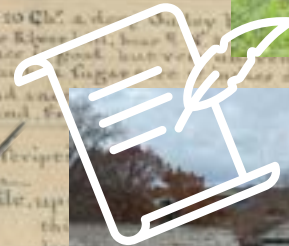
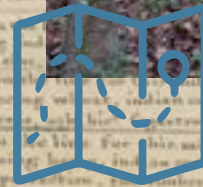


# OHIO

# Gateway of America's Westward Expansion

## 4TH GRADE STUDY GUIDE



This curriculum guide was generously supported by an America 250-Ohio grant.



Department of Natural Resources

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# THE HEART OF IT ALL WAS THE START OF IT ALL!

## Ohio's Important Role in America's Westward Expansion



Dear Educator,

As you bring the exciting story of Ohio's important role in America's Westward Expansion to your students, we hope you'll find the resources and information provided in this guide and on our website are both beneficial and fun.

As your students read the provided study guides (covering Key Topics and Historical Events) and use the accompanying worksheets and activities, we hope they will begin to understand how ideas and events from our past shaped Ohio and the United States today. A glossary of terms, maps, and images are also included to enrich learning.

Ohio's revised Learning Standards for Social Studies for grade 4 are supported by this curriculum guide. Here are the target benchmarks incorporated into this guide.

- Describe cultural patterns, such as exploration, colonization, and conflict, that are evident in North America today.
- Explain how new developments led to the expansion of the United States.
- Explain the reasons why individuals from various cultures traveled to North America and the historical consequences of these events.
- Provide examples of documents which specified the structure of the state and national governments of the United States, and how these documents foster self-government in a democracy.
- Use map elements and/or coordinates to locate physical and human features of North America.

If you have any comments or suggestions related to this guide, we encourage to email [naturalareas@dnr.ohio.gov](mailto:naturalareas@dnr.ohio.gov). We look forward to your feedback.

On behalf of the Ohio Department of Natural Resources' Division of Natural Areas and Preserves, thank you for considering these resources and applying them to your classroom curriculum.



# INTRODUCTION

## The Heart of it All Was the Start of it All!

After the Revolutionary War (1775 – 1783), when America gained its independence from Great Britain, the newly created U.S. government needed to raise money to support the new nation. One way to do this was to sell land from the Northwest Territory including the Ohio Country, which was the first region to be explored for new settlement.

Colonial surveyors crossed the Ohio River, at that time the most western edge of America, to measure, describe, and define sections of land in preparation for sale. As they walked along the terrain, they took notes about the natural resources, land features, and vegetation they observed. Surveyors were confronted by challenges as they explored the sometimes-difficult terrain including conflicts with Indigenous peoples. Ultimately, their work made Ohio the first state to be established during our nation's Westward Expansion.



## What's Inside This Guide

This curriculum guide is designed to support Ohio's revised Learning Standards for Social Studies for grade 4 and includes the following resources.

### Key Topics and Historical Events:

11 Historical Events are presented within four Key Topics: 1) Native Nations; 2) The Northwest Ordinance and The Northwest Territory; 3) A New Way to Map the Land; and 4) America's Westward Expansion.

### Study Guides:

Four study guides provide text and maps, images, and quotes to illustrate Historical Events, highlighting Ohio's unique role in this chapter of American growth.



### Worksheets (and answer key):

Four worksheets provide questions to support each student's grasp of the information and concepts.

### Key Topics to Consider and Discuss:

Questions are provided to expand thinking and encourage classroom dialogue.

**Hands-On Activity:** An interactive, team-based, student-driven outdoor activity transforms each student team into surveyors of the playground. Goals include understanding the role of a surveyor, creating individual and combined team maps using easily accessible measuring tools and simple math, and learning the importance of resource distribution and resource value to a community.

**Glossary of Terms:** Featuring terms used throughout the Study Guides

**Bonus Activities:** Coloring pages of Ohio's native wildflowers, word searches, word scrambles, and a crossword puzzle to reinforce concepts and vocabulary words.

## KEY TOPICS AND HISTORICAL EVENTS

### Native Nations

1. Almost 250 years ago the Ohio Country, *(an area of land that included parts of present-day Ohio, Pennsylvania, Indiana, West Virginia, and Kentucky)*, was home to many Native nations who called this land home, actively hunting, farming, and supporting their villages and local communities. They used rivers to travel across the land, supporting trade and economy.



### The Northwest Ordinance of 1787 and The Northwest Territory

2. Passed by the newly formed American Congress, the Northwest Ordinance of 1787 established the boundaries of the Northwest Territory—a large area of land transferred from Great Britain to the American colonies following the Revolutionary War. It included all land west of the Appalachian Mountains, south of Canada, north and west of the Ohio River, and east of the Mississippi River.

3. The Northwest Ordinance of 1787 offered guidance for settlers to govern themselves and provided a pathway to statehood for growing communities.

4. The Northwest Ordinance of 1787 also provided provisions for new states established in the Northwest Territory including prohibiting slavery, guaranteeing religious freedom and trials by jury, and protecting the legal right of inheritance for widows and children.

### Ohio Was the Start of it All - A New Way to Map the Land

5. The Ohio Country was the first land surveyed and opened for purchase and settlement in the Northwest Territory. The first area to be surveyed was called The Old Seven Ranges.

6. The Public Land Survey System was the system used to plat (measure, define, organize, and describe) the land. This system, which improved over the years, was used to organize the townships across most of the western United States, and it all started in Ohio.

7. The Public Land Survey System created townships that can still be seen on maps today. Land was measured into 1-square-mile sections, 36 sections made a township, and then the sections were sold (often sight unseen) at auctions in New York City.



### Ohio's Surveyors Set the Stage for America's Westward Expansion

8. As Teams of surveyors worked across the Ohio landscape, they were at times confronted by Indigenous peoples who considered the land their home, as well as American "squatters" from eastern states who had settled in the new territory illegally.

9. In 1786, Fort Steuben was built to provide surveyors with military assistance and protection. The reconstructed Fort and its blockhouses, officers' quarters, a hospital and store, blacksmith and quartermaster shops, and a guardhouse can be visited today in Steubenville.

10. The work of the 18th century surveyors was critical to opening the land west of the Ohio River for settlement. It set the stage for America's westward growth and the survey systems used resulted in land organization and mapping still seen today.

11. Surveyors found rich natural diversity and resources in the Ohio Country, including forests, wetlands, salt licks, prairies, rich soil, and a vast system of streams and rivers.



# NATIVE NATIONS

## Historical Event #1

1. **Almost 250 years ago the Ohio Country, (an area of land that included parts of present-day Ohio, Pennsylvania, Indiana, West Virginia, and Kentucky), was home to many Native nations who called this land home, actively hunting, farming, and supporting their villages and local communities. They used rivers to travel across the land, supporting trade and economy.**

## Native Peoples of the Ohio Country

Thousands of years before colonists arrived in North America, Native peoples flourished in the Ohio Country. Their cultures were complex and rich in tradition. Different Native communities sometimes lived closely together, and they adapted to changes in their homelands and relationships with flexibility. Native peoples built large communities with thriving towns, managed millions of acres of forested and farmed land, and used geometry and astronomy to build impressive earthen structures (like the Great Serpent Mound in southern Ohio). They also used rivers to travel long distances to visit each other and trade goods with people from other lands.

