

SUBJECT AREAS:

Natural science

ACTIVITY DESCRIPTION:

- To learn about cyanotype, what it is, how it works,
- To create your own print marks.

OBJECTIVES:

- To learn about this technique, know better as first photography, the chemical reaction and how to make it.

MATERIALS:

Cyanotype Kit

GRADE/LEVEL:

Upper Elementary School (12-14)

DURATION:

Preparation time: 30 min.

Activity time: 1 hour

PLACE:

Classroom, School yard

AUTOR:

Centro per lo Sviluppo Creativo
"Danilo Dolci" - Italy

Cyanotype

INTRODUCTION:

The is a slow-reacting, economical photographic printing formulation sensitive to a limited near ultraviolet and blue light spectrum, the range 300 nm to 400 nm known as UVA radiation. It produces a monochrome, blue colored print on a range of supports, often used for art, and for reprography in the form of blueprints. For any purpose, the process usually uses two chemicals: ferric ammonium citrate or ferric ammonium oxalate, and potassium ferricyanide, and only water to develop and fix. Announced in 1842, it is still in use.

BACKGROUND:

In 1851 the medium of photography was barely 10 years old. It was new and high-tech. These strange black boxes and obscure chemical processes promised to hold a moment still forever, capture the world in a way that you can hold in your hand; it must have seemed like magic. [Anna Atkins](#) learned about the development of the new medium of photography from [William Henry Fox Talbot](#), and learned to use the cyanotype process directly from its inventor [Sir John Herschel](#) (the man whose nephew, William Hersechel, discovered Uranus). Using Herschel's cyanotypes and Talbot's method of photogenic drawing, Atkins produced the *first ever* entirely photographically illustrated book.

Procedure:

Outline: For this lesson it's necessary to give to explain to the students how cyanotype works. They need to choose some plant species from their surrounding and take leaf or flowers.

Instruction: Cyanotype, also called blueprint, is an ancient photographic contact printing technique that exploits the reaction of certain iron salts to the sun. Students will explore the garden school or a green space in the local area in search for flowers and leaves to create their own personal botanical prints through three stages of the technique photography: composition, exposure and development. The whole process is very simple, fun and safe, in fact it makes use of sunlight and water without providing for contact with chemical solutions using pre-treated photosensitive paper.

Guided Practice: Securing the specimens to the paper with a sheet of glass, the glass and paper were then placed in the sun. After sufficient exposure to light, the paper was washed in water, which caused the image to appear in its final form. Because the specimens were solid objects that light could not pass through, they appear as negative images.

Formative Assessment: Make sure your students getting as much as possible from this lesson. Check if they understood with a few questions for continuously monitoring.

Collaborative Process: Students can work in pair and help each other with whole process.

Independent Practice: Students will work independently by collecting their plants.

FUN FACTS:

- *Atkins is not only considered to be the first person to publish a book illustrated with photographic images, but she is also widely regarded as the first woman to ever take a photograph.*

ASSESSMENT:

Teacher should ask students some questions about the process:

- How this technique works?
- What is necessary to make cyanotype?
- What is the role of water?
- What is the role of sunlight?

EVALUATION:

Students should write an essay about cyanotype and/or Anna Atkins, in this way they will be able to explore and learn more about this technique and her as a character and her important contribution.