

The Lifecycle of Paper

by Mary Erickson, Ph.D. with Arizona art teacher Karla Primosch

The Lifecycle of Paper is an abbreviated unit plan with suggested activities designed in conjunction with the Gallery at Tempe Center for the Arts.

Preview the Biennial: Paper exhibition PowerPoint

Themes

- Theme in Life: We all share one planet and need to take care of it.
- Theme in Art: Art can recycle and be recycled.



Where does paper come from and where does it go? (Natural Environment)



How do artists use paper? (Technical Qualities and Processes)

Community Connection

As in every United States' city, the residents of Tempe use and discard vast amounts of paper every day. The Lifecycle of Paper focuses on sources, qualities and transformations of some of that paper.

Activities

Pre-Visit Activity: Paper, Paper Everywhere (pdf) TCA Activity: Exploring the Paper Biennial (pdf) Post-Visit Activity: Paper Strip Still Life (pdf) Extension Activity: Paper Making (pdf)

Resources

Paper, Paper, Everywhere PowerPoint Exploring Paper at the Tempe Center for the Arts (pdf) Paper Strip Still Life PowerPoint Paper Making PowerPoint

Credits

Karla Primosch teaches art and technology at Fountain Hills High School. She is grateful to Jim Garrison, her instructor at Mesa Community College, for the idea for her paper strip still life lesson. Primosch's Fountain Hills' art students created the paper sculptures and drawings. Primosch led a paper making workshop for middle school students to provide student samples. Photography by Primosch, Mary Erickson and Michelle Nichols Dock.

4. Describe how the artist used recycled paper.



Exploring Paper at the TCA Worksheet

Part A: Paper Quality Choose one artwork on paper or made of paper to examine in detail.	
1. List the artist's name and the title of the work.	LOOK
2.Describe the thickness (weight) and surface texture of the paper.	
Part B: Recycled Paper Find a collage or some other artwork that uses recycled paper.	
3. List the artist's name and the title of the work.	



Paper Making Extension Activity

Supplies

- Various papers for recycling
- Lint
- Bleach, optional addition to pulp
- Liquid starch, optional addition to pulp
- Paper making screen frames

(commercial or made from window screen mesh stapled to old picture frames)

- Plants
- Twigs
- Flowers
- Thread

- Glitter
- Pigment
- Shallow buckets
- Deep bucket
- Sponges
- Felt or absorbent cloths
- Press or bricks

Preparation

Research the method of papermaking that best suits your situation. There are several recipes and ideas for papermaking on the Web. Use your browser to search "paper making recipes" or "how to make paper." Practice a couple of methods before teaching to ensure what will work best for your students.

Collect paper and supplies. Consider using the collection of paper you or your students gathered for analysis in your pre-visit activity, recycled "Exploring Paper at the Tempe Center for the Arts" worksheets from your TCA visit and/or students' paper strip sculptures after they have completed their drawings in the post-visit activity.

There are several ways to create your paper making frames. One of the best ways is to purchase screen mesh from the hardware store and attach the mesh to old wooden picture frames to create paper making frames.

Process

Fill shallow buckets with water about four inches deep. Buckets have to be large enough for the frame to be fully immersed. Set up a paper making area in your classroom for easy access of materials such as pulp, glitter, thread, plants, etc. Have sponges and absorbent cloth ready.

Put pulp in large shallow bucket, immerse screen and gather pulp on top of screen. It is important to get the pulp plump and full of water. One mistake students make is they use too much pulp resulting in paper that is too thick. Hydrating the pulp makes it fuller and prevents students from using too much pulp.

After the pulp is on the screen, add the other materials you want to use in your paper. Mix materials in with the pulp. Press the excess water out of the pulp. Make sure the frame is over the bucket when expressing the excess water. Use sponges to assist in removing water.

After the students finish creating their paper, take the frame over to a table and, using an absorbent cloth, press down and remove more water. Flip the frame upside down on the absorbent cloth. Take another sheet of absorbent cloth and place it on the back side of the paper. Students may need to use a few pieces of absorbent cloth. Place the paper in a press or place heavy objects, such as bricks, on top of the paper and cloths to keep the stack flat until dry.