About 250 years ago, as the United States became a country, but before Ohio was yet a state, thousands of members of the Miami, Delaware, Shawnee, Wyandot, Ottawa, Seneca, and Potawatomi Tribes called this land their home.

## Native Peoples Managed the Land

Native people living in the Ohio Country in the late 1700s were highly skilled farmers. They understood the importance of growing food in a way that kept the land healthy and balanced. Like farmers today who grow

crops in a way that's good for nature, Native farmers rotated the plants they planted in fields each season, added nutrients to the soil, and understood that some plants grew better together.

A well-known example of this is the "Three Sisters" – which is a mix of corn, beans, and squash. Instead of planting only one of these vegetables in a field, Native people would plant all three together.

As they grew, each plant benefited from growing closely to the others. The beans absorb nutrients (nitrogen) from the air, and transfer it to the soil, which helps the corn and squash grow. As the corn stalks grow tall, the bean vines wind around the stalks for support. Finally, the big squash leaves cover the ground, keeping it moist and stopping weeds



*The Three Sisters* <sup>1</sup>





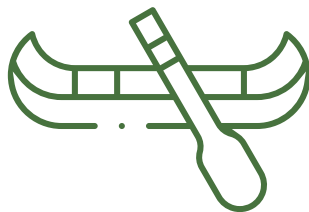
The map above shows where these Tribes lived at that time. Can you find Ohio within the white area? <sup>2</sup>

from growing. These three plants grow better when they are planted together.

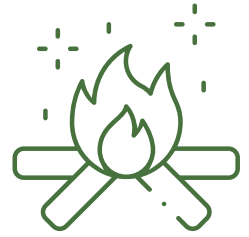
Then and now, native plants hold great significance in Tribal communities. In addition to being an important food source, they also provide medicines and materials for daily life. Native plants are also important to Indigenous peoples' spiritual beliefs and practices.

Rivers were very important to the Native nations who lived in Ohio. In addition to being the main way to travel using canoes, rivers were also important for farming.

Farm fields were often located next to rivers because when rivers flood (which happened regularly), the floodwaters enrich the soil, making it better for growing crops. River water was also used to water or irrigate plants during dry periods.



Fire was used as a tool to take care of the land. Indigenous peoples lit fires on their farmlands to clear fields quickly, which also made the soil better for farming. Fire was also used to open areas for hunting, and to maintain pathways for travel. Using fire in smart ways kept the landscapes clear, healthy, and productive.



## Celebrating the cultural resilience of Native Nations today

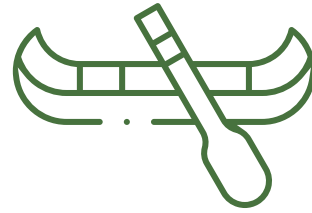
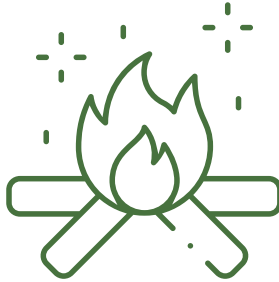
The Native tribes of the Ohio Country prospered until the arrival of Europeans seeking new lands and resources in the 1500s. This led to hundreds of years of battles for land, which ultimately resulted in the displacement of all Native tribes from Ohio. Many of these tribes were forced to relocate to different regions in the United States. This is a chapter of our nation's history that can be hard to think about, and it's important to take time to understand and learn from it.

Today, there are 574 federally recognized tribes in the United States, existing as sovereign nations. Alaska is home to 231, 139 are in California, 39 are in Oklahoma, and the remaining 165 are spread across the United States. Each tribe has its own leaders, laws, and traditions which exists alongside the framework of the United States. Tribal citizens are also U.S citizens who still live by their own unique cultures, histories, and ways of life that have been passed down for generations.

Many Indigenous people live in Ohio today, serving in all aspects of our state's communities. They are artists, teachers, doctors and mechanics. They serve in the military and are elected officials (like mayors and congresspeople).



# NATIVE NATIONS-WORKSHEET



1. True or False: No one was living in Ohio or using the land before colonists began settling the Northwest Territory in the 1780s.

\_\_\_\_\_

2. How did Ohio's Native nations manage the land in the 1700s? (select all that apply)

- Farming
- Using rivers for travel and farming
- Setting fires on purpose to clear the land
- Mining for coal

3. Select the plants that are the "Three Sisters"

- Corn
- Beans
- Squash
- Alfalfa

4. Give one example of why native plants were important to Native peoples:

\_\_\_\_\_

5. True or False: Members of Native tribes in the United States today are proud citizens of both the U.S. and their tribal nations.

\_\_\_\_\_



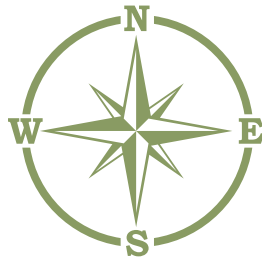
## NATIVE NATIONS-WORKSHEET ANSWERS

1. False
2. How did Ohio's Native nations manage the land in the 1700s? (select all that apply)
  - Farming
  - Using rivers for travel and farming
  - Setting fires on purpose to clear the land
  - Mining for coal
3. Select the plants that are the "Three Sisters"
  - Corn
  - Beans
  - Squash
  - Alfalfa
4. Examples:
  - Sources of food;
  - Sources of medicine
  - Materials;
  - Held importance in spiritual beliefs and practices.
5. True

# NORTHWEST ORDINANCE OF 1787 & NORTHWEST TERRITORY

## Historical Events #2-4

2. Passed by the newly formed American Congress, the Northwest Ordinance of 1787 established the boundaries of the Northwest Territory—a large area of land transferred from Great Britain to the American colonies following the Revolutionary War. It included all land west of the Appalachian Mountains, south of Canada, north and west of the Ohio River, and east of the Mississippi River.
3. The Northwest Ordinance of 1787 offered guidance for settlers to govern themselves and provided a pathway to statehood for growing communities.
4. The Northwest Ordinance of 1787 also provided provisions for new states established in the Northwest Territory including prohibiting slavery, guaranteeing religious freedom and trials by jury, and protecting the legal right of inheritance for widows and children.



## After the Revolutionary War the United States Needed to Raise Money

The American Revolutionary War (1775-1783) was a costly war, and after it ended the U.S. government needed to raise funds to support the growing nation. To answer this need, Congress decided to sell land to Americans who lived in the east and wanted to move westward to explore new opportunities and adventure.



