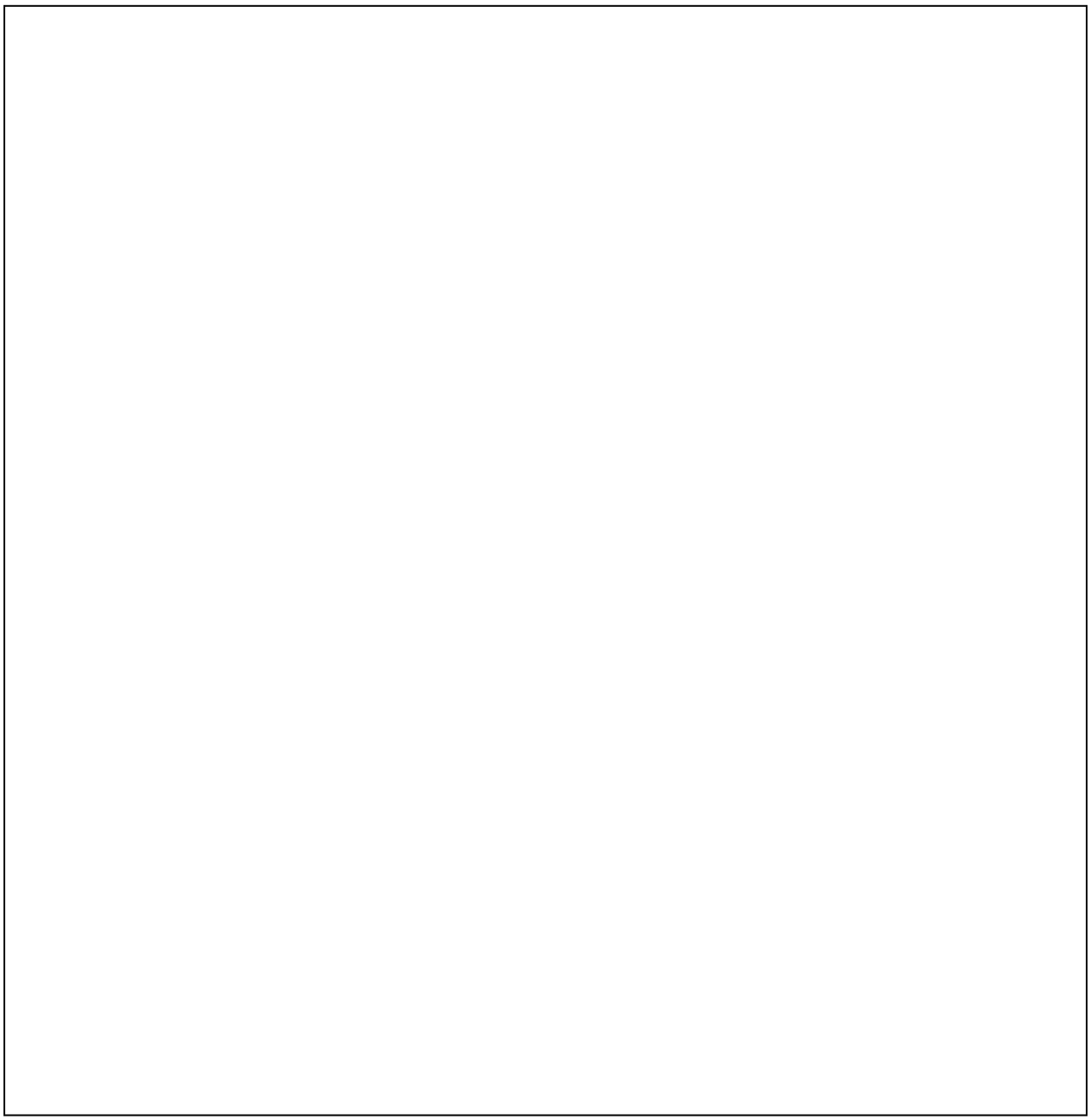
WHEATONARTS

AND CULTURAL CENTER



Draw a self-portrait in the box above!

Activity & Guide Book

wheatonarts.org

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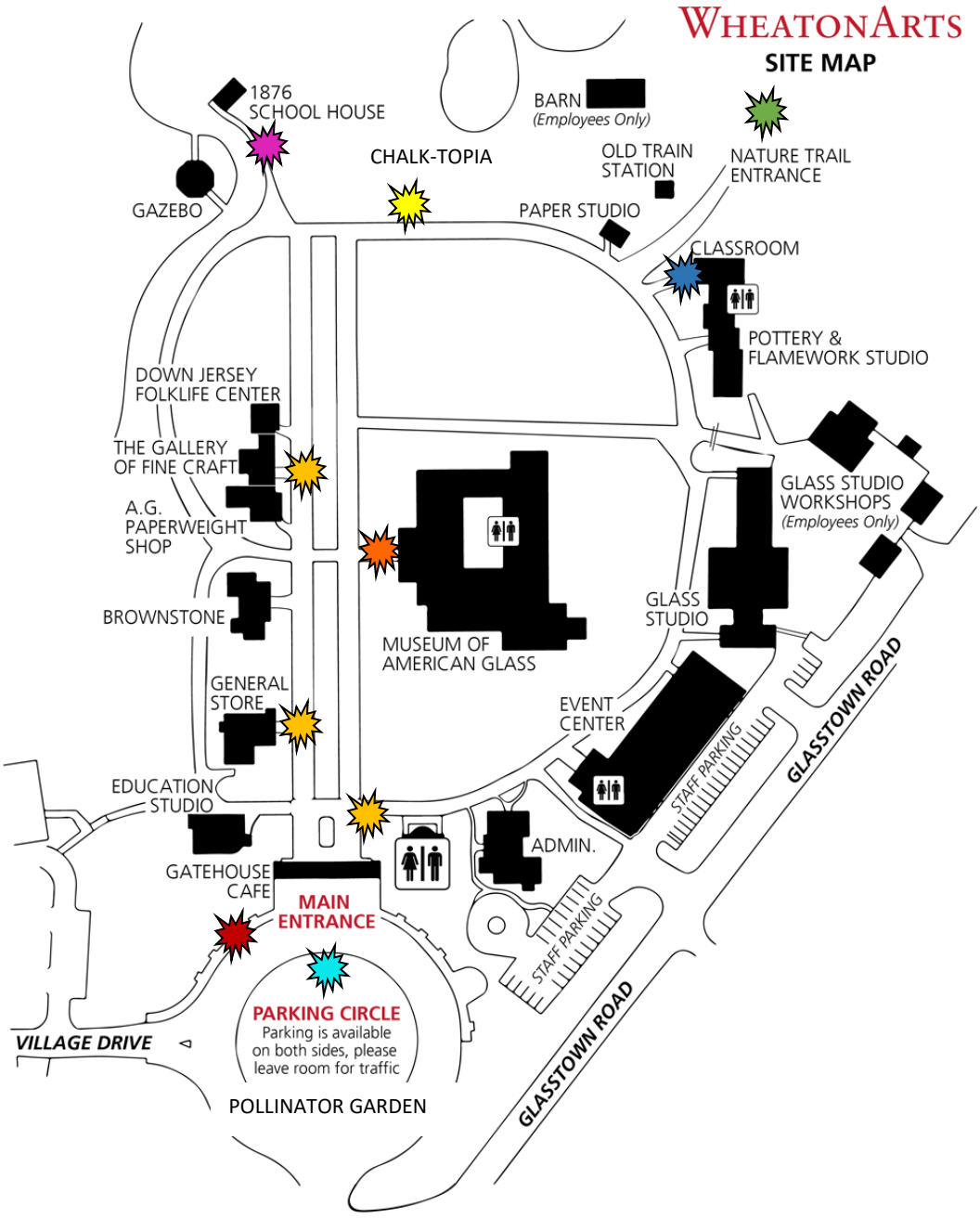


VISIT THESE AREAS TO FIND A FAMILY ACTIVITY!

- **Games on the Green:** Bubbles, sidewalk chalk, hula hoops, and fun yard games!
- **Reading and Writing Corner:** Books and literacy work-sheets!
- **Magnetic Board and Chalk Board**
- **Family Art Table**: Enjoy a variety of art supplies!
- **Nature Trail:** Walk the trail and complete a nature hunt!
- **Chalk-Topia:** A chalkboard haven, designed by our Teen Arts Council!
- **Discovery Garden:** Explore and discover plants and bugs!
- **Pollinator Garden**
- **Self-Guided Museum Gallery Activities**
- **Little Free Library:** Take a Book, Leave a Book. (littlefreelibrary.org)

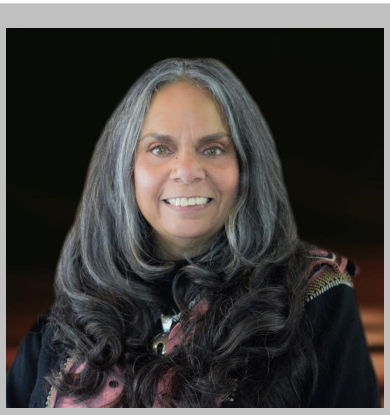
Letterboxing: Various Locations Scavenger Hunt (letterboxing.org) Clue sheet on page 38 & 39.

