

Canopy Understories, 2022 Public Art Program



Created by the Madison Public Art Project,
Artists, and the Youth and Community Education
Team at the UW-Madison Arboretum

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We encourage you to download these materials.
You can print all or any pages you select.

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Tag and share your project @madisonpublicartproject
#CanopyUnderstories

About the Madison Public Art Project

The Madison Public Art Project (MPAP) is a 501(c)(3) non-profit arts organization. We present innovative contemporary art to a diverse audience throughout Wisconsin in the public realm. Fueling local arts & culture, the MPAP creates exciting free public art exhibitions strengthening and educating communities with engaging art. Supporting emerging and established artists, the Madison Public Art Project relies on grants, individual contributions, corporations, and foundations to support our exhibitions. Our art installations inspire civic participation and fuel artistic imagination.

For further information please visit:
www.MadisonPublicArtProject.com

Welcome...

Thank you for visiting *Canopy Understories*. This visionary project was so exciting to develop and create. Will, Laura, and I started talking about how to celebrate the landscape of the Arboretum in a public dialogue in early 2020. I want to thank them for joining me in this endeavor and offering their artistic voices to showcase this important work to our community. It was truly an honor to work together. From early site-visits and walkthroughs, to studio visits, to weekly “sneak-peek” behind the scenes photos and videos of the artistic process, I found myself both inspired and amazed by this project in new ways each week. I hope visiting these sculptures ignites an art enthusiasm in all the visitors over the next year while the installation is on view. I truly believe it is projects like this that make Madison a special place to live, and I am so excited to add this to project to our vibrant arts scene in Dane County. You can tag your photos and pictures @madisonpublicartproject #CanopyunderStories to share your experience.

I look forward to seeing you!



Jillian Talarczyk
Founder & Creative Director
Madison Public Art Project

Samara Flight, 2022

By Laura Richards and William Grant Turnbull

Polychromed aluminum, aircraft cable, mechanical hardware,
wind

April 22, 2022- April 2023

#CanopyUnderstories

This linear mobile depicts the winged seed pods, (or samaras) of Wisconsin's state tree, the sugar maple (*Acer saccharinum*). Sculpted in lightweight materials used by the aviation industry and held aloft by a metallic cable and hardware developed for rock climbing, this trio of wind-activated kinetic sculptures mimics the natural dispersal mechanism maple trees use. The open lattice of the samara sculptures' wing veins spin and twirl in the wind, illustrating a natural process in color and motion.

Biomimetics is a contemporary design movement, focused on applying the lessons of nature to human problems. While human technologies exacerbate many of the environmental challenges we face today, we can also creatively adapt our knowledge to addressing these challenges.

The artists of *Canopy Understories* hope this project will spark new ideas and alter the viewers' perspective of both nature and technology. The installation seeks to question how the things people build can be made more efficiently, sustainably, and with more grace and style. The beauty of the Arboretum's flora presented in these sculptures symbolically articulates the aesthetic sense of place.

Mayapple Canopy, 2022

Laura Richards and William Grant Turnbull

Polychromed aluminum, LED solar light, glass, resins

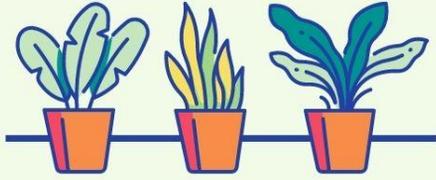
April 22, 2022- April 2023

#CanopyUnderstories

This sculpture takes a larger-than-life look at the Mayapple (*Podophyllum peltatum*), a species native to Wisconsin. Mayapples grow from a creeping root, with one or two umbrella-like leaves per stem. Only stems with two leaves will flower, to produce an intensely sour yellow fruit. Unripe fruit, like the rest of the plant, contains *podophyllotoxin*, a toxic chemical sometimes used in chemotherapy. The fruit is edible once fully ripened. Such poisons evolved in plants to discourage animals from eating them.

The sculpture functions during the day as a shade canopy, its shadow tracing a large arc on the ground like a sundial. It also stores energy from the sun, like photosynthesis in living plants. But instead of using that energy for plant growth and reproduction, it powers the LED-illuminated, blown glass fruit after sunset. Aluminum does not exist in the form of a metal in nature. It can be melted and re-melted, and, like components of living organisms, is easily recycled. The Madison-based artists Richards and Turnbull, both UW graduates, are inspired by nature. They illuminate how the tools and technology of the modern world can be more sustainable.

Photosynthesis



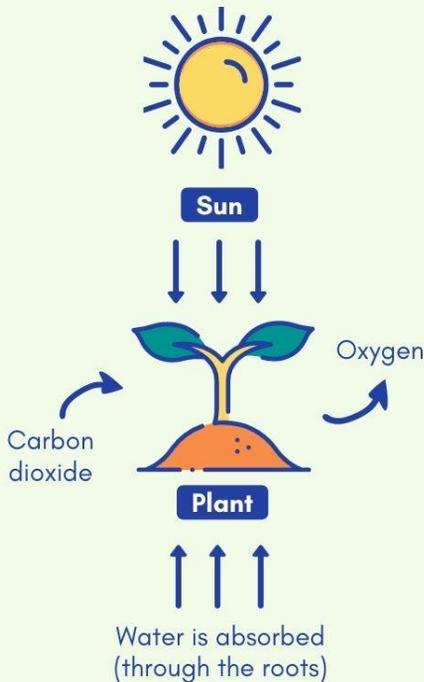
Photosynthesis is the process where plants transform light energy into chemical energy. Plants use this energy to make their own food. The light energy they captured is used to convert carbon dioxide, water, and minerals into oxygen.

Chlorophyll

The pigment that gives plants their green color and helps in the process of photosynthesis.

Did you know?

There are organisms other than plants that can undergo photosynthesis. These include algae and the emerald green sea slug.



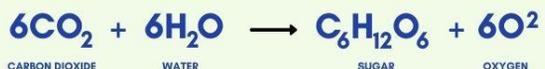
The Photosynthesis Process

Plants take in water and carbon dioxide and use energy from the sun to turn them into food.

Within the plant cell, water is oxidized, loses electrons, and is changed into oxygen. Carbon dioxide is reduced, gains electrons, and turns into glucose.

Oxygen is released, and glucose is stored within the plant as energy.

The Photosynthesis Formula



STEAM LEARNING ACTIVITIES

These STEAM exercises were created to be a resource for teachers, students, and parents. For educators, they are ideas to incorporate into your lesson plans in relation to visiting *Canopy Understories*. Teachers are encouraged to review the activities and select any that look appropriate and fun before, during, or after visiting the Arboretum, as time permits.

- Play a classical song and ask the students to dance in the style of the Samara and Mayapple Canopy on-site under the trees.
- The artists named this group of sculptures collectively *Canopy Understories*. Write a brief paragraph about what you would name this installation and why?
- Print pages from our *Canopy Understories* Coloring Book. Use them for an in-person or virtual painting, coloring, or drawing class.
- Complete the *Canopy Understories* crossword puzzle. Discuss new words that are unfamiliar to the students.

