# TAKE&MAKE

**GRADES K-7** 

# DIY ART PROJECTS TO GO!

#### **CREATE SUN PRINTS USING NATURAL MATERIALS**

# Take and Make: Photography and Sun Prints with Deb Shannan!

Lesson Objective: Meet professional photographer, **Deb Shannan**, and learn the history of different photographic processes that use chemicals and ultraviolet light to create images. You will also get to create your own

photographic images using the scientific and artistic parts of your brain!



#### About Deb Shannan....

Deborah Shannan is a **botanical photographer** living in the mountains of Western Colorado. Combining her love of photography, gardening, and science, she specializes in

photographing the patterns, textures, and shapes found in plants. Deborah makes her photographic prints by hand, favoring alternative, historical printing methods that use precious metals such as platinum and gold.

In February of 2021, Photographer, Deborah Shannan, arrived to begin a three month experience at The Bascom in Highlands, NC. You can see some of her photographs in person at The Bascom from April – May of 2021.

Don't forget to post and share!



#### A little history about two types of Photography

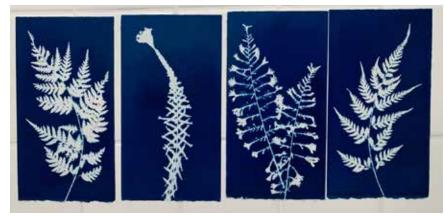
### Platinum-Palladium Prints



Traditional photographs use combinations of chemicals and minerals to make light into images. In this Take and Make we will be learning about **platinum-palladium prints** and cyanotypes. Many early photographers and scientists experimented with platinum and palladium, but William Willis was the first to patent the platinotype in 1873. Platinum is applied directly to the surface of the paper. As a result, all platinum prints have a matte finish which gives them a velvety appearance. Platinum is slower to react when exposed to light than other types pf photography, and more expensive. Their slow printing speed requires them to be printed with the **negative** placed on top of the photo-paper.

# **Cyanotypes**

Cyanotype is a photographic printing process that produces a cyan-blue print (like turquoise). Engineers used the process as a simple and low-cost way to make copies of drawings called blueprints. The process uses two chemicals: ferric ammonium citrate and potassium ferricyanide.



Anna Atkins created a series of cyanotype books in the 1840's that showed images of ferns and other plant life from her large seaweed collection, placing plant materials directly onto coated paper and letting light create a silhouette effect. By using this photogram process, Anna Atkins is sometimes considered the first female photographer.

#### LEARN MORE ABOUT PLATINUM PALLADIUM PRINTS & CYANOTYPES

#### **RESOURCES:**

#### **WEBSITES**

- Take and Make: www.thebascom.org/play/take-make
- Deborah Shannan: https://www.dgshannanphotography.com/
- Platinum Prints: https://noma.org/object-lesson-platinum-print-photography/
- Anna Atkins: https://www.moma.org/artists/231

#### **BOOKS**

• The bluest of blues: Anna Atkins and the first book of photographs by Fiona Robinson

#### TIME TO CREATE!

First, visit **www.thebascom.org/play/take-make** to watch the four videos for this Take and Make!

Video 1: Meet photographer, Deb Shannan!

#### **Questions for review:**

- Where is Deb Shannan from?
- Name three subjects that Deb Shannan combines to create her images.
- What subjects does Deb Shannan like to photograph?
- Name the three art related words that Deb Shannan likes to incorporate into her images.

Video 2: Watch Deb Shannan create Platinum-Palladium Prints in the studio.

#### **Questions for review:**

- What software program does Deb Shannan use to turn her images into a negative?
- What happens to black values and white values in an image when you turn it into a negative?
- What three chemicals does Deb Shannan use to coat her photo paper?
- What type of light does she use to expose the negative?

**Video 3:** Create photographs that use your science brain and your art brain using an iPad or mobile device.

#### **Questions for review:**

- How does Deb Shannan use her art brain and science brain to find images to photograph?
- What rule does the grid on your iPad photo app represent?
- Name two ways you can hold your iPad to change the composition of your photograph.







## Video 4: Create sun prints using natural materials.

#### Questions for review:

- What is another name for a sun print?
- What happens to sun print paper when you expose it to UV light?
- Why do the objects placed on sun print paper leave behind a negative of the object?
- What happens to sun print paper when you place it in water after exposing it to UV light?





## **VOCABULARY**

ANNA ATKINS Created a book in the 1840's using cyanotypes, and is considered the first female photographer

**BOTANICAL** Relating to plants

**COMPOSITION** The arrangement of objects in an image

CONTACT FRAME A device that holds a photo negative and the photo paper in contact with each other

CYANOTYPE A photographic printing process that produces a cyan-blue print

HORIZON Where the sky and landscape surface meet

HORIZONTAL Parallel to the horizon

**INVERT** To put upside down or in the opposite position, or order

**NEGATIVE** An image that shows the light and shade or color values reversed from the original



Create a sun print!

#### **VOCABULARY**

PLATINUM A chemical element with the symbol Pt. It is a rare metal found on earth

RULE OF THIRDS Imagine dividing an image down into thirds

(both horizontally and vertically) so that you have 9 parts

**ULTRAVIOLET LIGHT (UV)** A form of electromagnetic radiation found in sunlight and some artificial lights

VARIABLE An element, feature, or factor that is likely to vary or change VERTICAL Perpendicular to the horizon

Don't forget to post and share!



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