NANTICOKE LENNI-LENAPE

The land upon which WheatonArts resides is part of the traditional territory of the Lenni-Lenape, called "Lenapehoking." The Lenape People have lived in harmony with one another upon this territory for thousands of years.

During the colonial era and early federal period, many were removed west and north, but some remain among the continuing historical tribal communities of the region.

We acknowledge the Lenni-Lenape as the original people of this land and their continuing relationship with their territory. In our acknowledgment of the continued presence of Lenape people in their homeland, we affirm the aspiration of the great Lenape Chief Tamanend, that there be harmony between the indigenous people of this land and the descendants of the immigrants to this land, "as long as the rivers and creeks flow, and the sun, moon, and stars shine."

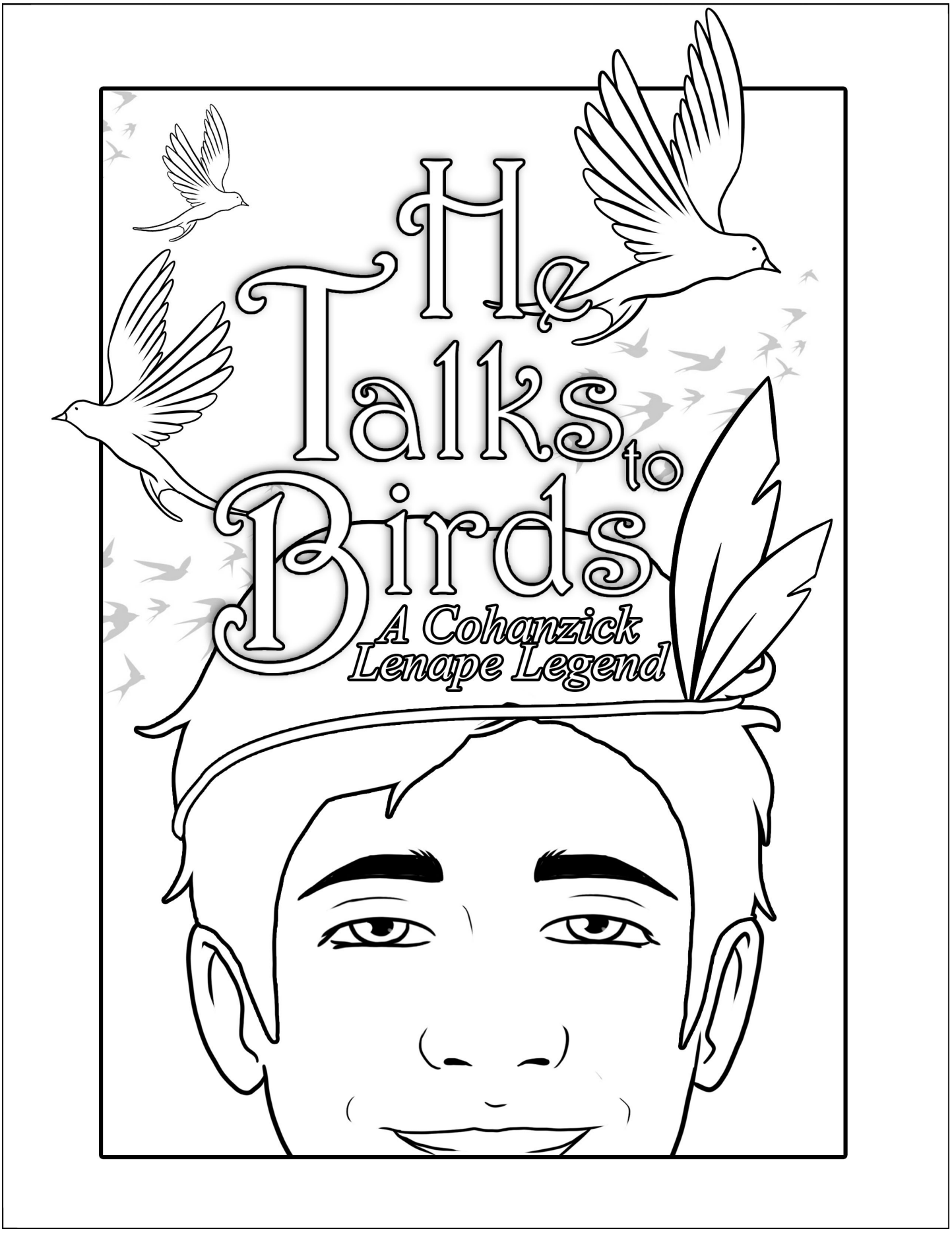


Tyrese "Bright Flower" Gould-Jacinto

The activities on the following pages were provided by Tyrese "Bright Flower" with permission for reproduction in this booklet. The activities are centered around a story, written by Tyrese, titled *He Talks to Birds*. Tyrese "Bright Flower" offers imagination that brings the past to life in the Cohanzick Lenape Inspirational and Children's Books.

Bright Flower wrote several books, including *Seek the Better Place*, *Tale of the Turkeys' Detailed Tail*, *The Creator's Great Soup*, *The Blossoms of Bright Flower*, *The Wishing Doll*, *Whisper Wind Song*, *He Talks to Birds*, *Precious Cohanzick Lenape Crabs*, and others, including, *Cohanzick Lenape Village Tales Coloring Books* to include her people in the history of New Jersey for the future generations.

To learn more about Tyrese visit her website: www.tygouldjacinto.com


He Talks to Birds
A Cohanzick Lenape Legend

He Talks to Birds

A Cohanzick Lenape Legend

By Tyrese "Bright Flower" Gould Jacinto

Edited July 2, 2024, Especially for WheatonArts, with full permission to use without monetary rights. The book can be purchased at: www.TyGouldJacinto.com

LENAPE PRONUNCIATION GUIDE
www.talk-lenape.org

English: birdhouse
Lenape: chulènsikaon chu-lurn-see-kown

English: bird
Lenape: chulëns chul-nas

English: mosquitoes
Lenape: punkwsàk poonk-sock

English: song
Lenape: asuwakàn as-su-wan-kank

English: gourd
Lenape: shuhokhàkw shu-ho-kock

English: cornstalk
Lenape: sipakòn see-pa-kone

English: grandmother
Lenape: uma oo-ma

Illustrated by: Arnild C. Aldepolla

There is a famous Lenape legend named Sipakònàk. When Sipakònàk was born, his mom said that he was long and skinny and reminded her of a sipakònàk which means cornstalk.

They live in the Cohanzick Lenape village along the river and near the bay and streams. This village had many animals and chulëns, which are birds in Lenape, and they and the Lenape lived in harmony.

Sipakònàk was twelve years old, and in the Lenape Cohanzick village, all the young boys learned how to hunt at that age. The boys throw stones and sticks as a part of their training when they are young.

There are many methods they must learn; there is a stick to hunt rabbits and rocks used to hunt small chulëns like the grouse and pheasant and large chulëns like turkeys and ducks.

Hunting is very important to the Cohanzick Lenape, and each young man must learn the techniques, as small as throwing stones and small branches, so they will be able to hunt large animals like the deer and bear as they get older.

They are taught how to use spears and bows, and arrows. It is essential for all the young men and women to learn how to survive and be an intricate part of the Cohanzick Lenape village.

Sipakònàk was not interested in learning to hunt and wanted to sit by a favorite oak tree. He liked to watch the chulëns and their beautiful formations when they flew. He seemed to be able to communicate with them and they with him.

As he sat by the tree, he thought to himself that he had no desire to chase animals for food. In fact, Sipakònàk just loved to be with the chulëns.

Sipakònàk's Uma, which is Grandmother in Lenape, noticed that he was not with the other boys of the village. She tended to the area where they dry the shuhokhàkw, which are gourds in Lenape, to be used in the village.

Each shuhokhàkw carries its seed to be planted as it has been for thousands of years, and Lenape has learned to cultivate the seeds from the many various shapes that the shuhokhàkw have, and dry them in specific areas of the village.

Cohanzick Lenape are shuhokhàkw experts and grow shuhokhàkw for many different items, from cooking to decorations and regalia. Lenape shuhokhàkw are made into bowls, cups, and spoons. They can have straps to wear and hold water. Small shuhokhàkw are used as neck pouches to hold herbs for healing.