STEAM LEARNING ACTIVITIES

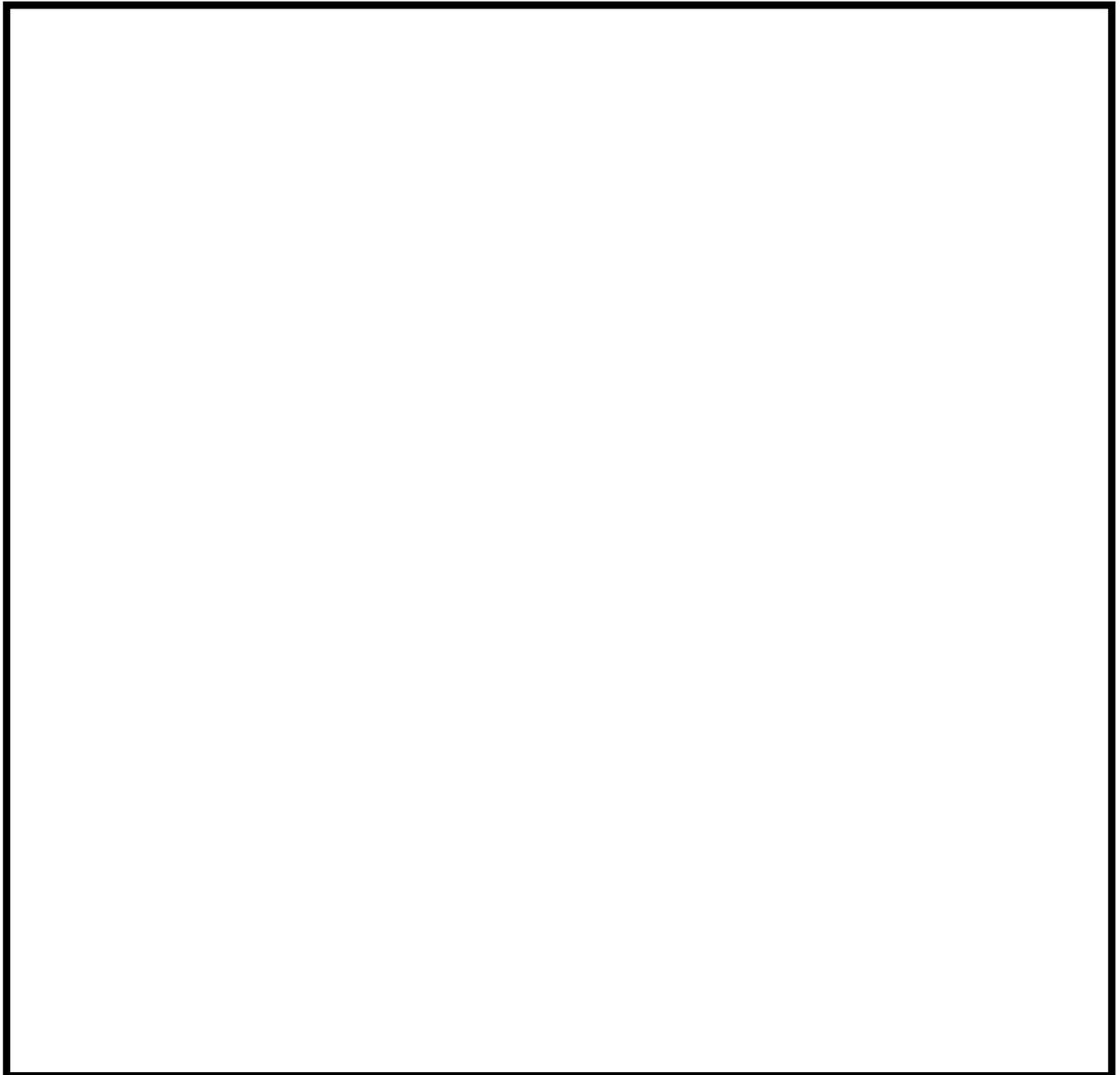
- Make a poem about your experience visiting the *Canopy Understories* project. You can use terms from the glossary of art terms. You can make it fun and interactive and use this activity as a poetry slam competition. Each poet will perform their spoken word piece live before their peers. You can have a panel of judges. Channel your inner “Hamilton” to rhyme and use the poetry of the English language to convey your intention.
- Use your mobile device to capture photos during your field trip. Use those photos as a photography exhibit in your classroom. What inspired you to capture this image? What is interesting, special, unique about this image? Why did you select it? How do the images of the classroom work together to convey a larger narrative?
- Create a painting or drawing from your favorite image captured. How does the tone change when the same image is portrayed in a new medium? What do you like/dislike?
- Visit the sculptures in different seasons. What do you notice that is different on each visit? Record your observations in your nature journal pages.

STEAM LEARNING ACTIVITIES

- Bring clay or playdough to make an impression on the signs of *Canopy Understories*. What does your impression reveal? What do you notice?
- Make your own maquette design activity. What is an art maquette? A maquette is a model for a larger piece of sculpture, created in order to visualize how it might look and to work out approaches and materials for how it might be made. Use your field trip as inspiration to create your own maquette based on the *Canopy Understories* sculptures you visited. You can do this at home virtually, or together in the classroom.
 1. Gather your supplies (clay, cardboard, wood, paper, cardboard) and begin the 3D construction. You can use hot glue or tape to attach the pieces together.
 2. Add details with pen, markers, and colored pencils to add color and dimension.
 3. Think about the sculpture surroundings. Select five words from the glossary of art terms when describing your maquette to the class.

SAMARA SEED POD RUBBING

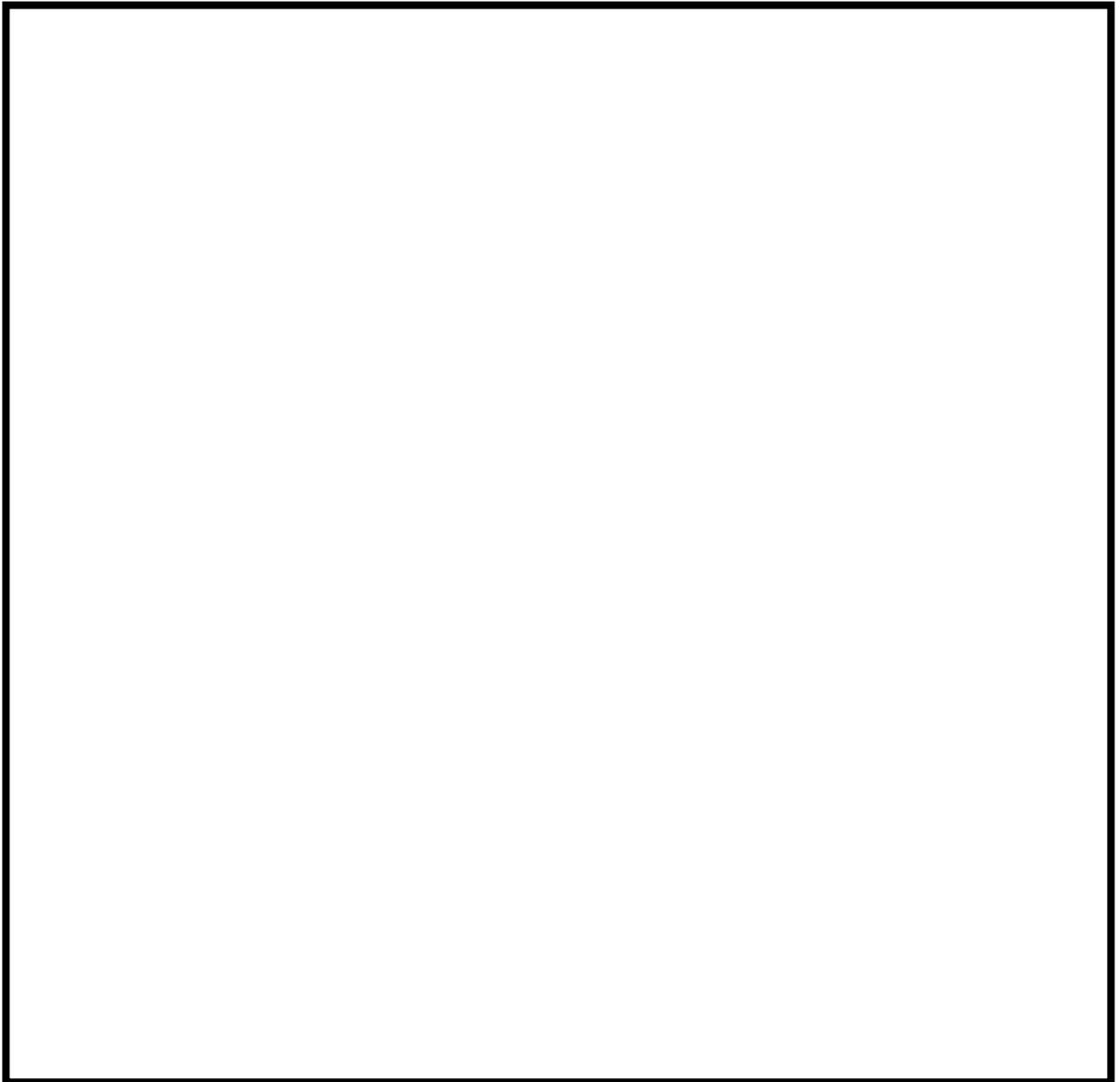
Create your own! Use crayons or pencil to make a rubbing from the Samara plate that is located near the Samara sculpture at the Arboretum.