*The Northwest Territory included the states of Ohio, Indiana, Illinois, Michigan, and Wisconsin, and part of Minnesota.<sup>3</sup>*

## U.S. Congress opens the Northwest Territory for sale

The Northwest Territory was a large area of land that was transferred from Great Britain to the American colonies following the American Revolutionary War. It included lands north and west of the Ohio River, south of Canada today and the Great Lakes, and east of the Mississippi River.

## The Northwest Ordinance of 1787

The boundaries of the Northwest Territory were defined by the U.S. Congress in the Northwest Ordinance of 1787. This act, or law, passed by Congress was very important for other reasons too. It provided rules to help new communities govern themselves as settlers established towns and cities in the new territory.





For example, the ordinance provided instructions on how new settlers could appoint community leaders, such as judges or governors, in newly settled

areas. It also provided a framework for growing communities to become states - when 60,000 residents had settled within a territory, they could draft a constitution of their own and petition Congress for statehood.

The ordinance also defined important new laws for new states in the Northwest Territory, including:

1. no slavery in any newly established state
2. that each new state was to be equal to all existing states,
3. freedom of religion,
4. the right to a trial by jury, and
5. the right for widows and children to inherit their husband's/father's estate.



**Ohio was the first state in the Northwest Territory, the first state in our nation's westward expansion, and the first state to include these new rules in our state government!**



The Ohio Country became the first lands opened for purchasing and settling in the Northwest Territory, but before the land could be sold, it had to be mapped, organized and measured. This process is called surveying the land - and it started in Ohio in an area called the Old Seven Ranges.



## NORTHWEST ORDINANCE OF 1787 & NORTHWEST TERRITORY WORKSHEET

1. Why did the U.S. government need to raise money by selling land in the Northwest Territory? (choose 3 correct answers)

- To pay for the expensive American Revolutionary War
- To support our young, growing nation
- To provide land for settlers who wanted to move west, seeking opportunity and adventure.
- They needed money to build the White House.

2. True or False: The state of Ohio today was a part of the Northwest Territory in 1787.

\_\_\_\_\_

3. The Northwest Ordinance of 1787 showed settlers in the Northwest Territory how to appoint community leaders. Circle two types of leaders included in the ordinance:

- Judges
- School principals
- Governors
- Ship captains



4. True or False: Ohio was the first state created in the Northwest Territory.

\_\_\_\_\_

5. Which laws did the Northwest Ordinance of 1787 create for the Northwest Territory? (check all that are true)

- No slavery
- Freedom of religion
- Right to a trial by jury
- Each new state would be equal to all existing states
- A community of 10 people could petition for statehood

6. How does it make you feel that Ohio was the first state in the westward expansion of our nation to include such important rules in our state government?

\_\_\_\_\_



## NORTHWEST ORDINANCE OF 1787 & NORTHWEST TERRITORY WORKSHEET ANSWERS

1. Why did the U.S. government need to raise money by selling land in the Northwest Territory? (choose 3 correct answers)

- To pay for the expensive American Revolutionary War
- To support our young, growing nation
- To provide land for settlers who wanted to move west, seeking opportunity and adventure.
- They needed money to build the White House.

2. True

3. The Northwest Ordinance of 1787 showed settlers in the Northwest Territory how to appoint community leaders. Circle two types of leaders included in the ordinance:

- Judges
- School principals
- Governors
- Ship captains

4. True

5. Which laws did the Northwest Ordinance of 1787 create for the Northwest Territory? (check all that are true)

- No slavery
- Freedom of religion
- Right to a trial by jury
- Each new state would be equal to all existing states
- A community of 10 people could petition for statehood

6. n/a

# OHIO WAS THE START OF IT ALL - A NEW WAY TO MAP THE LAND

## Historical Events #5-7

5. The Ohio Country was the first land surveyed and available to purchase and settle in the Northwest Territory. The area that was first surveyed was called the Old Seven Ranges.
6. The Public Land Survey System was the system used to plat (measure, define, organize, and describe) the land. This system, which improved over the years, was used to organize the townships across most of western United States, and it all started with Ohio.
7. The Public Land Survey System created townships that can still be seen on maps today. Land was measured into 1-square-mile sections, 36 sections made a township, and the sections were sold (often sight unseen) at auctions in New York City.

## Ohio was the start of it all!

The Ohio Country was the first land surveyed and opened for purchase and settlement in the Northwest Territory, in a subdivision of land named the Old Seven Ranges. Surveyors started their work there in 1785 - 18 years before Ohio became a state in 1803.

## Before Congress could sell the land, they had to organize it.

*The Public Land Survey System* was a system created to measure and organize land in the Northwest Territory.

Using the *Public Land Survey System*, land surveyors walked across the rugged Ohio landscape, measuring lines up and down (north to south) and across (east to west) to create a map grid. The blocks of the grid were each 36-miles square and were called townships. Within each township, land was measured in square mile blocks, called sections.



*The area highlighted in green is the very first part of the Northwest Territory that was opened for surveyors to measure, as they prepared the land for sale to people living in the eastern colonies.*

This is called platting the land. The township you live in was measured in this way. This is the same process that was used for almost the entire western United States... and it all started in Ohio!

★  
**The Ohio Country was the first land surveyed and opened for purchase and settlement in the Northwest Territory.** ★

Below is a map of the Old Seven Ranges. It may look confusing at first glance, but remember this is how it helped organize, measure, and mark the land.