The shuhokhàkw are made into dolls for the girls and musical instruments and rattles. They are used as fishing floats and colorful decorations to hang around the hut.

Uma went to look for Sipakònàk. She found him under a large oak tree and told him to get up, and it was time to learn.

She explained that this was practice and that he had to be ready to hunt with the bows and arrows when he became a man. These skills were a part of learning to be a man.

Sipakònàk did not want to go; he loved chulëns, he was friends with the little purple chulëns that flew in formation in the sky. He loved the asuwakàn, which is song in Lenape, they made as they danced all around him.

The little purple chulëns were not the chulëns that they ate, but he still didn't want to hunt. So, in a fit of anger, Sipakònàk stood up, grabbed a rock, and threw it across the village.

It just so happened that the rock hit one of the shuhokhàkw that the grand-mothers were tending to and made a giant hole in the shuhokhàkw's side. The shuhokhàkw are very important to the Lenape.

They grow for the summer but must be dried for two years before they can be made into any object. This process means that the shuhokhàkw are handled with great care and love.

Uma was highly disappointed with Sipakònàk at what he did. She was so upset and yelled, "I am going to tan your hide"! That is a huge deal when Uma says this.

She grabbed Sipakònàk's arm and took him to the shuhokhàkw patch and showed him the hole in the shuhokhàkw that was created by him throwing a rock in a fit of anger.

When Uma brought Sipakònàk to show him his hole in the side of the shuhokhàkw, Uma explained to him that because the hole he created is in the side of the shuhokhàkw, which has been drying for two years, now there is no use for that shuhokhàkw.

Uma commanded Sipakònàk that he must now go and reflect on his mistake. He must take that shuhokhàkw in his hands and analyze what he has done.

Sipakònàk sat by his oak tree as he was distraught at himself and what he had done to the shuhokhàkw in his hand and thought, now what can I do with this shuhokhàkw that I have destroyed?

As he sat by his favorite tree, he was sad and depressed that there was nothing that he could do with a shuhokhàkw with a hole in its side.

A few hours went by as he sat there sulking by his oak tree. Suddenly, he heard a little noise, and as he looked up, he saw a small chulëns that was frantically crying. Sipakònàk had a special connection with chulëns that he actually heard why she was crying.

She could not find a hole to make her nest!

This bird is a purple martin, and a type of chulëns from the Cohanzick Lenape Village flew in symmetrical circles and was very amusing to watch.

Each spring, all the chulëns would migrate north and live in this village. By the end of the spring, they would have their nest made so they could lay their eggs.

This type of chulëns would make its nest in holes in the trees that were created by the woodpecker or naturally made by nature and lay their eggs.

This chulëns, as she migrated from the long journey north with her husband, was separated from her flock and was separated from her husband. She looked around all the villages, yet she could not find him anywhere.

It was almost time for her to lay her eggs, and she had no nest in which to lay them. She cried and was going to give up because she could not find a place.

So Sipakònàk told her that he would help her find a hole so that she could make a nest and lay her eggs. He quickly rose from his oak tree, carefully hung his broken shuhokhàkw on a rope on a branch in the tree, and he looked all around the village.

He even looked around outside of his little village. He spent many, many hours looking for an empty hole for his new friend to lay her eggs.

He was unsuccessful; he could not find a hole, so he sat back down under his oak tree and was deeply sad and depressed again.

This day was not going well. As he sat there, he noticed that he could not find his new friend, making him even sadder and worried.

All of a sudden, he heard a noise above his head. He looked up he saw something moving inside of his shuhokhàkw that was hanging in the tree. He just thought himself, now what am I going to do?

I do not know what I can do with a shuhokhàkw with a hole in the side, and now something is moving inside the shuhokhàkw.Sipakònàk stood up, and he looked and was so surprised to see that his new chulëns friend was inside the shuhokhàkw. She had made a nest of twigs and straw from around the village and placed it inside of the hole of his shuhokhàkw.

Sipakònàk was so excited and thought to himself; I would've never have come up with that idea.

Sipakònàk was highly excited and said he must tell his Uma immediately. So, he quickly ran to get his Uma to show her what he had done with his broken shuhokhàkw.

Uma was filled with excitement and joy, and she said she would never have thought of a beautiful idea, as this home, for the little purple chulëns.

The little Purple chulëns are very important to the Lenape village. You see, they eat punkwsàk, which are mosquitoes in Lenape, and gnats, and since the Cohanzick Lenape Village was situated next to the river, there are plenty of bugs for the chulëns to eat.

Each late fall, they would migrate south where the temperature is warm and return to the Cohanzick Lenape Village in early spring to lay their eggs.

So, from that time forward, Sipakònàk learned the skill and mastered shuhokhàkw. He made hundreds of elaborately designed chulènsikaons, which are birdhouses in Lenape. He used dyes and etched designs with stones and made the hole just the right size for the little purple chulëns.

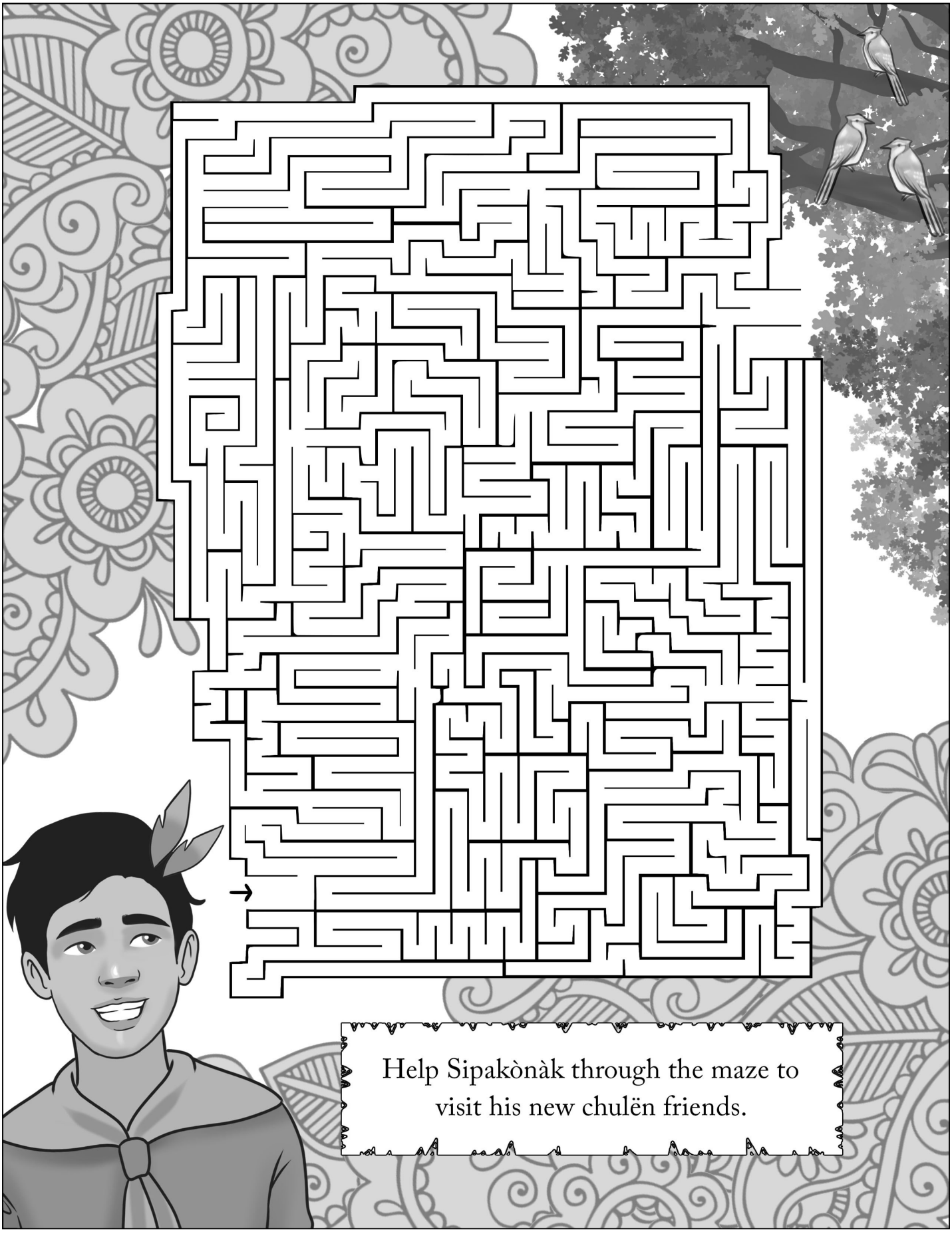
Each chulènsikaon was different and beautiful. He hung them all around the village, and the chulëns no longer had to search for leftover holes left by other birds to lay their eggs.