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#CanopyUnderstories

MAYAPPLE LEAF RUBBING

Your turn to be the artist! Use crayons or pencil to make a rubbing from the Mayapple Canopy plate that is located near the Mayapple sculpture at the Arboretum.



Tag and share your project @madisonpublicartproject
#CanopyUnderstories

Coloring Book Pages

The artists Laura Richards and William Grant Turnbull created these *Canopy Understories Coloring Book* pages so you can ignite your inner artist.

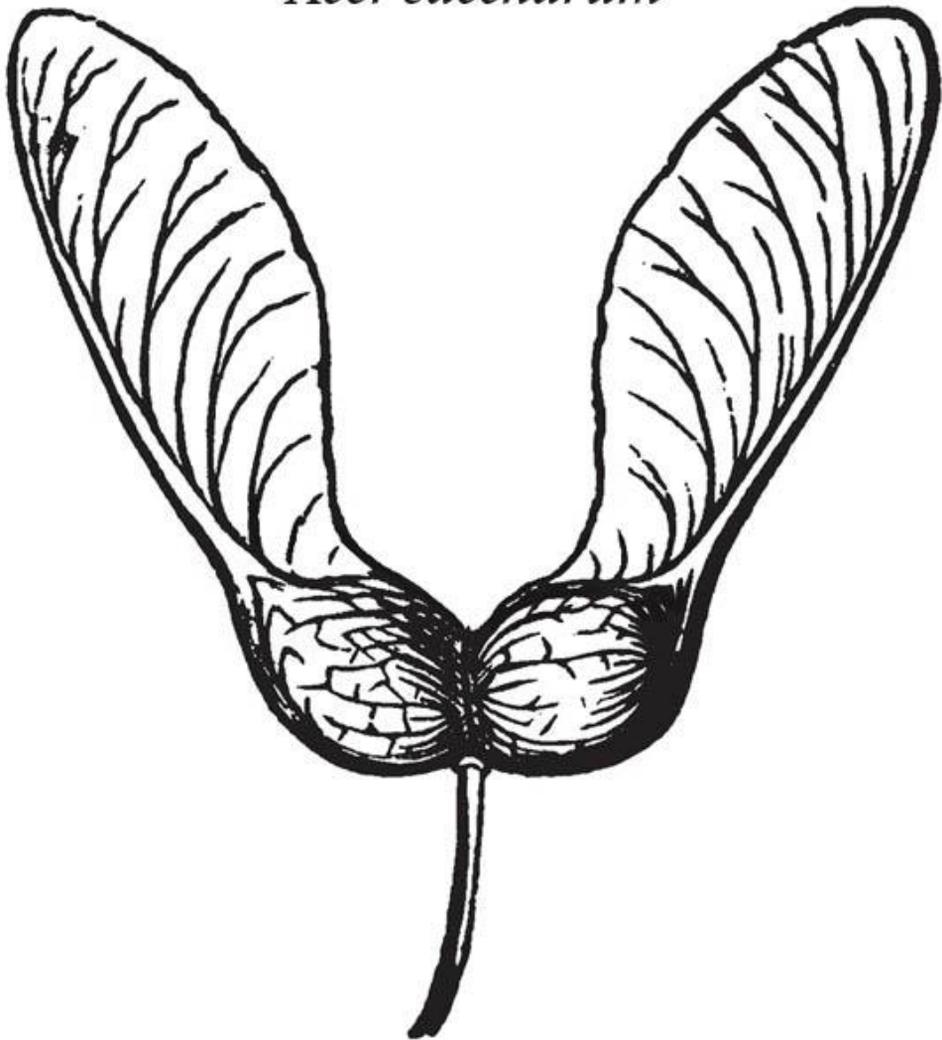
The pages offer a range of designs based off their conceptual sketches perfect for all ages.

Just grab your favorite marker, colored pencil, or brush and enjoy the process of making your own art. Try experimenting with different mediums like watercolor, finger paints, colored pencils, markers, graphite or crayons to create many versatile designs.

You can print as many pages as you like! We would love to see your creations. You can post them #canopyunderstories and tag us @madisonpublicartproject.