**Can you find these on the map?**

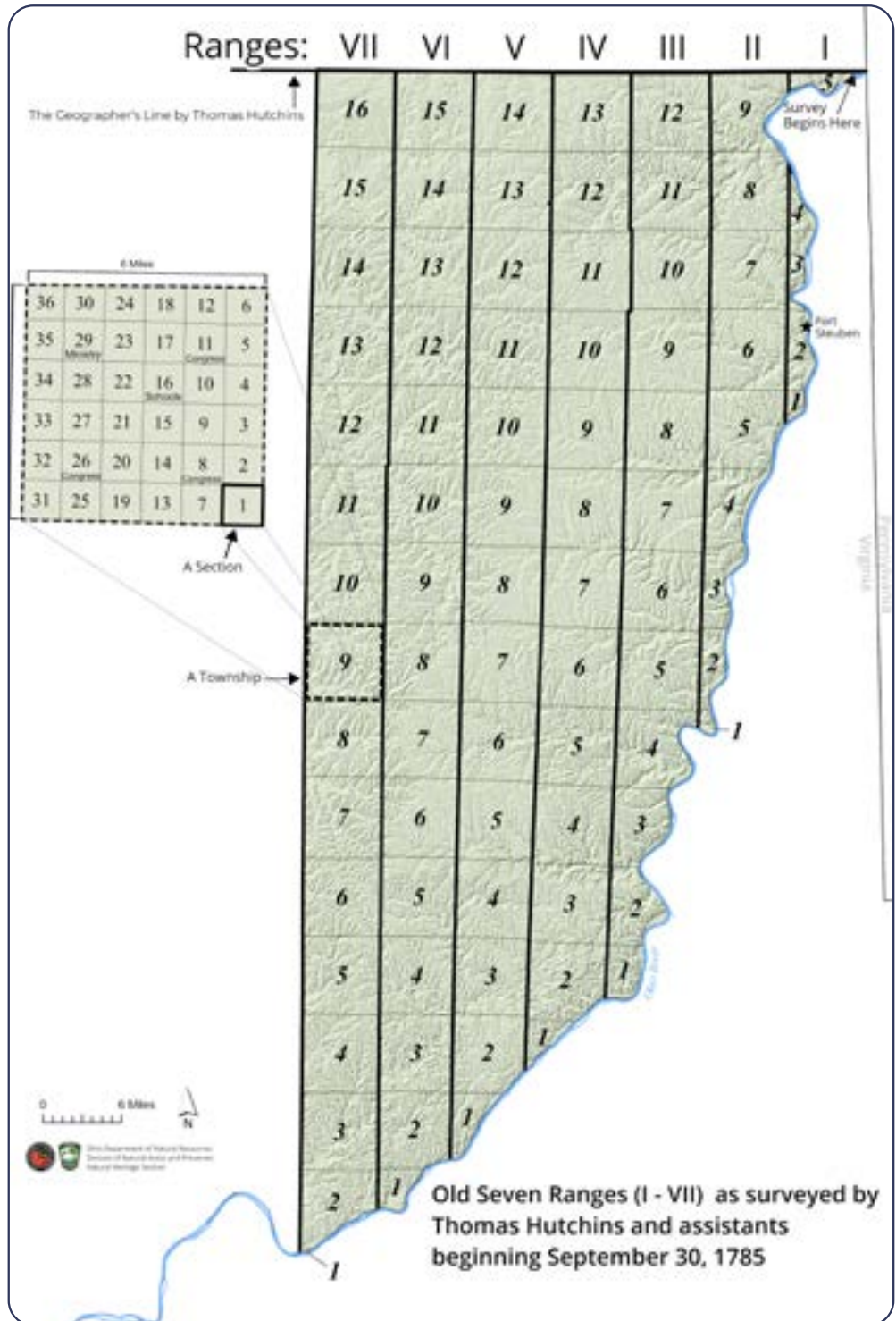
- **Ranges** – the columns of land marked by dark black lines running up and down (or north to south), with Roman Numerals I-VII at the top
- **Townships** – the blocks of land created when surveyors measured east-west lines across the range lines
- **Sections** - 1-mile square pieces of land, typically there are 36 of them within each township

In addition to measuring township and sections, surveyors were expected to record what they saw including soil quality, wetlands, rivers and streams, and different plants and trees they observed. They acted as explorers and botanists, filling their journals with notes about natural features and resources as they hiked the land.

Surveyor notes were helpful for buyers in New York City who were choosing

sections to purchase at auctions, without ever seeing the land. It also helped the new landowners find their land as they headed west to settle on it.

*How would you feel about buying a piece of property, thousands of miles away from you, without ever seeing it?*



## A NEW WAY TO MAP THE LAND WORKSHEET

1. True or False: Ohio was the first land surveyed and opened for purchase in the Northwest Territory?

\_\_\_\_\_

2. What was the area of the Ohio Country where surveyors started their work in the Northwest Territory?

- The Old Seven Ranges
- Pennsylvania
- Lucky Number Seven
- The Western Reserve

3. True or False: The Public Land Survey System was the system used to plat (measure, mark, and describe) the land.

\_\_\_\_\_

4. The Public Land Survey System created a \_\_\_\_\_ of the land - a series of columns and rows which divided the land into measured rectangles.

- grid
- treasure map
- board game

5. True or False: Surveyors only recorded township boundary measurements, no other information was collected.

\_\_\_\_\_

## A NEW WAY TO MAP THE LAND WORKSHEET ANSWERS

1. True
2. What was the area of the Ohio Country where surveyors started their work in the Northwest Territory?
  - The Old Seven Ranges
  - Pennsylvania
  - Lucky Number Seven
  - The Western Reserve
3. True
4. The Public Land Survey System created a \_\_\_\_\_ of the land - a series of columns and rows which divided the land into measured rectangles.
  - grid
  - treasure map
  - board game
5. False – surveyors also took notes on soil quality, wetlands and rivers, plants and trees they observed.

## OHIO'S SURVEYORS SET THE STAGE FOR AMERICA'S WESTWARD EXPANSION

### Historical Events #8-11

8. As Teams of surveyors worked across the Ohio landscape, they were at times confronted by Indigenous peoples who considered the land their home, as well as American "squatters" from eastern states who had settled in the new territory illegally.
9. In 1786, Fort Steuben was built to provide surveyors with military assistance and protection. The reconstructed Fort and its blockhouses, officers' quarters, a hospital and store, blacksmith and quartermaster shops, and a guardhouse can be visited today in Steubenville.
10. The work of the surveyors was critical to opening the land west of the Ohio River for settlement. It set the stage for America's westward growth and the survey systems they used to map and organize the land are still used today.
11. Surveyors found rich natural diversity and resources in the Ohio Country, including forests, wetlands, salt licks, prairies, rich soil, and a vast system of streams and rivers.



### What is a Surveyor?

Surveying – in the 1700s and today – is a highly respected job that requires special education and training. Surveyors measure land to mark boundaries and property lines. This is called platting the land. Surveyors may also record natural features like rivers, gorges, canyons, and natural habitats like forests, wetlands, and prairies.



Wooden ruler

Wooden compass

Measuring chains and iron chain pins

*Tools used by surveyors in the late 1700s.*

The tools that 18th century surveyors used were simple—usually a large field compass and a long metal chain that was used to measure and mark distances along the ground. Flat ground without rivers and streams, where they could lay the chain in a straight line, might have been the easiest land to plat. Imagine how challenging it would have been to measure the high cliffs of a gorge, with a river at the bottom, with just those tools.

While some surveyors were very accurate using just a compass and chain, others sometimes found themselves off track in the Ohio wilderness. Today, surveyors use very precise Global Positioning System (GPS) tools and plat the land with incredible accuracy.

### What was it like to be a Surveyor in the 1700s?

Surveying in the 1700s was dangerous, hard work. Surveyors and their helpers were brave and rugged. Their job was to go into wild places, and they sometimes faced life-threatening conditions. Day and night, they came across animals like mountain lion, bear, elk, bison, and wolves.



Surveyors often hiked through the eastern woodland forest which looked like Dysart Woods in Belmont County.



Surveyors also came across openings in the forest - called "barrens"- like this one found in Fradd Hollow, Lawrence County.



Slender blazing star was a flower often seen by surveyors in Ohio's open woods and prairies.

Constantly on the move, they had to make and break camp daily, and no doubt shared their camps with mosquitoes, snakes, and skunks! Often considered trespassers, surveyors and their teams were confronted by Indigenous people and early American squatters alike.