Each year Sipakònàk waited for his purple friends to return to their new homes. Sipakònàk made chulènsikaons for all the purple martins every year.

He showed others around the village how to make them with elaborate designs made from dyes, hung feathers, and even gave them to other villages for their purple chulëns that came each year.

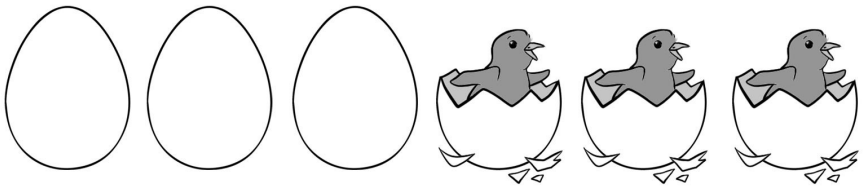
We use purple martin chulènsikaons in all of this continent and all around the villages so the purple martins can migrate north, make their nest, and lay their eggs to reproduce many chulëns to eat punkwsàk and bugs that live in the village.

Sipakònàk is now known in all of the lands as the one who created and saved the purple martin chulëns by making them their very own chulènsikaon.



Help Sipakònàk through the maze to visit his new chulën friends.

Some of the eggs have been hatched! Sipakònàk wants you to solve the subtraction problems below. Write your answers on the blanks.



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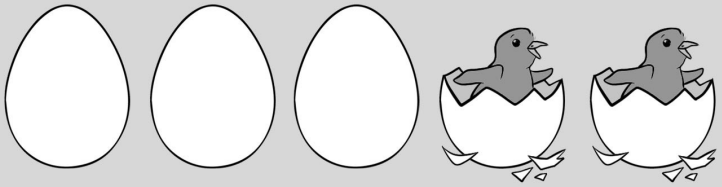

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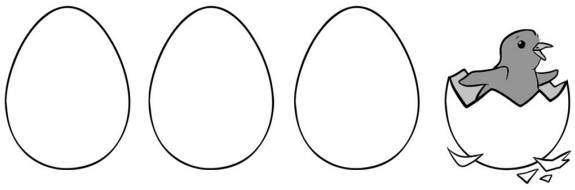

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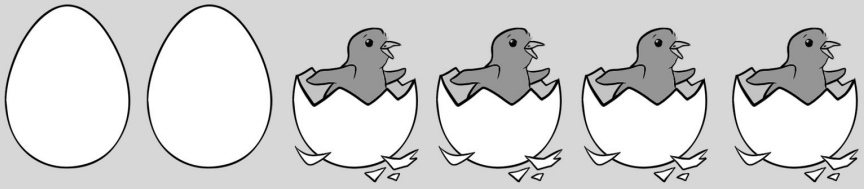

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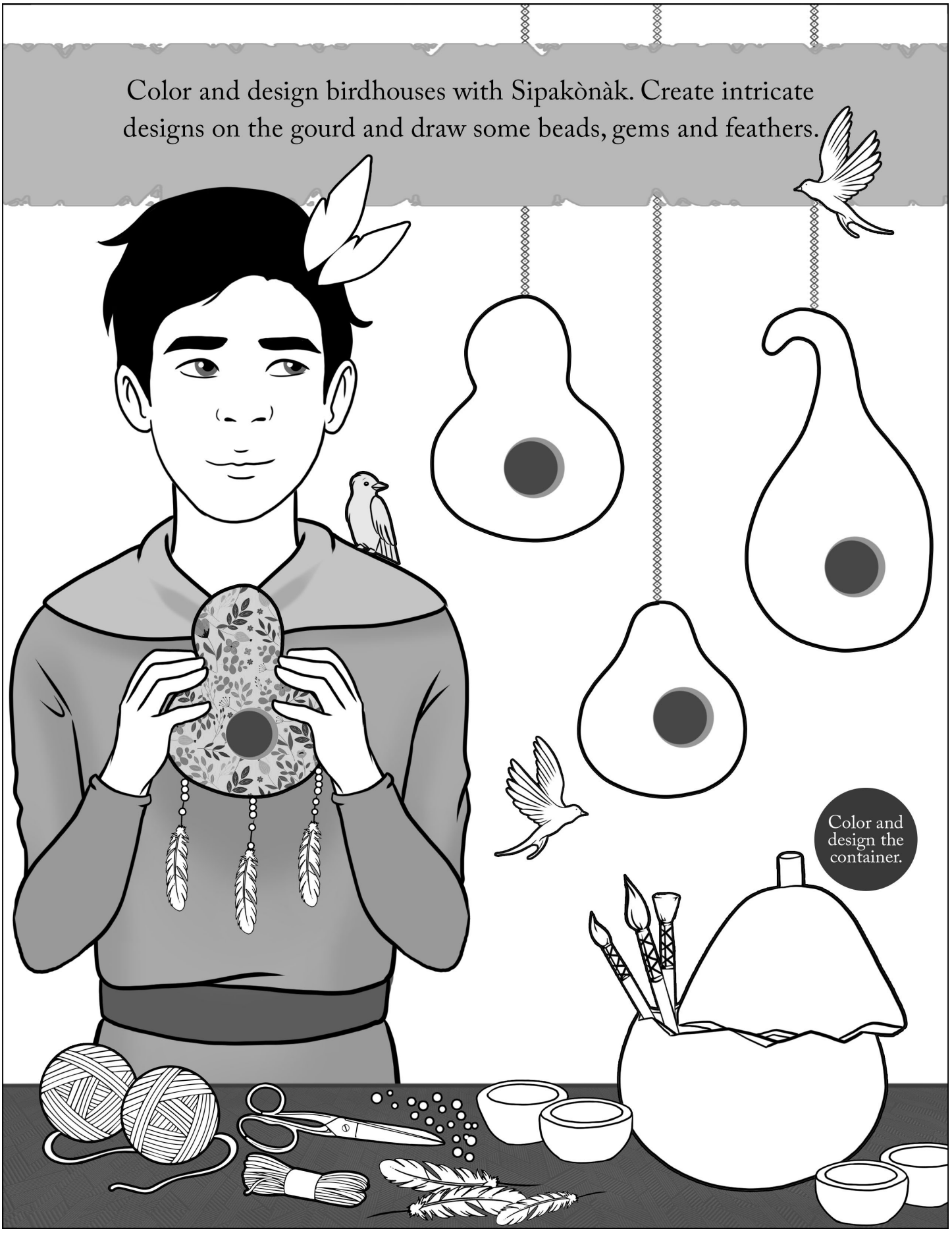
Color and design birdhouses with Sipakònàk. Create intricate designs on the gourd and draw some beads, gems and feathers.



bird	punkwsàk
gourd	chulènsikaon
song	chulëns
mosquitoes	sipakòn
birdhouse	shuhokhàkw
cornstalk	asuwakàn

Have you read
He Talks to Birds *book?*
Let's test your memory,
draw a line to connect the
english word to its
lenape word.

ANSWER KEY:
bird-chulëns, gourd-shuhokhàkw,
song-asuwakàn, mosquitoes-punkwsàk
birdhouse-chulènsikaon, cornstalk-sipakòn

GLASS ITEMS AT HOME

How do you use glass in your daily life? Make a list of all the items in your home that are made of glass. Think about the way you begin your day, through breakfast, getting ready for school, and spending time with your family.

	Item	How is it used?
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____

COLLECTING

A museum is distinguished by a collection of often unique objects that form the core of its exhibitions, education, and research. The museum at WheatonArts collects American glass objects and artwork made from the 1700s to the present day.

What do you collect and why? What makes your collection special?