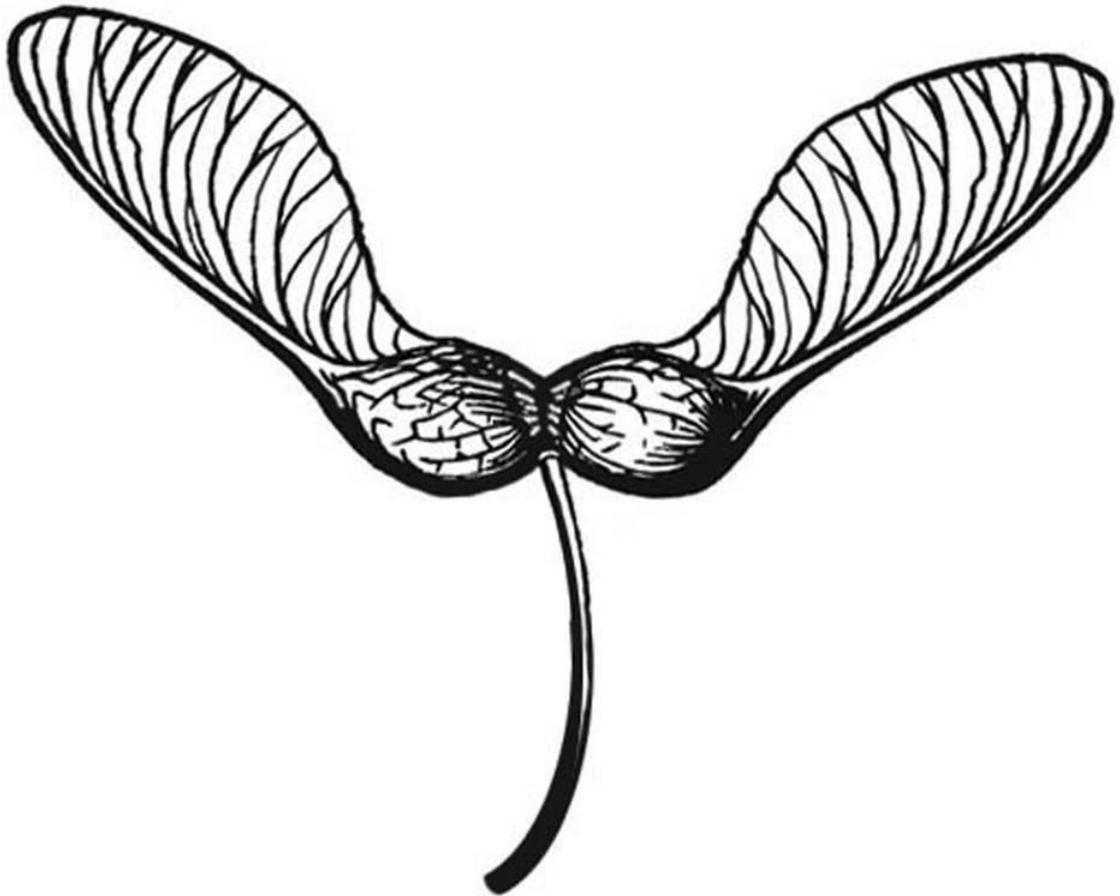
Sugar Maple Samara

Acer saccharum



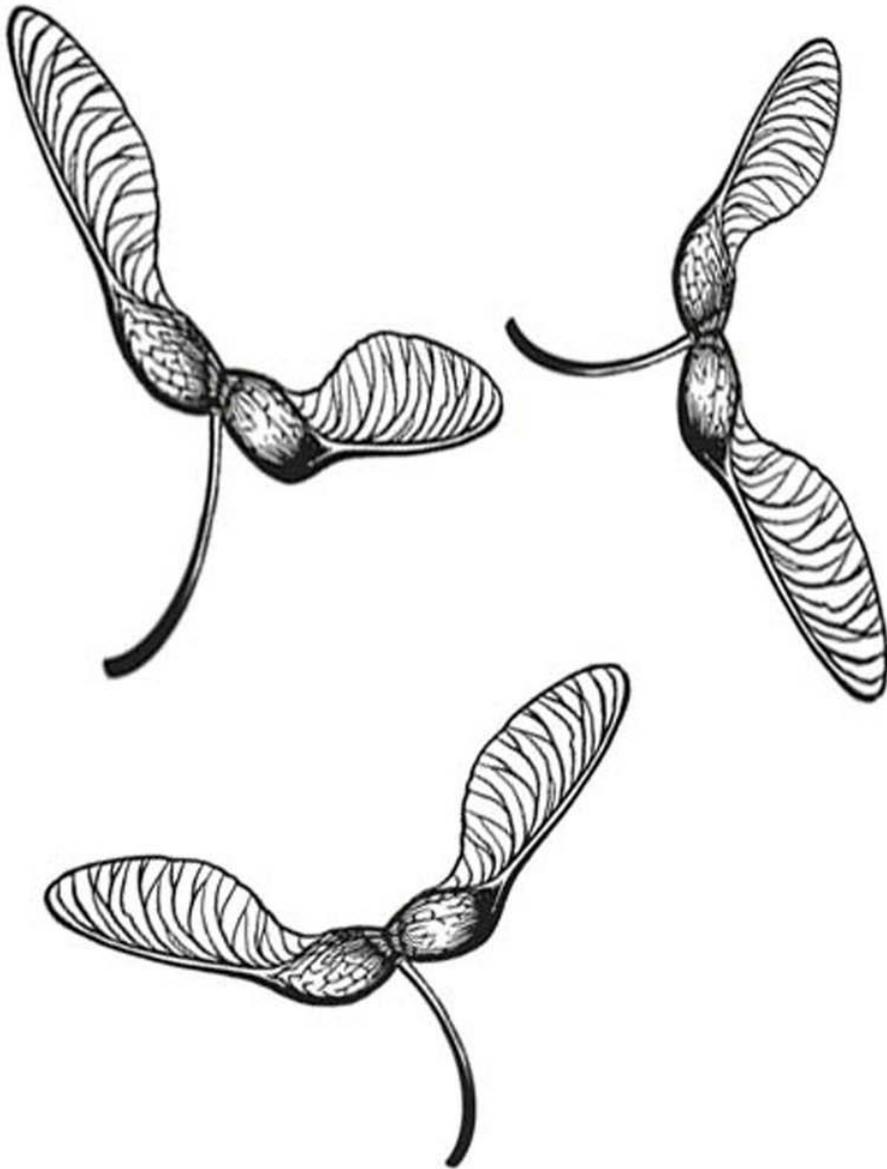
Sugar Maple Samara

Acer saccharinum



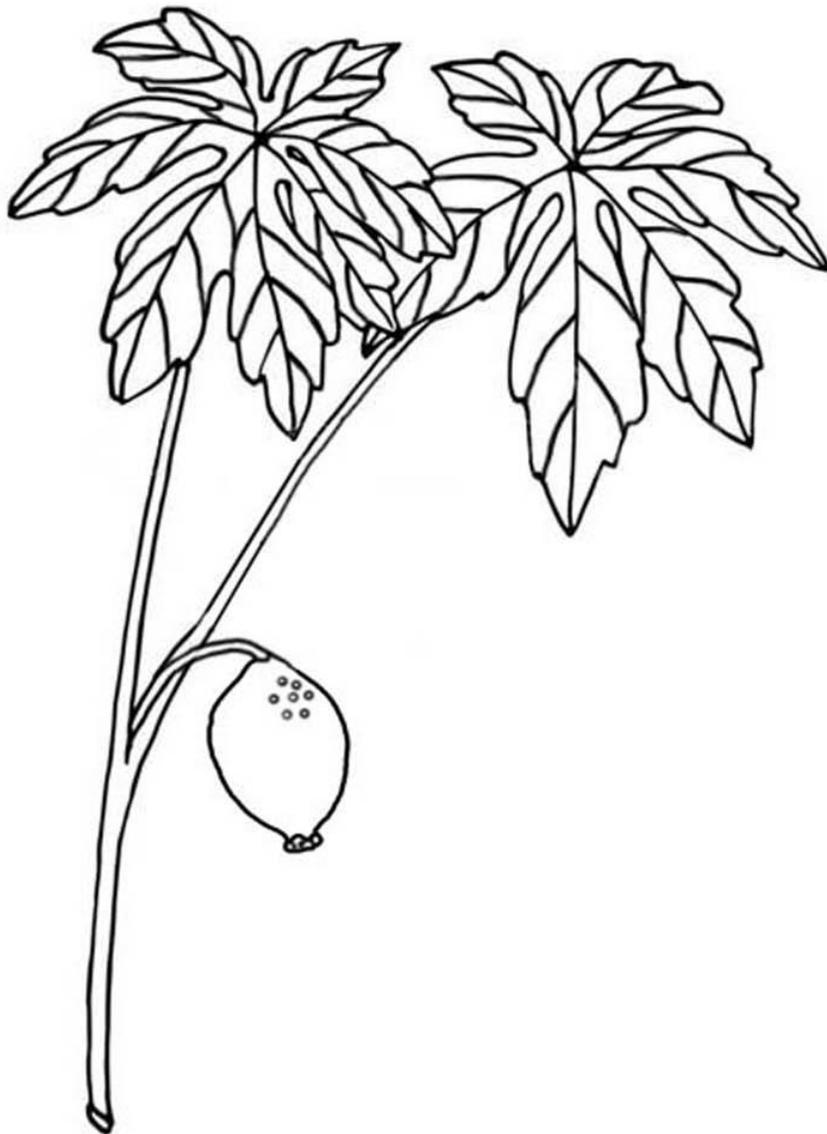
Sugar Maple Samara

Acer saccharinum



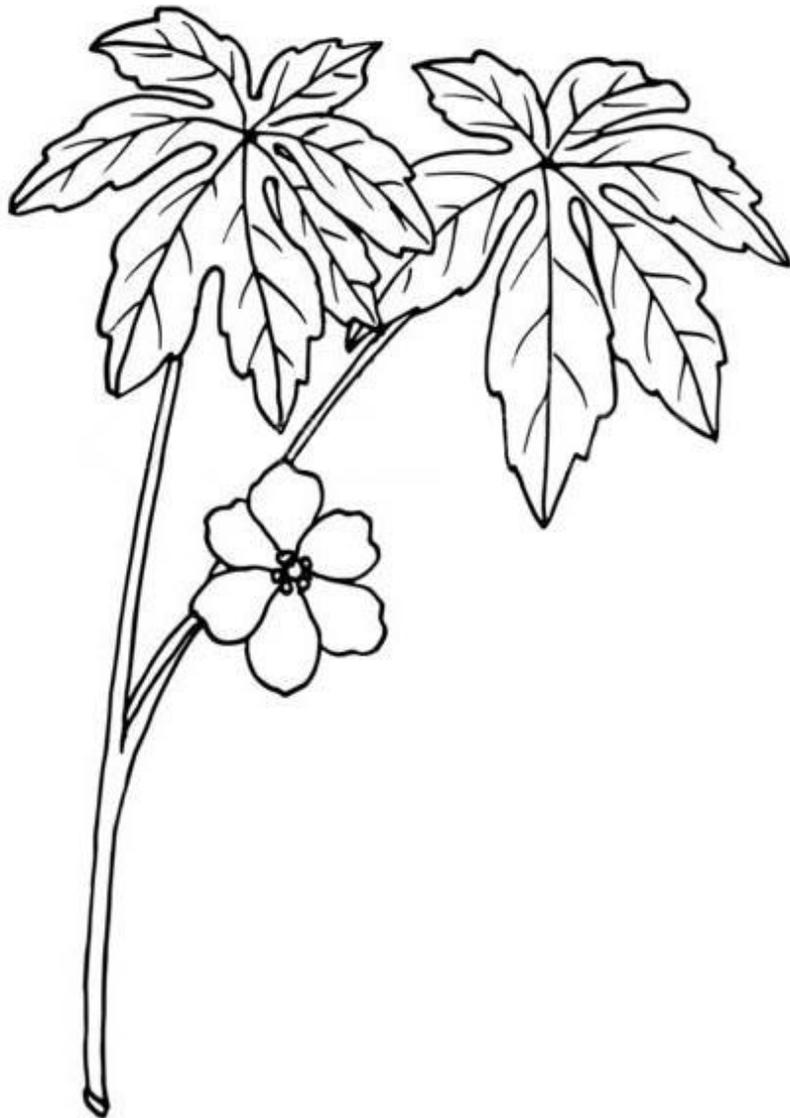
Mayapple

Podophyllum peltatum



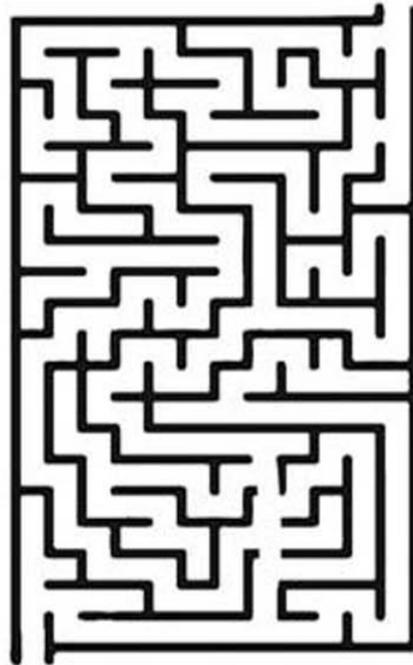
Mayapple

Podophyllum peltatum

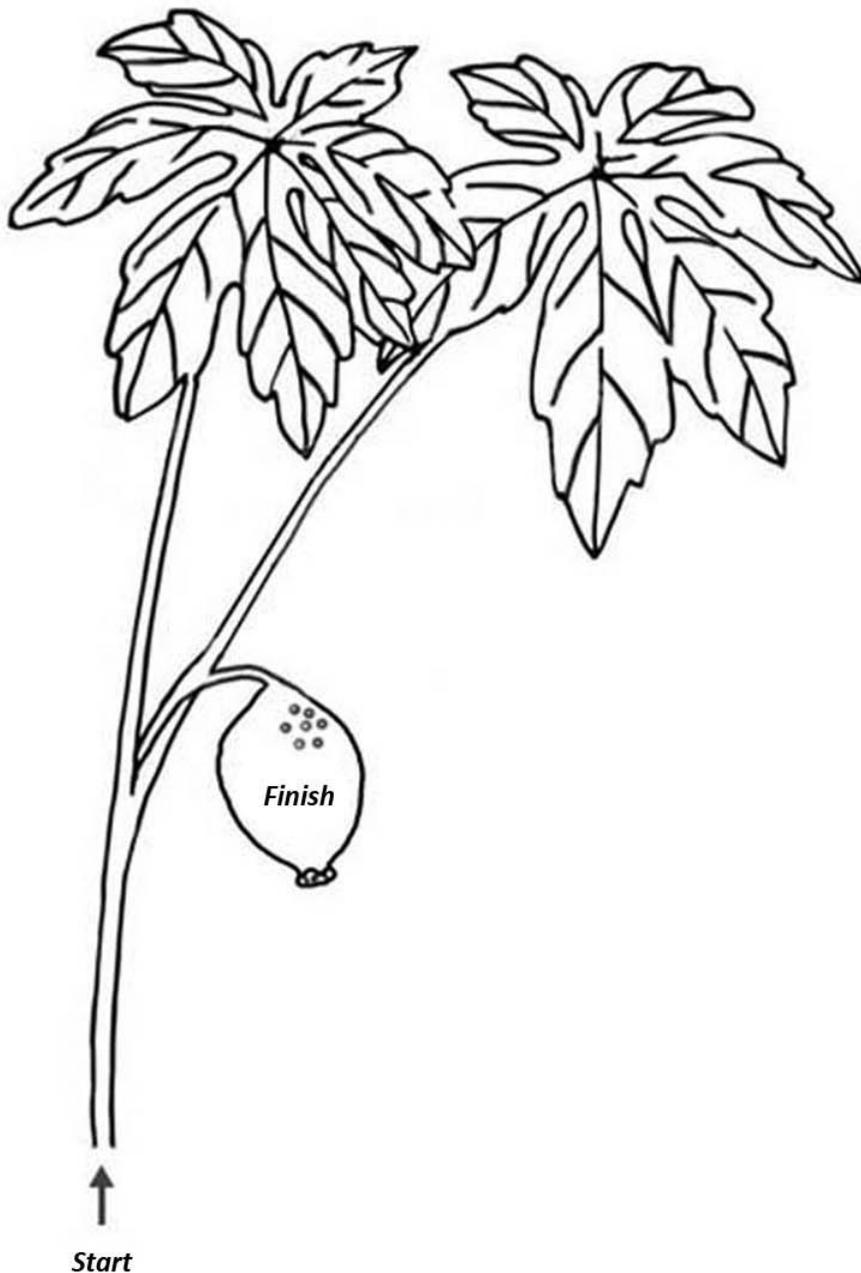




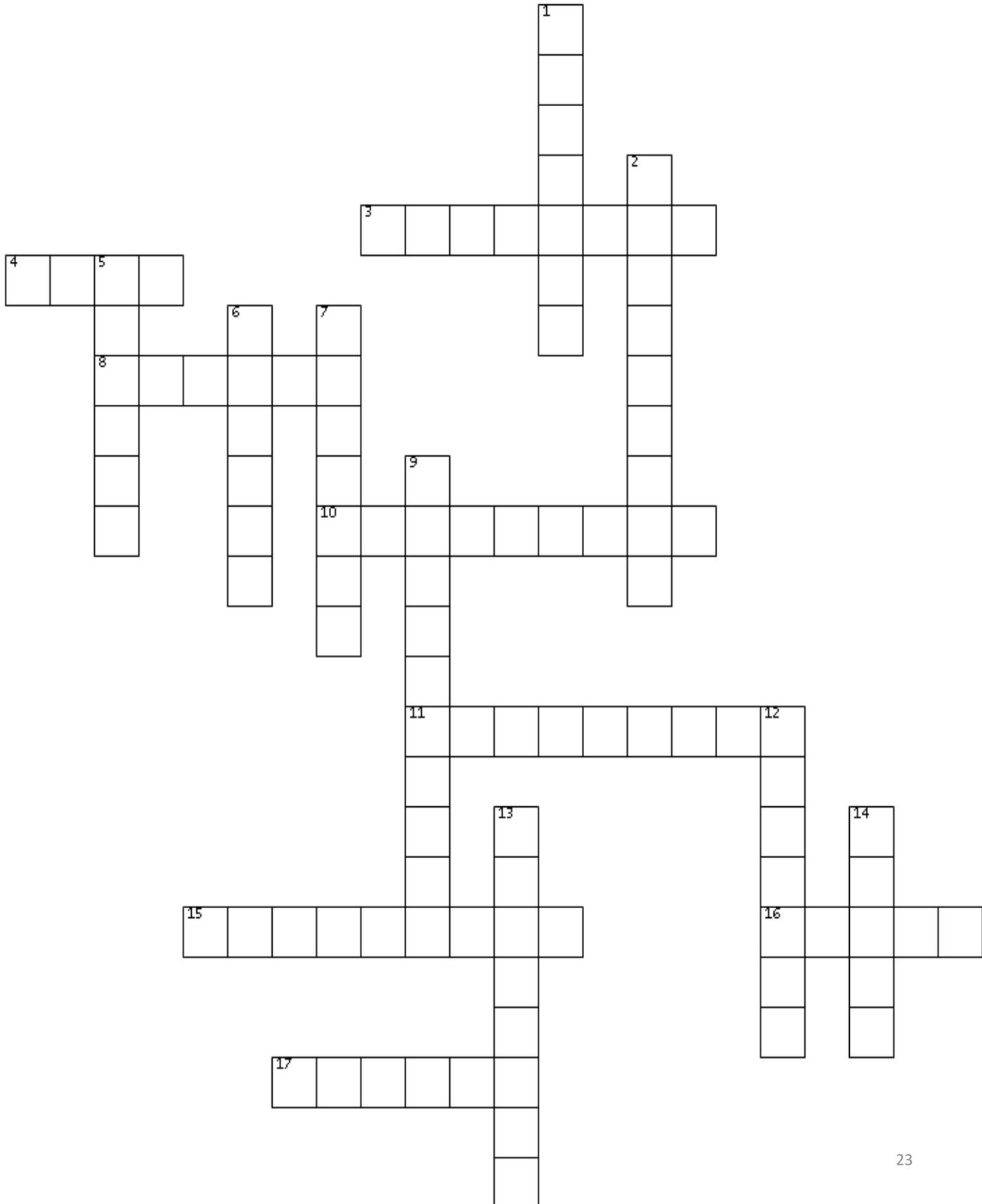
Follow the maze from the falling samara to the Mayapple



Follow the maze within the Mayapple plant from the stem to the fruit



Canopy Understories Crossword Puzzle



Canopy Understories Word List

Madison

Nature

Sculptor

Trees

Artist

Pods

Aluminum

Seeds

Sculpture

Sugar Maple

Welding

Samara

Design

Arboretum

Metalwork

Public Art

Kinetic

Canopy Understories Crossword Clues

Use the clues to fill in the words. Words can go across or down. Letters are shared when the words intersect.