The rate of pay to survey this land was \$2 per mile, which today would be about \$33 dollars. Surveyors soon realized that the pay didn't cover their time, expenses and losses like losing horses and supplies to squatters and Native Americans.

As a result, surveyors returned to Congress and requested higher wages and more protection moving forward.



### The going was rough and risky

The Indigenous peoples, who had lived in the Ohio Country for thousands of years, considered the land their home. They were confused by the arrival of surveyors and squatters, and often resisted their presence. Although some colonial surveyors had established good relationships with the Native nations, violent clashes were also a constant threat between them. This slowed the survey work considerably.



### Protection at Fort Steuben

Considering these struggles, in 1786 Fort Steuben was built to provide military protection for the surveyors and their teams. The reconstructed Fort can be visited today, and includes blockhouses, officers' quarters, a hospital and store, blacksmith and quartermaster shops, and a guardhouse.



Raccoon Creek State Scenic River

### What did surveyors see?

Surveyors found rich natural diversity and resources in the Ohio lands, including forests, wetlands, prairies, rich soil, and lots of streams and rivers.

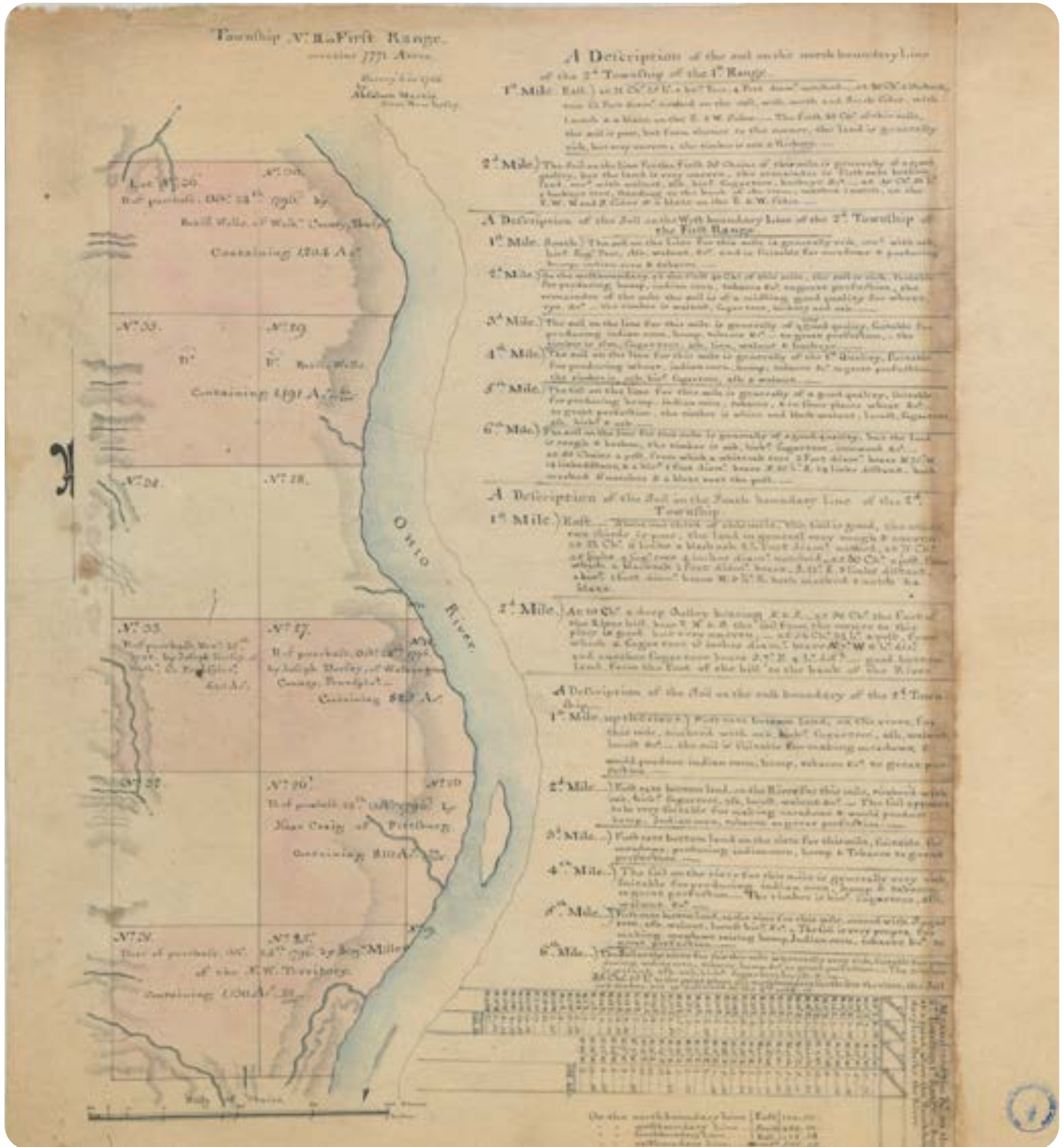


Recreated using the original 18th century plans, Fort Steuben offers visitors a glimpse into daily life at an 18th century fort.

# A Surveyor's Notebook

Surveyors kept highly detailed, sometimes beautifully written notes in their field journals as they measured the Ohio Country. Below is a page from the journal of a surveyor named Absalom Martin as he

walked Range 1, Township 2 in the Old Seven Ranges in 1786. A blue arrow points to this township on the map below. Can you see how the river shape in the drawing matches the river shape on the surveyor's map?



Surveyor Absalom Martin's field notes as he walked Range 1, Township 2 in the Old Seven Ranges.4

If you look really closely, you can read the surveyor's notes about tree types, trunk size, and soil quality. Did you notice that some sections of land have already been sold in auction and others were still available to buy?