_____

_____

_____

Draw a picture of your favorite thing to collect:

GLASS MUSEUM VOCABULARY

What is that? What does that mean? Use this vocabulary list to look up terms you hear during your visit

Art Glass
Decorative, usually free-blown, colored glassware made between 1875-1900. New techniques were used to imitate ceramics, precious stones, or other materials. Some of the most popular Art Glass gradually shades from one color to another, features exotic shapes and motifs, or has unusual surface textures.

crystal
Colorless glass containing lead oxide. Lead glass has a high refractive index; the way it bends light makes it very brilliant and creates "rainbows" when cut in decorative patterns.

cut glass
glassware that has been decorated by carving a design into the surface using large rotating wheels. The glasscutter holds the glass "blank" between their body and the wheel, pushing and turning the glass to make the desired cuts. Using wheels made of iron, stone, wood, and sometimes cork, the process progresses from roughly cutting, to smoothing, then polishing the design.

iridescence
A rainbow-like effect on the surface of glass that changes when viewed from different angles. In American decorative glassware, this is usually achieved by adding metallic substances to the batch or spraying the outer surface of the object with stannous (tin) chloride and reheating it in a reducing atmosphere.

lily pad glass
Blown glass hollow wares such as bowls, pitchers, and vases with extra glass around the lower portion that has been tooled, while hot, into a design resembling water-lily pads on stems.

mold-blown glass
Glassware created by inflating a gather of molten glass in a mold. The glass is forced against the inner surfaces of the mold via graity and air blown through the blow pipe. Full-size molds give the object its shape. Part-size molds, also called optic molds, create simple patterns like diamonds or ribs on the glass, which is then further inflated and shaped by the glassblower.

paperweight
A small heavy object used to hold down loose papers. Glass paperweights usually have small glass elements or an image encased in a thick layer of glass. The outer glass magnifies the details on the inside.

pressed glass
Glassware formed by forcing hot glass into a metal mold using a plunger. This technique is used to create an object's shape and surface decoration at the same time. The side opposite of the decorative surface is smooth. This mechanical technique was first used in America between 1825 and 1830.

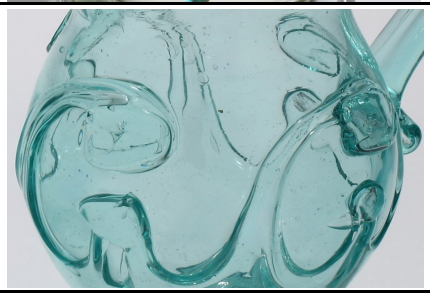
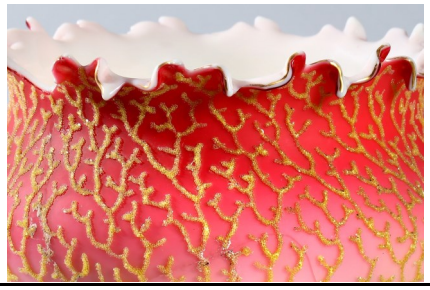
studio glass
A term popularized in the 1960s for unique, or limited-edition, functional objects and artwork designed and made in a studio rather than a factory. The designer and maker may or may not be the same person.

Whimsy/whimsy
An object made by a glassworker on his own time, usually between shifts or at the end of the day to use up the molten glass that remained in the pot. Glassblowers sometimes made whimsies to demonstrate their skills and impress factory visitors. Whimsies could be taken home, gifted, bartered, or sold.

GLASS MUSEUM VOCABULARY HUNT

As you go through the Museum, look for objects that represent or are related to your vocabulary words. Here are a few to get you started.

1. Each picture is a detail of an object in the Museum. Look carefully to find these and similar objects in the Museum.
2. Write the vocabulary word you think it represents.
3. Use the "Description of Connection" column to explain how the object you found relates to the definition. For example, for Art Glass you might write, "shades from yellow to red."

	Vocabulary Word	Description of Connection
		
		
		
		

REFLECTIONS: THE MUSEUM

What did you like about the Museum and why? What did you find interesting? What questions do you have? Use the space below to write or draw.

_____

_____

_____

_____

MUSEUM SKETCH PAGE!

Choose an artwork in the museum and spend time in observation. Consider the following questions:

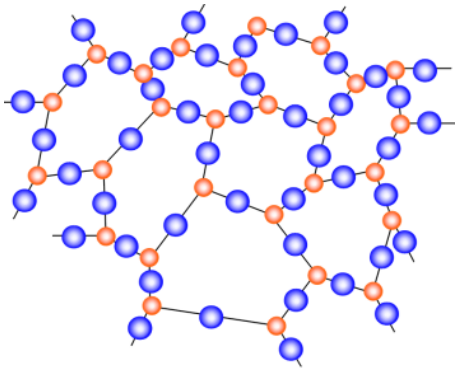
- What is the first thing you notice?
- How do the colors used affect the mood or feeling of the piece?
- What techniques has the artist used to draw attention to specific parts of the work?
- What emotions or thoughts does this piece evoke?

Sketching encourages close looking. Sketch your favorite piece of glass in the Museum of American Glass below:

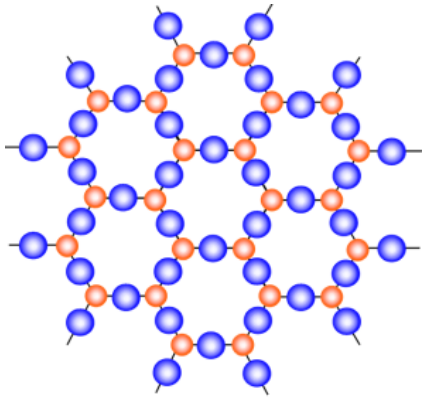
MAKING GLASS

Glass is an extremely versatile material that is commonly used for various types of vessels, windows, and optics. We see it everywhere, but it is not easily defined. Glass is neither a true liquid nor a solid, but shares the qualities of both. It is often called an amorphous solid, and some scientists even consider it a fourth state of matter.

Glass is made by heating a mixture of dry ingredients, called **batch**, to a viscous state, then cooling it fast enough to prevent a regular crystalline structure. As the glass cools and becomes hard like a solid, the atoms become locked in a disordered state, like a liquid.



Amorphous



Crystalline

Glass batch has three main ingredients:

1. **Silica** (silicon dioxide), found in sand, is the main component in glass. It requires very high heat to become viscous.
2. An alkaline flux is needed to lower the melting point of the silica. In historical glass, the flux is usually **soda ash** (sodium carbonate), derived from marine plant ashes, or **potash** (potassium carbonate), made by burning bracken and trees.
3. A stabilizer is needed because the first two ingredients are water soluble. **Lime** (calcium carbonate) is the most common stabilizer.

Batch is heated in a furnace to about 2,400 ˚F. Broken glass, called cullet, is added to the batch to facilitate the melting process. Sometimes the glass itself is referred to as the "metal." Other additives in the batch can change the properties and appearance of the glass, making it stronger, less reactive to heat, or opaque. There are thousands of different glass recipes.

Coloring Glass

The color of glass is determined by metallic oxides in the batch. Naturally occurring iron in the sand causes various shades of green, amber, and brown. Decolorants, such as manganese dioxide, are used to take the natural color out of the glass. However, it is very difficult to get all of the iron out of the sand. Common glass that appears colorless (clear) still has a subtle green or aquamarine tint visible in cross-section or in the thickest areas. "Artificial" colorants include cobalt for blue, manganese for amethyst, uranium for bright yellow, tin for opaque white, and gold chloride for ruby red.

GLASS BLOWING TOOLS

Bench
A glass worker's bench is most commonly a steel framed long armed chair with a wooden seat that extends beyond the arms on both sides. Below the arms are metal shields to protect the legs of the worker from the heat of the glass. The pipe with molten glass is placed on the arms and rolled back and forth to keep the glass in a smooth round shape while working it.

Blow Pipe
An iron or steel tube, usually four to five feet long, used for picking up glass on other end and blowing. Blowpipes have a mouthpiece at one end and are usually fitted at the other end with a metal ring that helps to retain the gather.

Diamond Shears
Special pliers with a sharp diamond-shaped opening for cutting Hot Glass Bits and, usually, a round opening at the tip for controlling punties, pulling glass, etc.

Jacks
A hairpin shaped tool with two metal arms joined at one end by a spring. The distance between the arms is controlled by the glassworker. All parts of the tool are used by skilled glass workers, but the blades get the most use: closing in the narrow neck of the piece on the pipe and working the opening of lips.

Marver
(French *marbre*, "marble") Metal, marble or graphite plate, most often steel, used for rolling glass to a cylinder or cone and chilling the surface to firm it for blowing.

Newspaper
Used for shaping glass when formed, wetted and held in the hand, to replace a marver, mold or block. The water keeps the paper from burning and the shape is controlled by the shape of the hand.

GLASS BLOWING TOOLS

Paddles
Boards with handles, made of fruit wood, usually cherry, or sometimes graphite or metal. Used for flattening glass and for shielding gaffer's arm.

Punty
A punty is a solid metal rod that is usually tipped with a wad of hot glass, then applied to the base of a vessel to hold it during manufacture. It often leaves an irregular or ring-shaped scar on the base when removed.

Torch
Most glass studios have at least one hand held torches. At the low end are propane braising torches. Some studios use an oxy-gas or acetylene torch, which are much hotter, for melting work and have spaces piped for gas. The torch is used for heating parts of the pieces during a long working session.

Tweezers
Tweezers made for glass working are long and wide spread and have bent in tips for fine gripping. They can be used as fine jacks when needed.

Wooden Blocks
Blocks are chunks of wood, with or without a handle, with a spherical hole in them, for shaping and cooling the outside of the glass before it is inflated. All wood that touches the glass is soaked in water until it is water logged (sinks); once it is soaked, it must usually be kept wet or it will split on drying.