ACROSS-

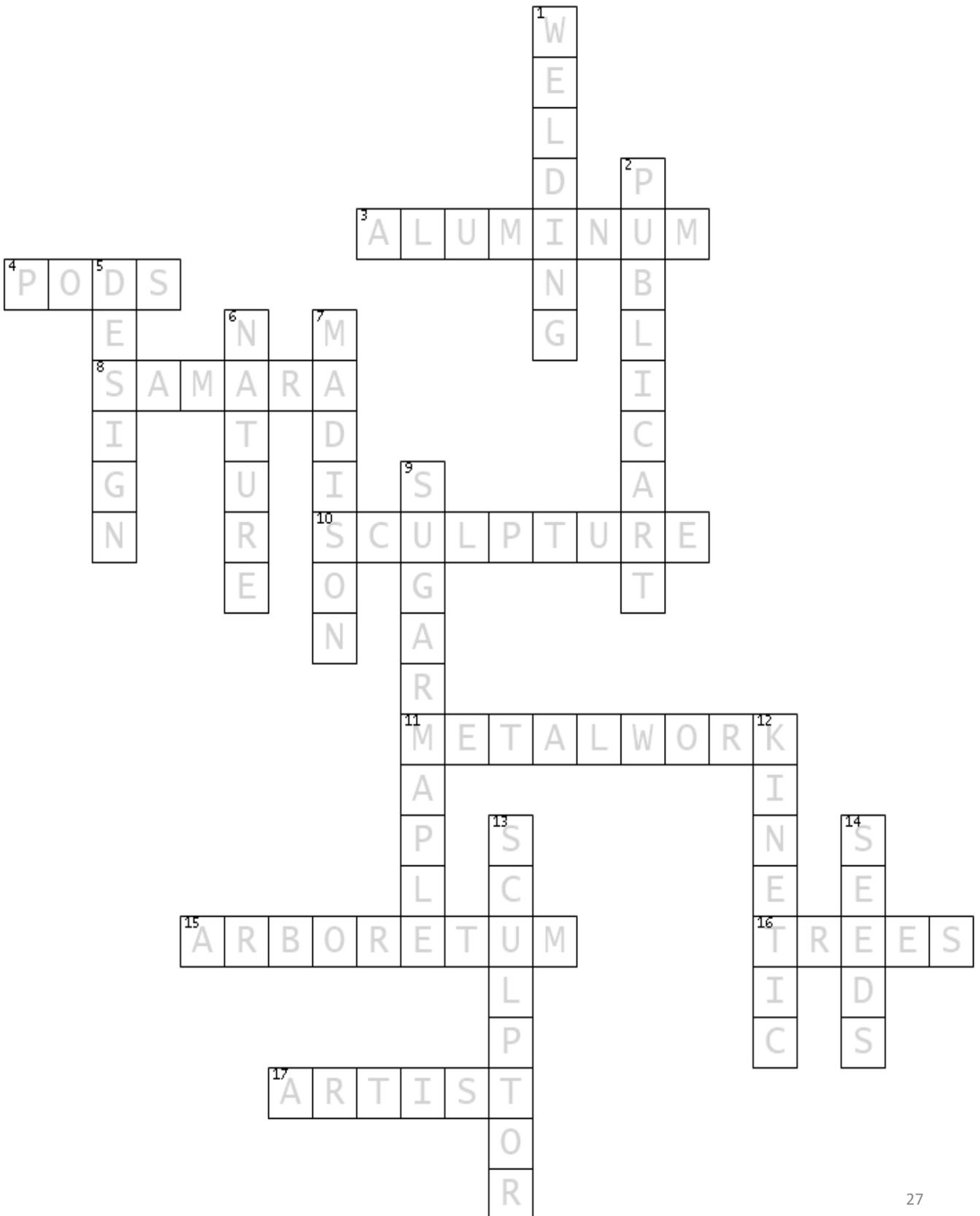
3. It is the most abundant metal in the earth's crust.
4. An elongated seed vessel of a leguminous plant such as the pea, splitting open on both sides when ripe.
8. A winged nut or achene containing one seed, as in ash and maple.
10. A three-dimensional work of art made by a variety of means, including carving wood, chiseling stone, casting or welding metal, molding clay or wax, or assembling materials.
11. The art of making things out of metal.
15. A botanical garden devoted to trees.
16. A woody perennial plant, typically having a single stem or trunk growing to a considerable height and bearing lateral branches at some distance from the ground.
17. A person who produces paintings or drawings as a profession or hobby.

Canopy Understories Crossword Clues

DOWN

1. A process of joining two pieces of metal together by heating the surfaces to the point of melting and then pressing them together.
2. Placed in public sites, this art is there for everyone, a form of collective community expression. It can be a reflection of how we see the world.
5. A plan or drawing produced to show the look and function or workings of a building, garment, or other object before it is built or made.
6. The phenomena of the physical world collectively, including plants, animals, the landscape, and other features and products of the earth, as opposed to humans or human creations.
7. Capital city of Wisconsin.
9. The Wisconsin State tree.
12. Relating to or resulting from motion.
13. One who produces a three-dimensional work of art using any of a variety of means, including carving wood, chiseling stone, casting or welding metal, molding clay or wax, or assembling materials.
14. A flowering plant's unit of reproduction, capable of developing into another such plant.

