



Lesson Plan Title

Plant Life Gel Glue Batik Lesson Plan

Grade Level

5th Grade

Subject Area

Science

MSCCRS

L.5.3A.1 - Research and communicate the basic process of photosynthesis that is used by plants to convert light energy into chemical energy that can be stored and released to fuel an organism's activities

L.5.3A.2 - Analyze environments that do not receive direct sunlight and devise explanations as to how photosynthesis occurs, either naturally or artificially.

Art Form

Visual Arts

MSCCR Creative Arts Standards

VA: Cr1.1.5 Generate and conceptualize artistic ideas and work.

a. Combine ideas to generate an innovative idea for art-making.

VA: Cr3.1.5 Refine and complete artistic work.

a. Create artist statements using art vocabulary to describe personal choices in art-making.

VA: Cr2.2.5 Organize and develop artistic ideas and work.

a. Demonstrate quality craftsmanship through care for and use of materials, tools, and equipment.

Essential Questions:

How can I create a realistic observational drawing rather than drawing what I imagine I see?
How can I use glue as a resist to create a batik?

Duration

4 days of one hour sessions (allowing for idea development, paint dry, glue dry, etc.)

Materials

Images of plants showing stems, veins in leaves, details

8.5" x 11" Paper

Pencil

Sharpie

White fabric 8.5" x 11" (I bought a king size 100% cotton sheet from Wal-Mart and cut it up)

Wax or parchment paper

Blue gel glue (I ordered Elmer's from Amazon, worked great!)

Craft acrylic paint

Paintbrushes

Dedicated space to put material as it dries from the glue, and the next day, the paint

Objectives

Students will construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.

Students will identify the reactants and products of the chemical reaction involved in photosynthesis.

Students will create a batik using glue resist.

Science Vocabulary

Artificial light

Autotrophs

carbon dioxide

Chemical reaction

Chlorophyll

Glucose

light energy

Molecule

Photosynthesis

Plant

Products

Reactants

Stomata

Sunlight

Water

Visual Art Vocabulary

observational drawing

glue resist

batik Blue
contour line

Lesson Description

Day One

- Discuss how to create an observational drawing with students--notice the lines, shapes, sizes of the object. Draw what you see, not what you imagine.
- Review plant terminology and vocabulary.
- Students will look at plants and do contour line observational drawings. Do large drawings to fill the paper. Students do at least three drawings. Have them describe the different elements of their drawing to their table mates.
- Trace favorite drawing with Sharpie.

Day Two

- Demonstrate proper use of blue gel glue
- Students stack materials to prepare—Sharpie drawing on the bottom, wax paper in the middle and white fabric on top. Be sure to use Sharpie to write students' names/initials on a small corner of the fabric.
- Use blue gel glue to carefully trace over Sharpie drawing on fabric.
- Put glue drawings aside to dry. Be careful not to touch or smudge the glue.

Day Three

- Before students arrive, mix craft acrylic paint with water to thin. Approx. 3 parts paint to 1 part water, stir well.
- Demonstrate how to paint on the fabric, being sure to cover the entire piece of fabric with paint, covering up the glue lines.
- Students will spend the rest of the class time painting the fabric. Use colors that they observed for the plants and have fun with the background space.

Day Four

- After the paint is completely dry (wait overnight at least), soak fabric in hot water for 15 - 20 minutes. (cool hose water also works)
- Once water has cooled down a bit, have students grab their fabric and rub it against itself. This will make the glue come off. Once all of the glue has come off, run under warm water and hang to dry.

Once dry, the fabric can be used to create flag banners, sew pillows, to cover small notebooks or to just have as is. Lots of options! This finished product could even stair-step into a lesson of its own.

Recommended Resources

<http://anniesartroom.weebly.com/elementary-art/october-15th-2014>

<http://anniesartroom.weebly.com/elementary-art/5th-grade-glue-batik-quilt>

Sources

Lesson Author: Annie Monaghan

Tips

The flags look beautiful hung across the hallway ceiling.

Instead of letting each student rub the excess glue off, designate teams to do each part of the activity.

Rinsing the fabric is very messy, this is done best outside with a hose. Check with your custodian!

Ask a parent, or student helper, to assist with soaking off the glue, rubbing off the excess paint, hanging the material to dry, and ironing the finished pieces.

Adapted by:

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