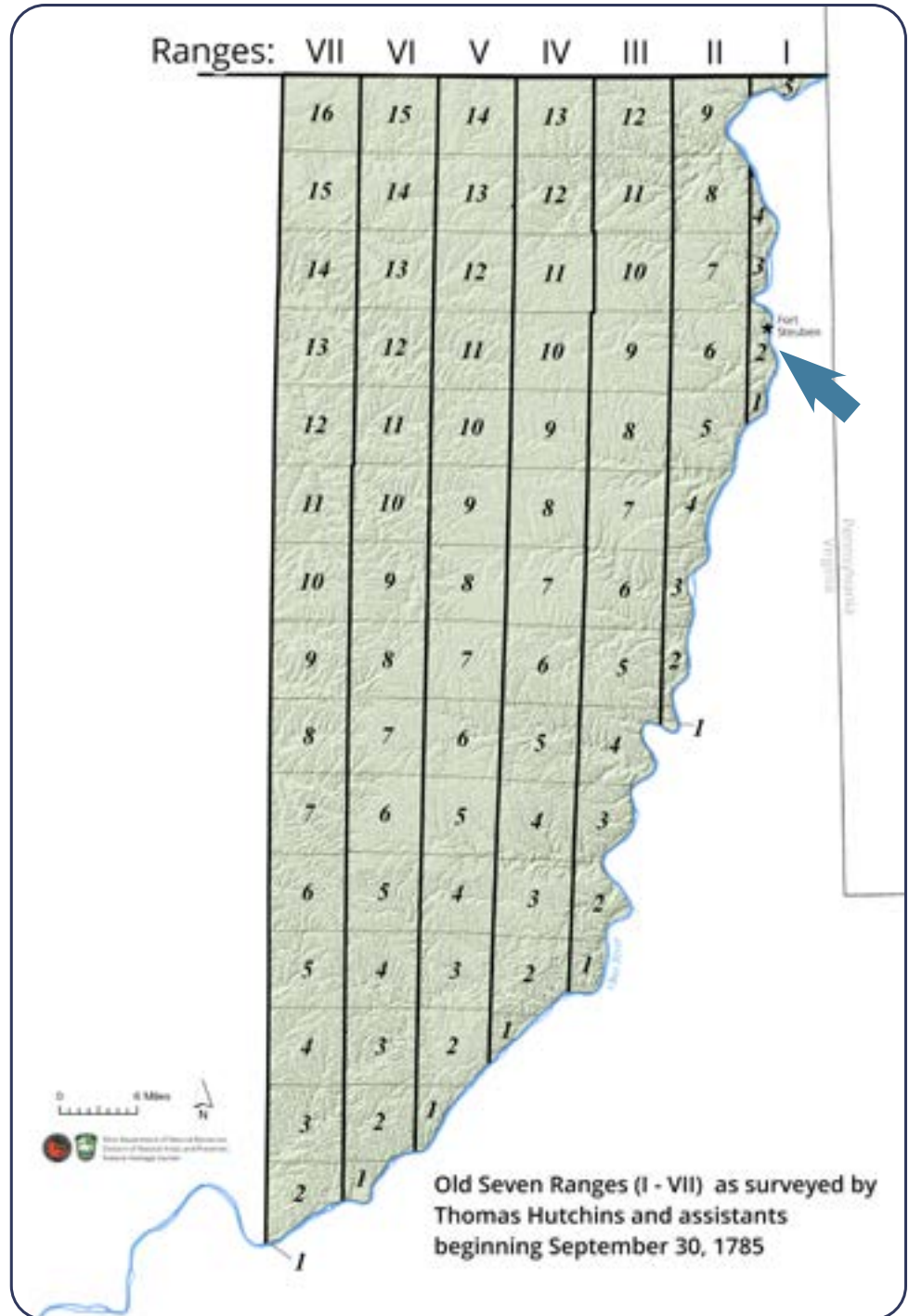
These notes were important to prospective settlers from the colonies who wished to purchase lands that would supply good farmland for crops, plentiful game for hunting, and other resources for daily life in the 1800s.

How difficult it must have been to take such detailed notes while hiking through wilderness in all weather conditions, living in a makeshift camp and defending yourself from wildlife each night.

**Gratitude for the brave surveyors!**

The work of America's 18th century surveyors helped open the land west of the Ohio River to new settlers from the colonies and was the beginning of the westward expansion of our nation. Because of their bravery and hard work, settlers could buy land, establish farms, open up trade, and create new communities. As settlement increased, towns were established which

brought roads and canals to transport people and goods between them. This growth in population and economy resulted in Ohio becoming the first state in the Northwest Territory and played an important role in the growth of our nation!



## OHIO'S SURVEYORS SET THE STAGE FOR AMERICA'S WESTWARD EXPANSION WORKSHEET

1. What is the job of a surveyor?

- To measure land, mark boundaries, and describe the nature they saw
- To fight bears and wolves
- To make sure no one is breaking the law
- To build military forts

2. Check two tools commonly used by surveyors when platting the Ohio Country:

- compass
- long, metal chain
- bugle
- phone

3. True or False: Surveying was easy, safe, and simple work.

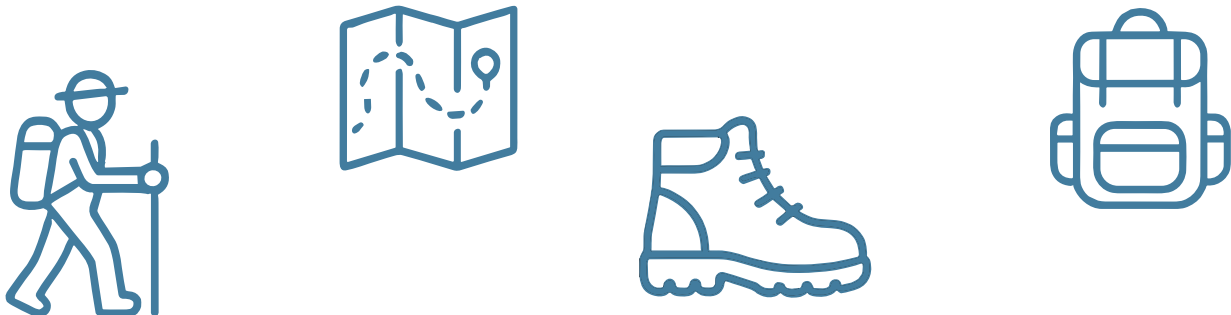
\_\_\_\_\_

4. Besides measuring and marking the land, surveyors also included \_\_\_\_\_ and \_\_\_\_\_ in their field journals.

- natural features (like rivers, gorges, canyons)
- natural communities (like forests, wetlands, and prairies)
- school songs
- camping recipes

5. True or False: Surveyors were brave, rugged, and highly trained people who played a critical role in opening the land of the Northwest Territory for our nation's westward expansion.

\_\_\_\_\_



## OHIO'S SURVEYORS SET THE STAGE FOR AMERICA'S WESTWARD EXPANSION ANSWERS

1. What is the job of a surveyor?
  - To measure land, mark boundaries, and describe the nature they saw
  - To fight bears and wolves
  - To make sure no one is breaking the law
  - To build military forts
2. Check two tools commonly used by surveyors when platting the Ohio Country:
  - compass
  - long, metal chain
  - bugle
  - phone
3. False
4. Besides measuring and marking the land, surveyors also included \_\_\_\_\_ and \_\_\_\_\_ in their field journals.
  - natural features (like rivers, gorges, canyons)
  - natural communities (like forests, wetlands, and prairies)
  - school songs
  - camping recipes
5. True

## KEY CONCEPTS TO CONSIDER AND DISCUSS

Here are some key points to think about when studying America's westward expansion:

