VTS to engage students and general visitors with art, encouraging them to observe closely, think critically and discuss respectfully; however, VTS can be effectively used across curricula. This approach teaches its participants how to take the time to observe closely, describe what they see in detail and provide evidence for their observations. Students learn that their reflections and thoughts are valued and appreciated in this inclusive teaching method.

In order to facilitate a VTS discussion, you first encourage viewers to take a quiet moment to observe the work you are going to explore. Then you ask the following questions and paraphrase the responses without adding any of your own judgements. You can insert additional vocabulary and point to specific parts of the artwork.

What's going on in this picture?

What do you see that makes you say...?

What more can you find?

Visual Thinking Strategy Links

If you are interested in learning more about VTS, [here is their website](#). If you already know and love VTS, but want help finding great images to use in your classroom, here is a [fantastic gallery](#). You can also visit this website for additional resources: www.monamuseum.org/resources-for-educators

About the Artist: Sally Webber



Sally Webber

Image Source: Donna Granada

Sally Webber is a light artist based in Oakland, California. Webber grew up in the Northeast, earning her Master of Science in Visual Studies from the Center for Advanced Visual Studies at the Massachusetts Institute of Technology. Webber's interest in light inspires her work using optical and digital holography, video, dimensional photography, and laser installations. Her work focuses on revealing the immediacy of the essential natural forces underlying life and the patterns that interconnect them. She has produced numerous public art installations and private commissions, and has exhibited extensively both nationally and internationally.

**"I WORK WITH LIGHT. I SENSE LIGHT
AS IMMERSIVE ITSELF, A
SUBSTANCE WE MOVE THROUGH
UNCONSCIOUSLY ALL THE TIME, AN
UNSEEN PRESENCE BETWEEN US."**

-SALLY WEBBER



Descent, Sally Webber
Image Source: Sally Webber