Robert Arneson is a good example of a modern artist who used paper as an art medium. The Arizona State University Art Museum exhibits a large Arneson paper sculpture, *Flat Face*, in its Americas Gallery.



Post-Visit Activity: Paper Strip Still Life

Objectives

- 1. Students construct three-dimensional sculpture from two dimensional materials.
- 2. Students use value to create an illusion of three-dimensions on a two dimensional surface.

Supplies

- 18 x 24 inch white, 90-pound drawing paper
- Cardboard or canvas board approximately 9- x 12-inches
- Tape
- Scissors
- Paper cutter
- Stapler
- Wide range of graphite pencils 4H to 9B
- Drawing boards
- Spot lights, as possible

Activities

Ask students to cut pieces of 18 x 24-inch paper lengthwise into three-inch strips. They should have six strips when finished. Connect the strips together with stapler or tape creating one long strip. Twist the paper to make an open form sculpture and attach the sculpture to board.

Henry Moore makes an excellent example of an art historical context for this lesson. Moore used line as a dominant element in his sculpture and he emphasized the open, organic form.

Before asking students to begin to draw their sculptures, have them practice working with value. For example, ask them 1) to transform a circle into an illusion of a ball using gradual changes in value or 2) make a value scale. Renaissance artists provide excellent examples of artists' effective use of values to create strong illusions of three dimensions.

Direct each student to use his or her sculpture for a still life on 18 x 24-inch paper. Dramatic lighting will create a larger range of lights and darks on the sculpture. As possible, place dramatic lighting on the still life. Ask students to capture the value ranges to create the appearance of a three-dimensional object.

Decide whether you will include a paper making extension activity either before or after your TCA visit. If your students make paper before their visit, they can use the various papers you (or they) collected for analysis in that process. If your students make paper after their visit, they can use their "Exploring Paper at the Tempe Center for the Arts" worksheets and/or their paper strip sculptures (after drawings are completed) in the paper making process.



Pre-Visit Activity: Paper, Paper Everywhere

Objectives

- 1. Students describe the thickness (weight) and surface texture of paper.
- 2. Students identify local efforts to recycle paper both to conserve natural resources and to reduce waste.

Preparation

Preview "Paper, Paper, Everywhere" PowerPoint as a resource to prepare your students for a visit to the Biennial: Paper exhibition at the Tempe Center for the Arts.

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Before beginning the unit, ask students to bring several different kinds of paper or cardboard to class for examination. Assemble your own collection.

Activities

Present the "Paper, Paper, Everywhere" PowerPoint. Practice and check students' understanding by asking them to compare and contrast thickness (weight) and surface texture of papers brought to class. Lead a discussion of how, where and why people in your community recycle paper.



TCA Visit Activity: Exploring the Biennial: Paper

Objectives

- 1. Students describe the thickness and surface texture of artworks made on or with paper.
- 2. Students identify artworks made, at least in part, with recycled paper.

Preparation

Make arrangements for field trip to the TCA. Before your visit, discuss with assigned TCA docent, if possible. Provide the docent with a copy of "Exploring Paper at the Tempe Center for the Arts" worksheet in advance of your trip and discuss the extent to which students might complete any or all of the worksheet at the center or whether any or all of the questions might be addressed during their tour.

Activities

Distribute "Exploring Paper at the Tempe Center for the Arts" worksheets to students and ask them to answer as many questions as they can during their tour. If writing responses on the worksheet is not practical or possible during the tour, use the worksheet to guide students in focused observation as circumstances permit. For example, you might use questions on the worksheet when students assemble or travel to the TCA or when they assemble for or travel back to school.

Take notes on any new information presented by the docent as well as interesting questions, observations or responses made by your students during their tour. If the circumstances of the visit do not allow students to complete their worksheets, explain that later, in class, you will lead a discussion of discoveries they made about the qualities of paper and use of recycled paper.

If a visit to the TCA is not possible, display the Biennial: Preview PowerPoint to get a sense of the tremendous range of works artists have made on, with or about paper.