- 1. Which Native nations were living in the Ohio Country when the U.S. opened the Northwest Territory for sale and settlement? Describe how Indigenous people actively managed the land. What impact did the American colonists have on nations that were present in the Ohio Country at this time?** (In the 1780s, the Miami, Delaware, Shawnee, Wyandot, Ottawa, Seneca, and Potawatomi tribes called this land home. They managed the land as skilled farmers, harvested native plants for medicines and for spiritual practices, and used rivers to fertilize soils and irrigate crops. Native nations used fire as an important tool for many purposes including clearing land for hunting, opening areas for travel, replenishing soil nutrients, and for protection. When American colonists entered the Ohio Country, they were essentially invading the territory of Native nations already living on the land. Ultimately, European settlers forced the tribes to move on until they were gone from the Ohio Country.)
- 2. What were the major factors driving the young American nation to expand westward?** (The U.S. government needed to raise money, military war veterans received war bonds, and a general desire for colonists to explore opportunities in the west by owning land, using natural resources, and gaining prosperity as a result.)
- 3. How did the U.S. government receive the Northwest Territory, and what current states were included in the Northwest Territory?** (The Northwest Territory was a large area of land that was transferred from Great Britain to the American colonies following the American Revolutionary War. It included the states of Ohio, Indiana, Illinois, Michigan, and Wisconsin, and part of Minnesota.)
- 4. How were key provisions of the Northwest Ordinance of 1787 important in organizing new and growing communities in the Northwest Territory?** (The act of Congress provided instructions on how community leaders would be appointed, provided a pathway for growing communities to apply for statehood, and defined laws that weren't in the Constitution but were based in ideals that were important for the growing nation, such as prohibiting slavery in new states, guaranteeing freedom of religion and an individual's right to trial by jury, etc.)
- 5. How did the Public Land Survey System contribute to the understanding of natural resources, and settlement of the Ohio Country?** (In addition to measuring township boundaries, surveyors were expected to describe soil quality, wetlands and rivers they crossed, and different plants and trees they observed. They acted as explorers and botanists, filling their journals with notes about natural features and resources as they hiked the land. This helped buyers from the east choose which land they wanted to buy.)

- 6. How did the Public Land Survey System, first used in Ohio, impact western expansion?** (The Public Land Survey System was the first system created to organize land based on measurements, not landmarks. It was created for use in the Northwest Territory, and helped colonial buyers locate land they purchased without having seen it. The system was so successful, it was used to plat almost every state west of the Ohio River.)
- 7. Why did the members of Ohio's Native nations feel confused and threatened by surveyors measuring the Ohio Country land?** (The Ohio Country's Indigenous tribes lived on the land for thousands of years and considered it their home before colonial surveyors and other European settlers arrived. Native nations used the land to build communities and manage the lands for daily living. They felt that the incoming surveyors and settlers were invading their land.)
- 8. What role did Fort Steuben play in America's westward expansion?** (Fort Steuben was constructed to provide military protection for the surveyors and their teams because clashes with Native tribes were slowing down progress.)
- 9. What role might the natural resources of this land (water, good soil, lots of animals to hunt, etc.) have played in settling the Ohio Country?** (Colonists from the east were seeking good soil and access to water for farming, and good hunting grounds for both food and items like fur and animal hides to trade.)
- 10. What are some examples of changes to the land that settlers made as they came to the Ohio Country?** (They established farms, built schools and churches, and eventually began creating towns which brought roads and canals to transport people and goods.)

## HANDS-ON OUTDOOR ACTIVITY

### You are a Surveyor - Platting the Townships of Your Playground!

Objective: Students will demonstrate an understanding of how the Ohio Country, the first land surveyed in the Northwest Territory, impacted westward expansion by role playing and simulating the process of surveying land, using simple tools and a basic understanding of geography.

Teacher will assign groups to survey a “township” of the outdoor space, and bring all the maps together at the end of the activity to discuss what “land resources” are available in each section.

#### Pre-activity site prep:

- Teacher marks the center of the playground with a flag, or something conspicuous. This is the starting point of the activity. See Teacher Map as a reference.
- Teacher marks cardinal directions on the playground at the edges of the “map,” at a specific distance (i.e. approx. 30 feet) from the starting point. Choose your map distance based on 1) the size of your open space; and 2) land resources (e.g. jungle gym, basketball hoops, benches.)

#### Materials needed for four (4) surveying teams (scale up as needed):

- 4 printed Student Survey Team Maps, one for each student survey team
- notebooks or clipboards to write on while “in the field.”
- Pencils
- Four (4) 10-foot measuring tapes, or four (4) 10-foot lengths of string
- 15-20 survey markers per team. (These could be colorful circle dots, bean bags, plastic spoons, colored popsicle sticks or any other safe item that can be placed on the ground as survey markers.)

#### Pre-activity class prep:

- Use the provided study guides and worksheets to gain understanding of the Key Ideas.
- If time allows, share surveyor map examples to help students understand what the surveyor notes looked like (beautiful, detailed, hand-drawn) and what their maps of the playground may resemble (a grid, with landmarks noted).

#### The activity:

- Teacher divides class into four 4 groups – each is a surveying team.
- Each team has a blank map that represents the township they are platting (mapping).
- At the starting point, a team will measure 10 ft. in a cardinal direction (i.e. 10 ft. N) and mark that point with a survey marker. Then the team will measure 10 ft. in the next direction (i.e. 10 ft. E) and mark that spot. Next, they will measure 10 ft. in the direction that would complete a “section” (i.e. 10 ft. S). When complete, they have established one square, or “section” of their township.
- Students then draw or label any “land resources” in that section (e.g. specific playground equipment, soccer field, tree, drinking fountain, etc.).
- Teams will continue measuring section squares and labeling resources in them until they have completed their township map.

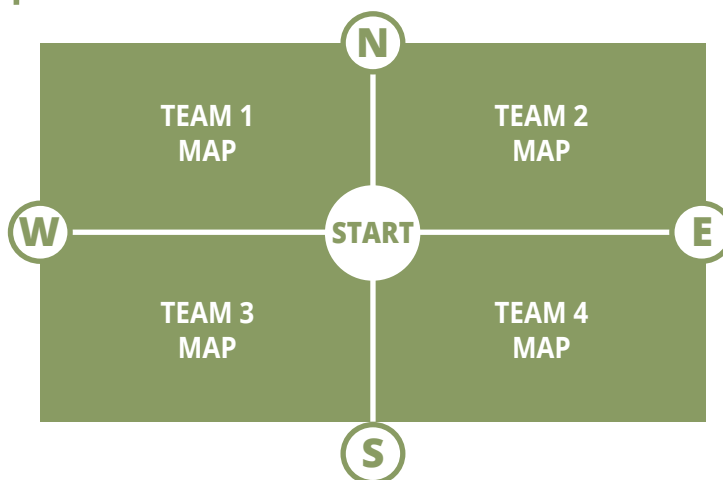
Once townships are all mapped and land resources are labeled, the teams will combine their townships into one large map. Looking at the full map, students will be able to consider the distribution of the playground's resources.

- The class discussion might include the following questions:
- How hard would it be to survey in bad weather (snow, rain, heat)?
- Which areas of the playground have the best or most resources?
- Looking at the map, which square of land would you buy and why?
- Which sections would you NOT want to buy and why?