GLASS WORD FIND

Find all the glass studio terms in the puzzle below!

B F Q G H B Z H G H Y H W I B
Y B X P A Z D V E P V I U N E
I F N H A T A R F I U E Y B N
F L C P C P H V I N N J Q I C
U A H N S B E E M Q J P K S H
R M S F F J L R R N L W I A K
N E W G W A K O W P N Y K U Y
A T P L F J N Y W E R F S S Z
C Z A A D N V N B P I N N H Q
E D U S P O Y S E P I G D L C
Q X C S Z H H V I A R P H K U
N G D P U N T Y F L L M E T L
K W R F D M L W K G I I P J L
M A R V E R B X X T K C N Q E
Q X Z H H Q U D Y W L Z A G T

ANNEALING
BENCH
BLOWPIPE
MARVER
SILICA
PUNTY
PAPERWEIGHT
GLASS
FURNACE
GATHER
FLAME
CULLET

GLASS STUDIO VOCABULARY

What is that? What does that mean? Use this vocabulary list to look up terms you hear during your visit.

annealing
The process of slowly cooling a completed object in an auxiliary part of the glass furnace or in a separate furnace. This is an integral part of glassmaking because if a hot glass object is allowed to cool too quickly, it will be highly strained by the time it reaches room temperature. The glass may break, either as it cools or at some later date.

blowing
The technique of forming an object by inflating a gather or gob of molten glass on the end of a blowpipe to the desired size.

cullet
Scrap glass intended for recycling

flux
A substance that lowers the melting temperature of another substance. A flux is added to the batch in order to facilitate the fusing of the silica. Fluxes are also added to enamels in order to lower their fusion point to below that of the glass body to which they are to be applied. Potash and soda are fluxes.

frit
Chunks of broken glass the size of raisins to grape nuts; bigger than powder. Fritting (or sintering) is the process of making frit.

furnace
Place for melting glass, built of several kinds of high temperature (refractory) materials to hold the glass and hold in the heat without breaking down during the several months that furnaces usually run.

gather
A mass of molten glass (sometimes called a gob) collected on the end of a blowpipe, pontil, or gathering iron.

reheating chamber
A place for reheating glass, usually shop built from a barrel with castable or fiber or framed with bricks.

kiln
An oven used for firing pottery and casting glass

lampwork (or flameworking)
The technique of forming objects from rods and tubes of glass that, when heated in a flame, become soft and can be manipulated into the desired shape. Formerly, the source of the flame was an oil or paraffin *lamp* used in conjunction with foot-powered bellows; today, gas-fueled torches are used.

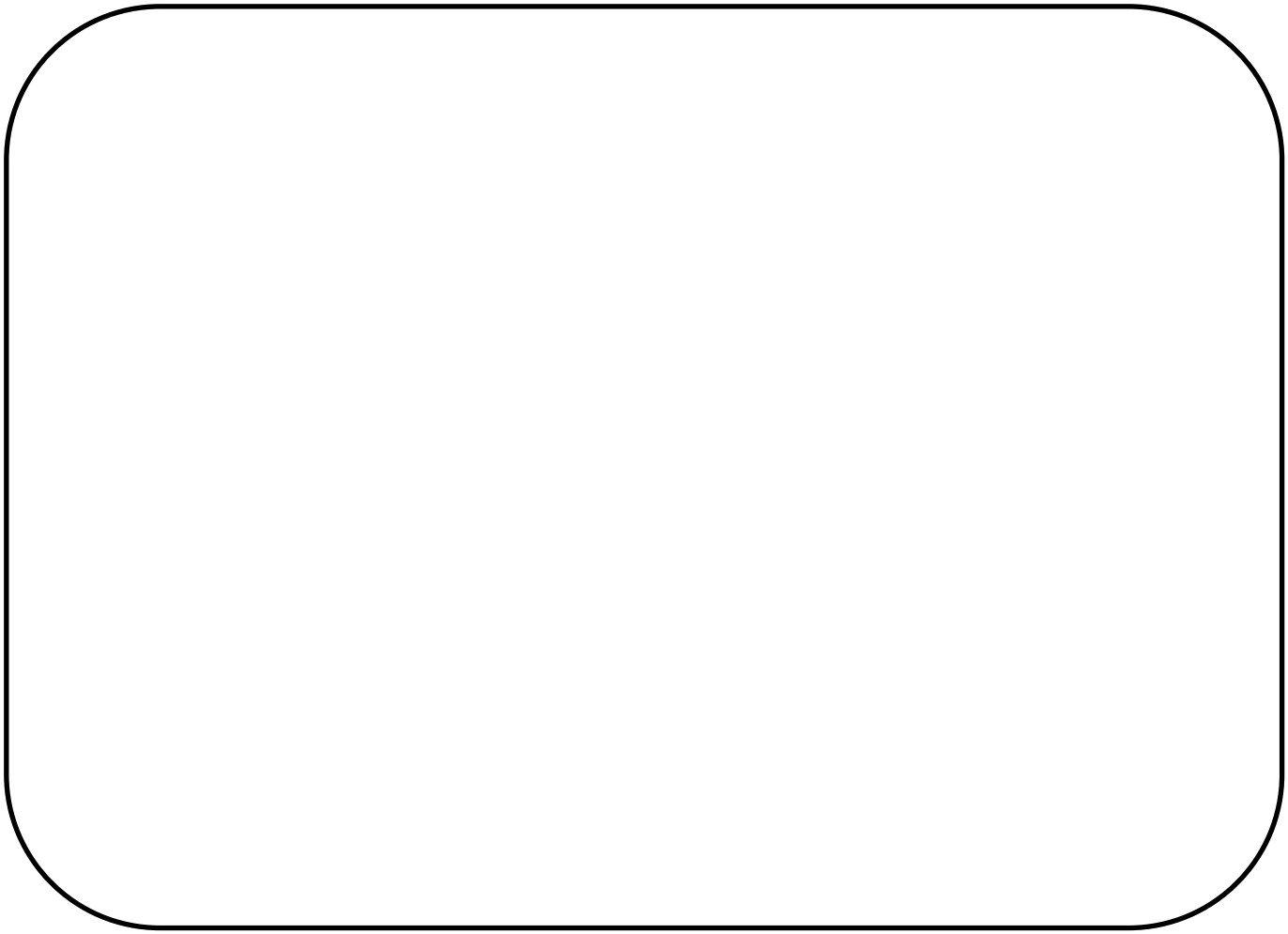
DESIGNING GLASS WITH CANE

Cane, thin rods of glass with color, is used to add colorful decoration to glasswork. Making and using cane is referred to as 'caneworking.' An ancient technique, caneworking was first invented in southern Italy in the second half of the third century BC, and elaborately developed centuries later on the Italian island of Murano. The generic term for blown glass made using canes in the lengthwise direction is *filigrano* (filigree glass), as contrasted with *murrine* when the canes are sliced and used in cross-section. *Murrine* can be made in infinite designs from simple circular or square patterns to complex detailed designs to even portraits of people. One familiar style is the flower or star shape which, when used together in large numbers from several different canes is called *millefiori*.

Design a glass vessel that uses cane or murrine.
How does the cane or murrine influence your design?

GLASS SKETCH PAGE!

If you made a blown glass object what would it look like? Draw your ideas below. Describe the piece of glass you designed. What color is it? Where would you put it in your house? How would you use it?