Canopy Understories Crossword Answers



Reflection Questions

What did you notice while you were creating your seed pod rubbing or leaf drawing?

Name five things you learned after visiting today's installations.

*We would love to hear your answers!
Send them to us at info@madisonpublicartproject.com*

Reflection Questions

Why is Public Art important?

What did you enjoy most about visiting the sculptures today in the Arboretum? Why?

What is significant about this public art project to you?

We would love to hear your answers! Please share.
Send them to us at info@madisonpublicartproject.com or tag
[@madisonpublicartproject](#)

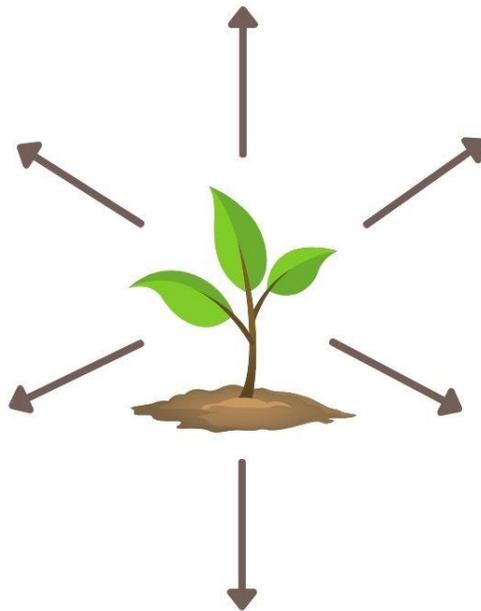
STEM: LIVING THINGS | PLANT FEATURES

Inquiry question: How do humans use plants?

Plants not only provide people with food to eat, but also serve other equally important functions. For example, plants:

- Provide shelter for animals
- Are a source of food for other animals
- Provide oxygen to maintain the atmosphere
- Produce products such as firewood, medicines, timber, oil, rubbers and so on.

Instructions: Research and brainstorm below, all the different uses for plants, using specific examples for each.



GLOSSARY OF ART TERMS

Review the Glossary of Art Terms- Acquaint students with any unfamiliar terms associated with art and sculpture.

Aluminum [*uh-loo-muh-nuhm*] Aluminum is a relatively soft, durable, lightweight, ductile, and malleable metal with appearance ranging from silvery to dull gray. It is nonmagnetic and does not easily ignite. It is the most abundant metal in the earth's crust.

Architecture [*ahr-ki-tek-cher*] The science, art, or profession of designing and constructing buildings, bridges, and other large structures.

Ben-Day dots Colored dots (generally in four colors: cyan, magenta, yellow, and black) used to create shading and secondary colors in the mechanical reproduction of images.

Biomorphic [*baɪəʊ'mɔːfɪk*] Derived from the Greek words *bios* (life) and *morphe* (form), a term referring to abstract forms or images that evoke associations with living forms such as plants and the human body.

GLOSSARY OF ART TERMS

Color [kuhl-er] The perceived hue of an object, produced by the manner in which it reflects or emits light into the eye. Also, a substance, such as a dye, pigment, or paint, that imparts a hue.

Column [kol-uhm] A decorative or structural feature, most often composed of stone, typically having a cylindrical or polygonal shaft.

Commission [kuh-mish-uhn] To request, or the request for, the production of a work of art.

Composition [kom-puh-zish-uhn] The arrangement of the individual elements within a work of art so as to form a unified whole; also used to refer to a work of art, music, or literature, or its structure or organization.

Construct [*verb* kuhn-struhkt; *noun* kon-struhkt] Something formed or constructed from parts.

Content [kon-tekst] The subject matter or significance of a work of art, especially as contrasted with its form.

Culture [kuhl-cher] The customs, arts, social institutions, and achievements of a particular nation, people, or other social group.

GLOSSARY OF ART TERMS

Curator [kyoo-rey-ter] A person whose job it is to research and manage a collection and organize exhibitions.

Drawing [draw-ing] A work of art made with a pencil, pen, crayon, charcoal, or other implements, often consisting of lines and marks (noun); the act of producing a picture with pencil, pen, crayon, charcoal, or other implements (verb, gerund).

Enamel [ih-nam-uhl] A type of paint made from very fine pigments and resin that form a glossy surface. Also, the application of this paint to a material in order to create a smooth and glossy surface.

Expression [ik-spresh-uhn] A facial aspect indicating an emotion; also, the means by which an artist communicates ideas and emotions.

Form [fawrm] The shape or structure of an object.

Frottage [fraw-tahzh] A technique that involves rubbing pencil, graphite, chalk, crayon, or another medium onto a sheet of paper that has been placed on top of a textured object or surface. The process causes the raised portions of the surface below to be translated to the sheet.

GLOSSARY OF ART TERMS

Medium [mee-dee-uhm] The materials used to create a work of art, and the categorization of art based on the materials used (for example, painting [or more specifically, watercolor], drawing, sculpture).

Mood [mood] A state of mind or emotion, a pervading impression.

Naturalism [nach-er-uh-liz-uhm] Faithful adherence to nature; factual or realistic representation.

Organic [awr-gan-ik] Having characteristics of a biological entity, or organism, or developing in the manner of a living thing.

Pigment [pig-muhnt] A substance, usually finely powdered, that produces the color of any medium. When mixed with oil, water, or another fluid, it becomes paint.

Popular culture Cultural activities, ideas, or products that reflect or target the tastes of the general population of any society.

Primary color One of three base colors (blue, red, or yellow) that can be combined to make a range of colors.

GLOSSARY OF ART TERMS

Prototype [proh-tuh-tahyp] An early sample built to test a concept or process.

Rendering [ren-der-ing] A representation, executed in perspective, of a proposed structure.

Sculptor [skuhlp-ter] One who produces a three-dimensional work of art using any of a variety of means, including carving wood, chiseling stone, casting or welding metal, molding clay or wax, or assembling materials.

Sculpture [skuhlp-cher] A three-dimensional work of art made by a variety of means, including carving wood, chiseling stone, casting or welding metal, molding clay or wax, or assembling materials.

Setting [set-ing] The context or environment in which a situation occurs.

Shape [sheyp] The form or condition in which an object exists or appears.

Site-specific [sahyt-spi-sif-ik] Describes a work of art designed for a particular location.

GLOSSARY OF ART TERMS

Sketch [skech] A rendering of the basic elements of a composition, often made in a loosely detailed or quick manner. Sketches can be both finished works of art or studies for another composition.

Subject matter The visual or narrative focus of a work of art.

Technique [tek-neek] The method with which an artist, writer, performer, athlete, or other producer employs technical skills or materials to achieve a finished product or endeavor.

Welding [weld-ing] A process of joining two pieces of metal together by heating the surfaces to the point of melting and then pressing them together.

Nature Journal Pages

We created these pages for you to take out on your Arboretum nature walks. Find a place in nature to sit, write, and sketch what you see.

Many famous artists have worked this way throughout history, particularly in the French school of painters. These artists preferred to work outside of their studios and paint in the natural world amongst nature. This term is called '**en plein air**' which is French for "in the open air."

Enjoy your journal activities, and as you are drawing and writing, make sure to be in tune with all your senses. You can print as many journal pages as you like! The sculptures of *Canopy Understories* will be on view for one year, so you can visit many times. We hope that over the year, you will fill up these pages with notes, sketches, poems, paintings, photos, drawings and pressed flowers and leaves as a record of your experience.

We would love to see your creations. Please share and post them #canopyunderstories and tag us @madisonpublicartproject

My Nature Journal



Name: _____

On today's walk...



I SAW...



I TOUCHED...



I SMELLED...



I HEARD ...



MY NATURE JOURNAL



TODAY'S OBSERVATIONS

1. _____
2. _____
3. _____

WHAT I SAW, HEARD, & SMELLED

1. _____
2. _____
3. _____





My Nature Journal

Use this page to record your observations as you visit the Arboretum in different seasons. What do you notice about the lighting, shadows and colors you see around you? Draw pictures and record your observations in each season.