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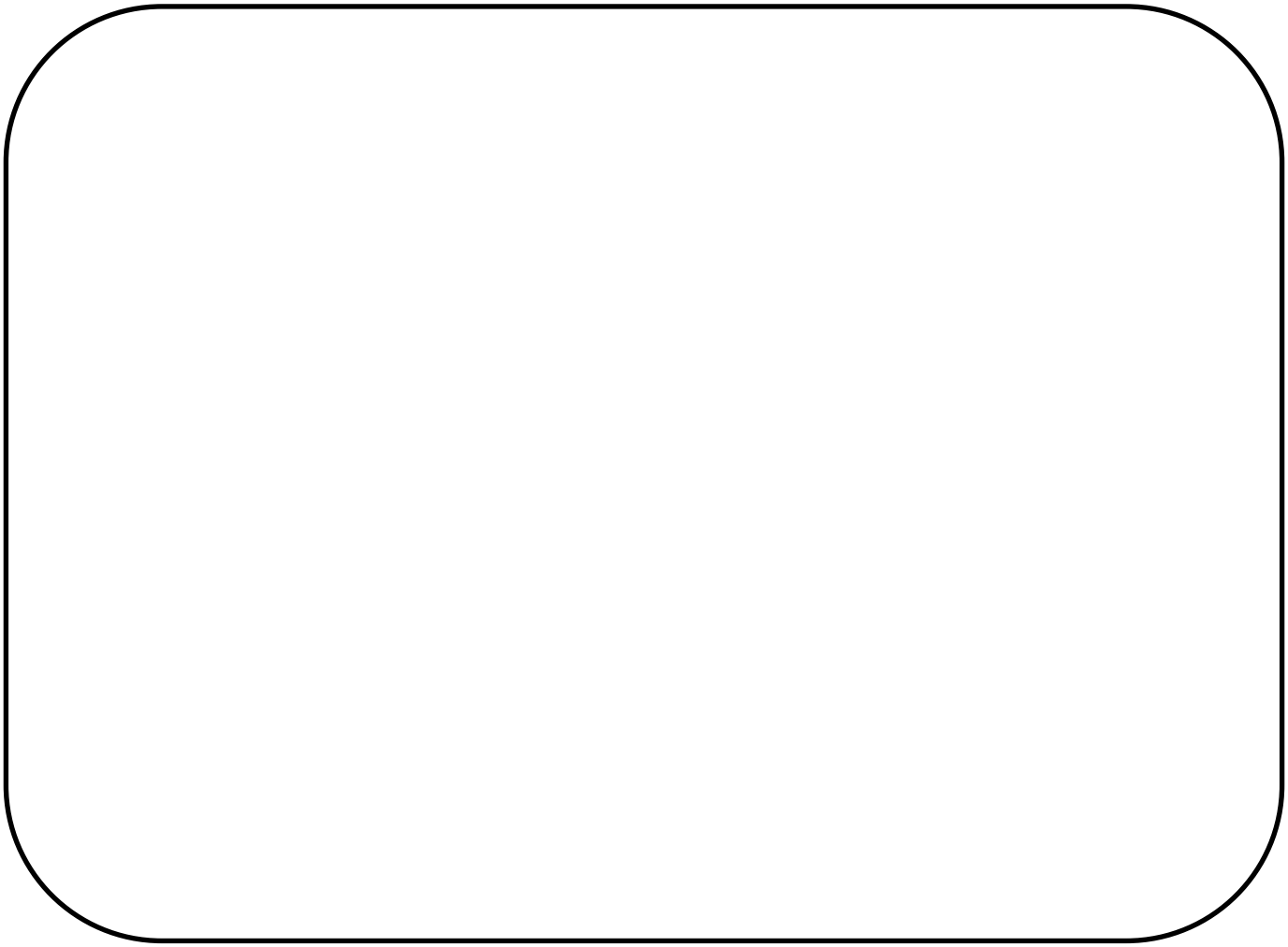
REFLECTIONS: GLASS STUDIO

Draw a picture of something you liked in the Glass Studio and write about it.



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HOW POTTERY IS MADE

Throwing on the wheel

Most of the pottery made at WheatonArts is made using the technique of throwing on the wheel. The speed of the wheel is controlled by a foot pedal and can spin at various speeds. Clay is attached to the wheel head and is shaped with hands or tools as it spins. After the pot is formed it is cut off the wheel to dry.

Bisque Firing

Many potters bisque fire pots to prepare them for glazing or other surface decoration. When the pots are finished and completely dry (bone dry) they are fired to a high enough temperature to make them hard and permanent. The bisque firing is not hot enough to fully vitrify the clay, which will happen during a later firing. One exception is some low-fire clays which can be bisque fired at a slightly higher temperature than when glaze fired. Many potters bisque fire to cone 04 (around 1945 ˚F).

Glazing

A glaze is a mixture of materials that, when fired, will melt and fuse to the clay, usually creating a glass surface. Many potters apply glaze to their pots to add color, texture, or functionality. Glaze, after reaching the proper temperature, usually becomes a hard, glassy surface on the clay to increase aesthetic properties. Some potters mix their glazes but commercial glazes can be purchased. Glazes can be applied by brushing, dipping, pouring, or spraying.

Atmospheric Decoration

When pots are fired, sometimes the air surrounding them carries chemicals that land on the pots in the kiln. These chemicals can melt onto the pot and often produce interesting markings, a range of surface textures, and incredible colors. Results are often more random than applying only glaze to the pot. Chemicals that can become part of a pot during firing include ash, soda, salt, smoke/carbon.

Firing

There are numerous ways to fire pottery. The way that a pot is fired will be one of the main factors in the look of the finished pot. You could fire the same pot in two different kilns or even two different areas of the same kiln and get completely different results. The two types of kilns we use at WheatonArts are:

Gas Kilns- propane or natural gas, often used to achieve a reduction atmosphere.
Wood Kilns- most are larger than electric and gas kilns, heated by wood combustion.

Finishing the Pots

After the kiln has cooled and pots are removed sometimes there is a little extra work. Results don't always turn out as expected or the process can leave undesirable qualities on a pot. Sometimes a pot can be fixed or re-fired. Sometimes it is a lost cause.

POTTERY STUDIO TOOLS

Match the tool terms to the pictures below!

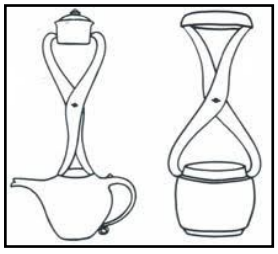
A. wheel
A potter's wheel is a machine used in the shaping of round ceramic ware (known as throwing). The wheel may also be used during the process of trimming the excess body from dried ware, and for applying incised decoration or glaze.

B. bats
A thin slab of wood, plaster, or plastic used to support pottery forms during throwing, attached to the head of the potter's wheel by clay body or "bat pins."

C. rib
A rib can help shape and smooth pots as they are being formed on the wheel. Ribs come in many different shapes and are usually made of hardwood, rubber, or metal.

D. calipers
A tool used to measure the diameter of round forms. Calipers are used to get lids to fit just right.

E. kiln
A furnace of refractory clay bricks for firing pottery and for fusing glass.



POTTERY STUDIO VOCABULARY

clay
A stiff, sticky fine-grained earth, typically yellow, red, or bluish-gray in color and often forming an impermeable layer in the soil. It can be molded when wet, and is dried and baked to make bricks, pottery, and ceramics.

slip
Clay mixed with water with a mayonnaise consistency. Used in casting and decoration.

salt glazing
A ceramic firing process during which salt is introduced into the kiln during the higher temperature portion of the firing cycle. Sodium from the salt reacts with the silica in the clay body to form a glassy coating of sodium silicate. The resulting surface is translucent and orange-peel-like in texture.

greenware
Unfired pottery. Ready to be bisque fired. The clay is soft.

leatherhard
Stage of the clay between plastic and bone dry. Clay is still damp enough to join it to other pieces using slip. For example, this is the stage handles are applied to mugs.

trimming
The technique of using a knife to pare away the surface of a pot; the effect was sometimes used decoratively such as to produce facets around the vessel or to create a 'foot.'

wedging
A method of kneading clay to make it homogenous (all the same throughout) by cutting, rolling, and pushing it with your hands.

porcelain
A translucent, white clay made kaolin, feldspar, and silicia.

pugging
Mixing of clay, especially in reference to mixing clay to recycle it for future use.

reduction
Firing with reduced oxygen in the kiln. Reduction firing typically is used to obtain mottled, rich, earthy colors, often the iron from the clay shows through and gives a speckled look.

stoneware
All ceramic wear fired between 2,100 and 2,300 degrees.

woodfire
Wood firing uses wood as fuel instead of gas or propane. In pit firing, a large hole is dug in the ground, wood and pots placed in, wood started on fire, and the whole thing covered with dirt to smolder. Pots are then dug out.

POTTERY WORD FIND

Find all the pottery studio terms in the puzzle below!

T P N G J B G S Y A L C K L G
D E K M O W R J V V C D E R N
G I A W V E N R S O W A N E I
Q N L P P N B B V T T D X F W
S S I I O B J Z X H J B H Q O
R T L M E T W W E D G I N G R
G A A E M Y Y R G X W S F N H
C B V B L I H X X M U Q A I T
Y K M M H A R J A W N U W E O
W M F W R G A T Z V V E D K M
C R B D C B Z X L P P K Y I D
Y I L H G D X L J D S Y F Q D
E R A W N E E R G V D F B Y Q
K V R P K E O B W B I P L L H
A Y A W P O K C Y T L K K G G

BATS
BISQUE
BOWLS
CALIPERS
CLAY
GREENWARE
LEATHERHARD
LIDS
TEAPOT
THROWING
TRIMMING
WEDGING

POTTERY SKETCH PAGE

If you made a ceramic object what would it look like?
Draw your ideas below:

FOLKLIFE CENTER

What is folklife?

"The everyday and intimate creativity that all of us share and pass on to the next generation."
– *The American Folklife Center at The Library of Congress*

"Folklore is the traditional art, literature, knowledge, and practice that is disseminated largely through oral communication and behavioral example. Every group with a sense of its own identity shares, as a central part of that identity, folk traditions–the things that people traditionaly believe (planting practices, family traditions, and other elements of worldview), do (dance, make music, sew clothing), know (how to build an irrigation dam, how to nurse an ailment, how to prepare barbecue), make (architecture, art, craft), and say (personal experience stories, riddles, song lyrics). As these examples indicate, in most instances there is no hard-and-fast separation of these categories, whether in everyday life or in folklorists' work."
– *The American Folklore Society*

View the current exhibit in the folklife center. Can you identify any similarities or differences between your own cultural practices and those depicted here?

Draw a picture that represents your family's cultural traditions:

LETTERBOXING

Letterboxing is an intriguing "treasure hunt" style outdoor activity. Letterboxers hide small, weatherproof boxes in publicly-accessible places (like parks) and post clues to finding the box online on one of several Web sites. However, clues to finding some of the most highly-sought boxes are passed around by word of mouth.

There are about 60,000 active letterboxes listed on LbNA alone. Individual letterboxes usually contain a log book, an often hand-carved rubber stamp and occasionally contain an ink pad. Finders make an imprint of the letterbox's stamp on their personal log book, and leave an imprint of their personal stamp on the letterbox's logbook.

SEARCHING FOR A LETTERBOX: While looking for a letterbox, remember to leave the area just as, or better than you found it. If you look under a rock, replace the rock where you found it. Don't pull out plants or rip up the ground looking for a letterbox. Avoid trampling vegetation while searching for the letterbox. Don't tear apart that stone wall that has withstood hundreds of years of time to find the box. Be discreet while searching if other people are around. You may need to postpone retrieving a box if you can't do it without being seen. Remember- not everyone is "letterboxfriendly" and you should not jeopardize someone else's letterbox.

FINDING A LETTERBOX: Carry it away from the hiding place when you stamp-in so as not to reveal the hiding place to passers-by, or to draw attention to what you are doing. Make sure you are discreet when unpacking the contents of the box and stamping-in.

RECLOSING A LETTERBOX: After stamping in, make sure the plastic bags are securely closed to keep moisture out. If there are 2 bags in the box, the logbook is what should be double-bagged since it has the most potential for becoming damaged. Rewrap the stamp in a paper towel. Make sure too that the lid of the container is snapped on tightly.

REHIDING A LETTERBOX: After finding a letterbox, rehide it as well as or better than you originally found it. Again, discretion at this time is very important. It is a good idea to cover the box with a handful of dead leaves, anchor the box with a flat rock so that an inquisitive critter can't run off with it, and then put a few more leaves or twigs on top so it looks natural to passers-by. Look at it from different angles before you leave to make sure no plastic is showing. Never leave a letterbox out in plain sight!

BE AWARE!

Letterboxing, like any outdoors activity, carries risks. Poison ivy, sumac and oak may obscure a letterbox hiding place; snakes or spiders may live in the same nooks and crannies where letterboxes are hidden; mosquitoes, deerflies or black flies may be in the woods. Be familiar with the LbNA Waiver of Responsibility and Disclaimer (http://www.letterboxing.org/lbna/tou.html) before you embark on any letterbox quest.

LETTERBOXING CLUE SHEET

LbNA #65041

*To begin the hunt you will need a **notebook or journal, pencil,** and **rubber stamp**.*

INSTRUCTIONS
***Step 1:** Follow the clues below to locate the 5 letterboxes on site.*
***Step 2:** When you find a box, use the stamp in the box to stamp your journal.*
***Step 3:** Take your stamp and stamp the log book. Write your trail name (or name) in the log book under the stamp you just made.*
***Step 4:** Return the box to the hiding place for others to find.*

CLUE #1
Where the artists' fires brightly glow,
Near the studio where glass can flow.
By a bush with blossoms grand,
Beneath the rhododendron,
Look on the sand.

CLUE #2
Learning and crafting, a perfect mix,
Find the sign marked by number six plus six.
Under the mosaic, art to be seen,
Your treasure awaits, where colors gleam.

CLUE #3
A place of history, goods once sold,
On the porch, stories of old.
Where shoppers rested, in days gone by,
Side porch hiding spot, give it a try.

CLUE #4
Where the path to nature begins anew,
Follow the trail as morning dew.
At the entrance, where journeys start,
Your prize is hidden, take heart.

CLUE # 5
In a garden where blooms attract,
Find the oasis, a circle intact.
Behind the sign where the pollinators play,
Your box is hidden, not far away.

To learn more about letterboxing and sign up for a Trail Name visit letterboxing.org.

THE FLORA AND FAUNA OF WHEATONARTS

Visit three locations on our campus to begin your exploration of nature!

1. Pollinator Garden 2. Discovery Garden 3. Nature Trail

*For a special treat, we recommend downloading the **Merlin Bird ID by Cornell Lab** app to your device to discover the birds flying overhead.*

The Discovery Garden (established and maintained by the Rutgers Master Gardeners) supports a variety of native and some non-native plants.

Can you find these plants? Note that the seasons affect the appearance of each plant. Some may be dormant (not active).

Wild Bergamot
(Monarda fistulosa)

____ Found it!

Sedum Stonecrop
(Hylotelephium spectabile)
Native to China & Korea

____ Found it!

Carolina Wild Petunia
(Ruellia caroliniensis)

____ Found it!

Lamb's Ear
(Stachys byzantina)
Native to the Mid-dle-East

____ Found it!

Tic-Tac-Toe

Visit the Discovery Garden and enjoy a game of tic-tac-toe using our tree stump tic-tac-toe board!

EN PLEIN AIR SKETCHING

Our pollinator garden greets you before you enter the campus. The garden, a collaborative project with CU Maurice River & WheatonArts, is Funded by the National Fish and Wildlife Foundation. This revitalizing project created a rain garden system and native plant pollinator garden to help protect the local drinking water supply while supporting pollinators & bird populations.

En plein air is the practice of creating art outdoors with the subject in full view. The term translates to "out of doors" or "in the open air." Take a moment to explore the garden. Sketch your favorite plants:

NATURE EXPLORATION

Go out into nature to play, explore, and learn!

How many things from this list can you find?

- ☐ Mallard Duck
- ☐ Frog
- ☐ Woodpecker
- ☐ Redbelly Turtle
- ☐ Bee
- ☐ Soaring Bird
- ☐ Butterfly or Moth
- ☐ Spider Web
- ☐ Moss
- ☐ Sprout
- ☐ Three Trees with Different Bark
- ☐ Flowering Tree or Bush
- ☐ Something Prickly
- ☐ Something Yellow
- ☐ Something Red
- ☐ Something Rough
- ☐ Something Living on Something Dead
- ☐ Something with Six Legs
- ☐ Hear Something Singing
- ☐ Something Scented

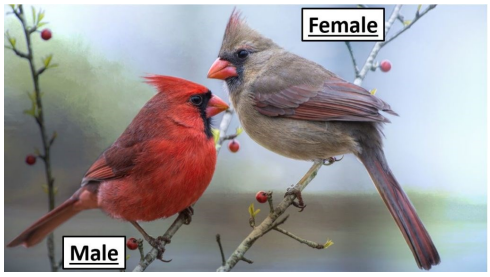
Can you find these birds?

Grey Catbird

☐

Cardinal

☐



Chickadee

☐

Please leave nature where it is. Do not pick flowers or leaves.

NATURE EXPLORATION

Find these on the grounds on WheatonArts:

Chimney Swift Tower

____ Found it!

Purple Martin Houses

____ Found it!

Rain Garden

___ Found it!

Take a walk down the nature trail and look for these native plants.
Hint: There are signs along the path indicating their locations.

Red Chokeberry

____ Found it!

Sheep Laurel

____ Found it!

Inkberry Holly

____ Found it!

Sweet Pepperbush

____ Found it!

TREE BARK RUBBING

A **rubbing** is an art technique that involves placing a sheet of paper over a textured surface and rubbing it with a crayon or colored pencil to create an image.

Can you find the following trees?
Create a rubbing of the tree bark in the corresponding quadrant.

Sweet Gum

Liquidambar styraciflua

Sassafras

Sassafras albidum

Black Oak

Quercus velutina

Mockernut Hickory

Carya tomentosa

JOURNAL ENTRY

What did you learn at WheatonArts? What interested you the most?

WheatonArts
AND CULTURAL CENTER

wheatonarts.org

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Millville, NJ 08332-1566
800-998-4552 or 856-825-6800

Large Print

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