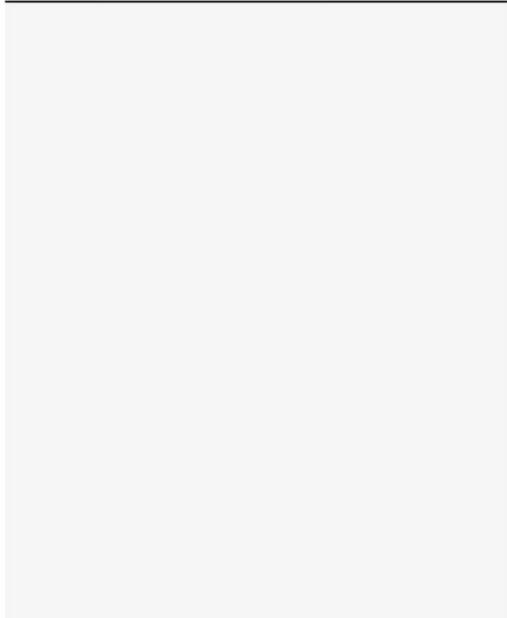


My Nature Journal

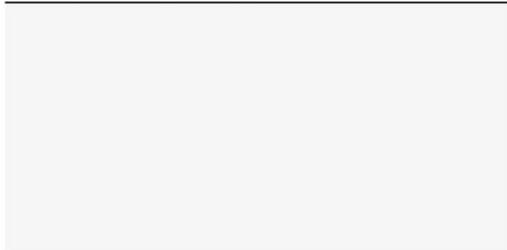
DATE

TODAY I NOTICED...

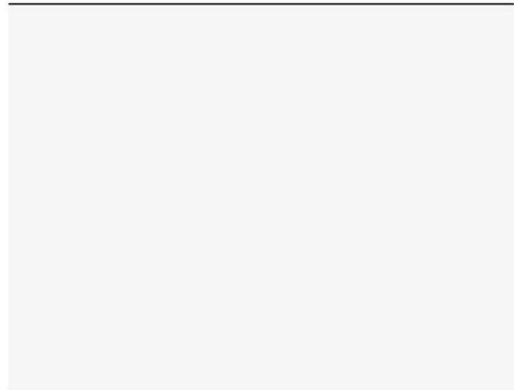
MY FAVORITE LEAF. DRAW HERE:



WHAT I WANT TO REMEMBER
ABOUT MY WALK:

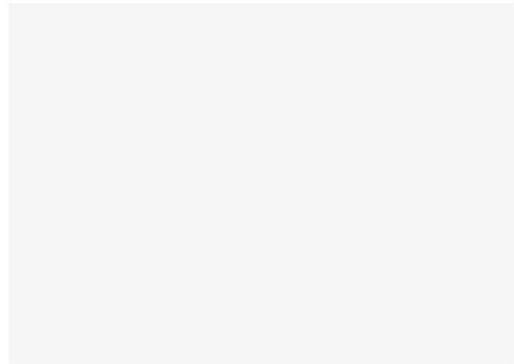


DRAW A PICTURE ABOUT TODAY:



FOUR DIFFERENT THINGS WERE:

DRAW A PICTURE OF AN ANIMAL
YOU SAW TODAY:



STAY CONNECTED!

Join us for upcoming nature walks and other exciting news. We will be hosting artists talks, with artists Laura Richards and William Grant Turnbull, led by Jillian Talarczyk, President of Madison Public Art Project.

Stay connected with the Madison Public Art Project on social media for updates on our upcoming events.

Instagram [@madisonpublicartproject](#)

Email info@madisonpublicartproject.com

To register your school group to visit Canopy Understories please contact Jennifer Mitchell at Jennifer.Mitchell@wisc.edu to coordinate the bus drop off and location specifics for your visit.

If you are experiencing financial hardship and are unable to print these materials or bring your own art supplies, please check out a backpack from the Visitors Center Information Desk with the materials included to enjoy your experience during your visit.

*while supplies last

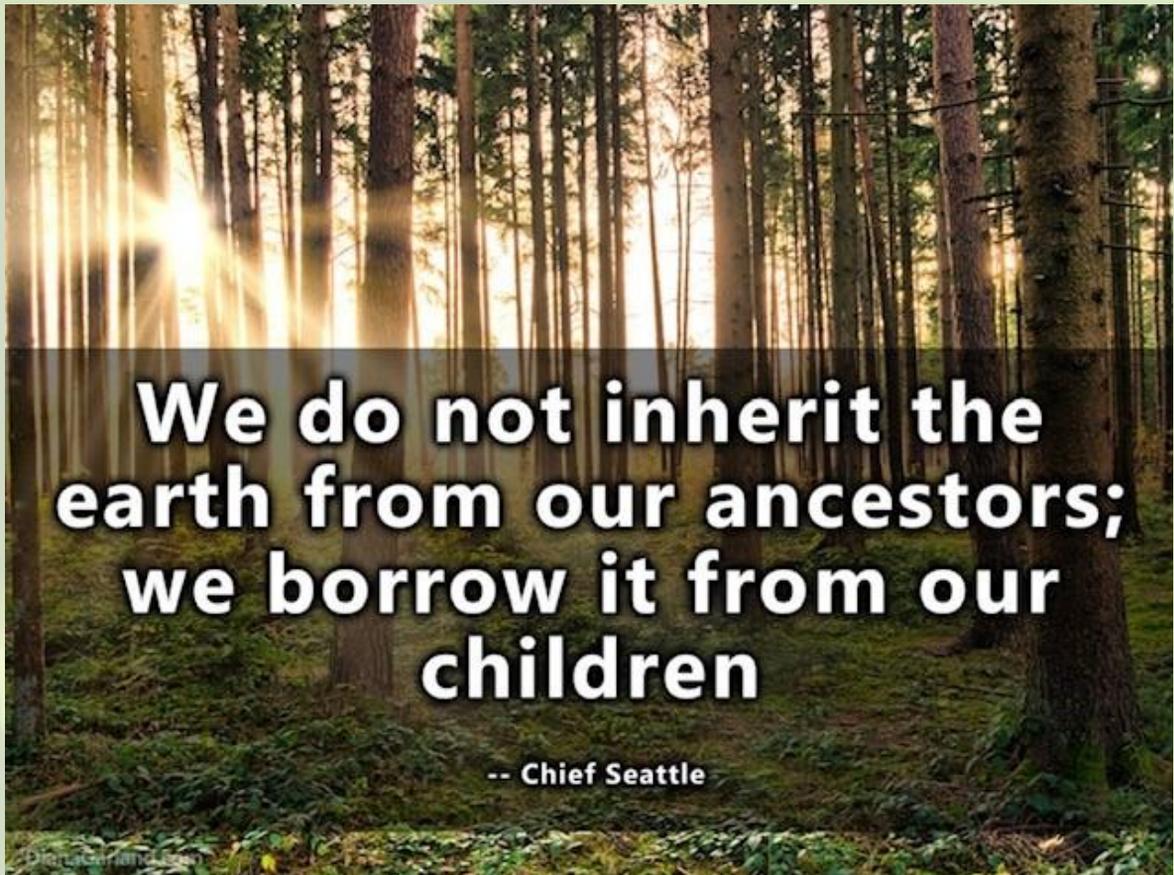
MORE INFORMATION LINKS

Further information & research links on the species found in the *Canopy Understories* Project can be found here.

To find more information on the Mayapple species you can visit:

<https://hort.extension.wisc.edu/articles/mayapple-podophyllum-peltatum/>

QUOTE INSPIRATION



**We do not inherit the
earth from our ancestors;
we borrow it from our
children**

-- Chief Seattle

DONATE TO SUPPORT

Projects like this require public support. Please consider a tax-deductible donation today!