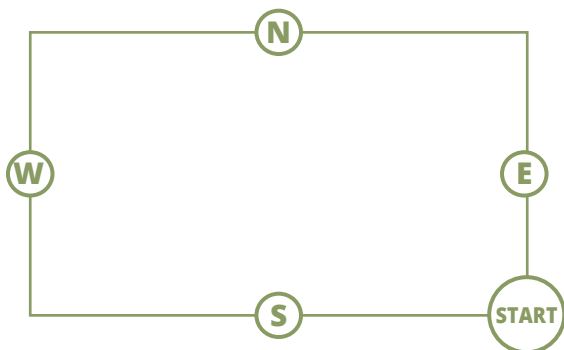
Now think back to 250 years ago and you're sent out to the Ohio Country, before there were roads, calculators, cameras and other modern technologies. Would you have liked to have been a surveyor then and why?

### Playground Map Templates

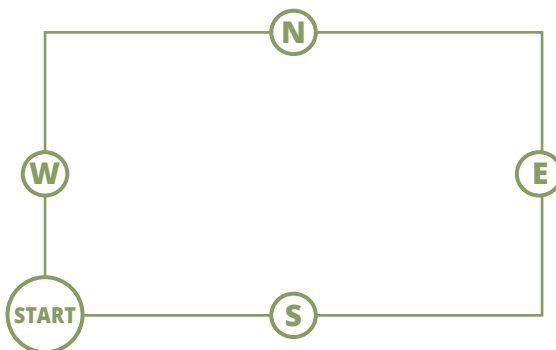
Teacher Map



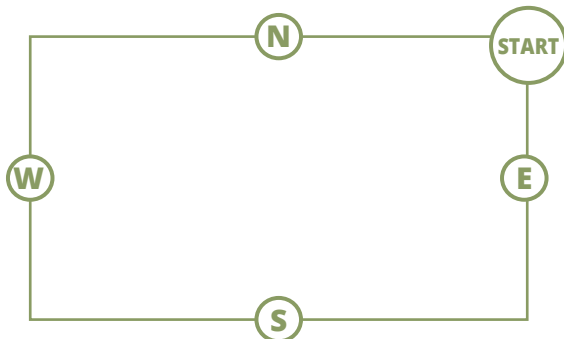
Team 1 Map



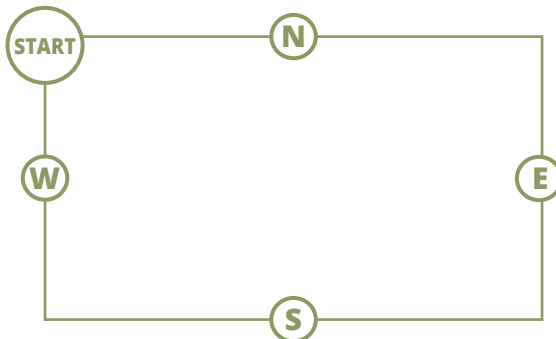
Team 2 Map



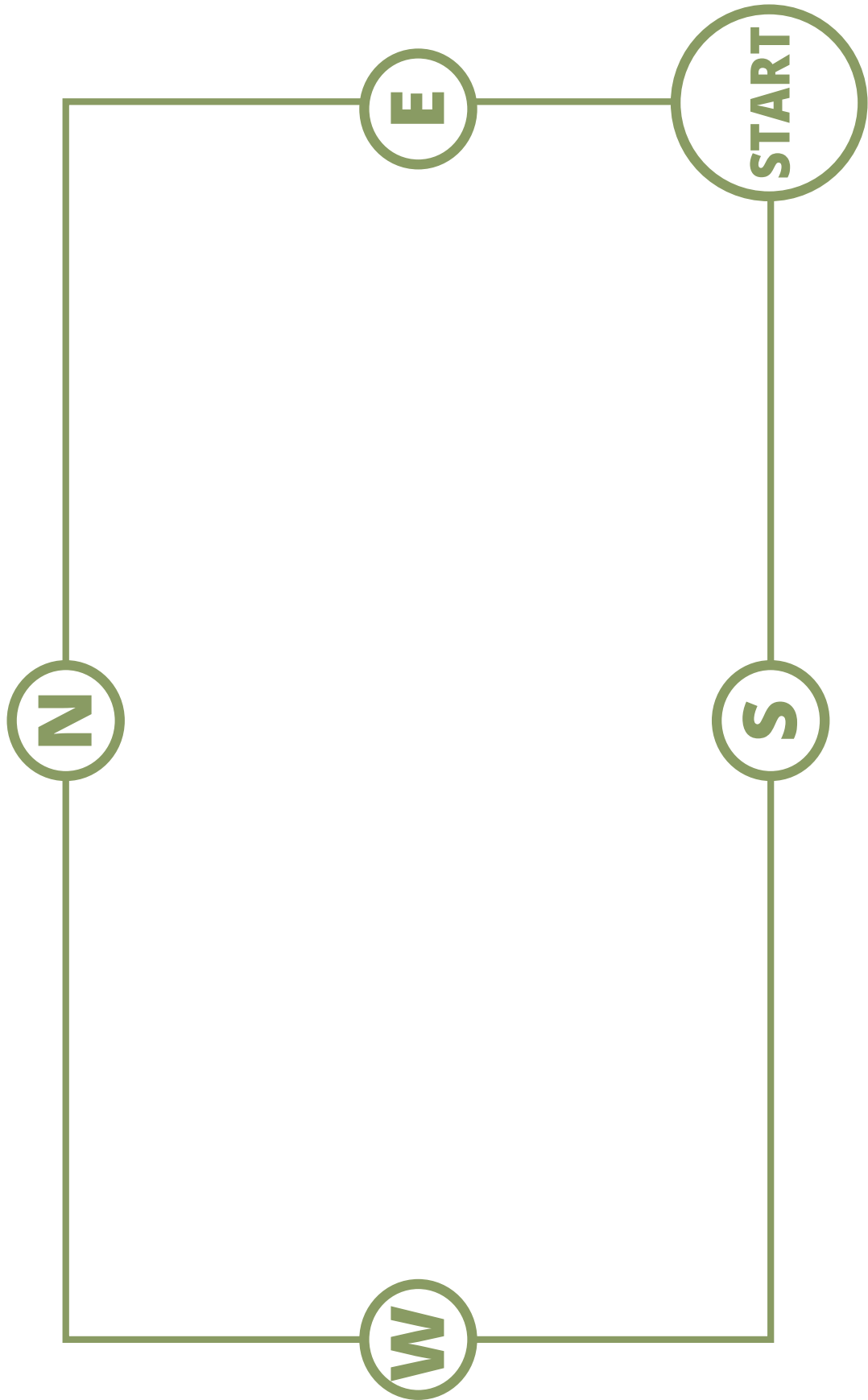
Team 3 Map



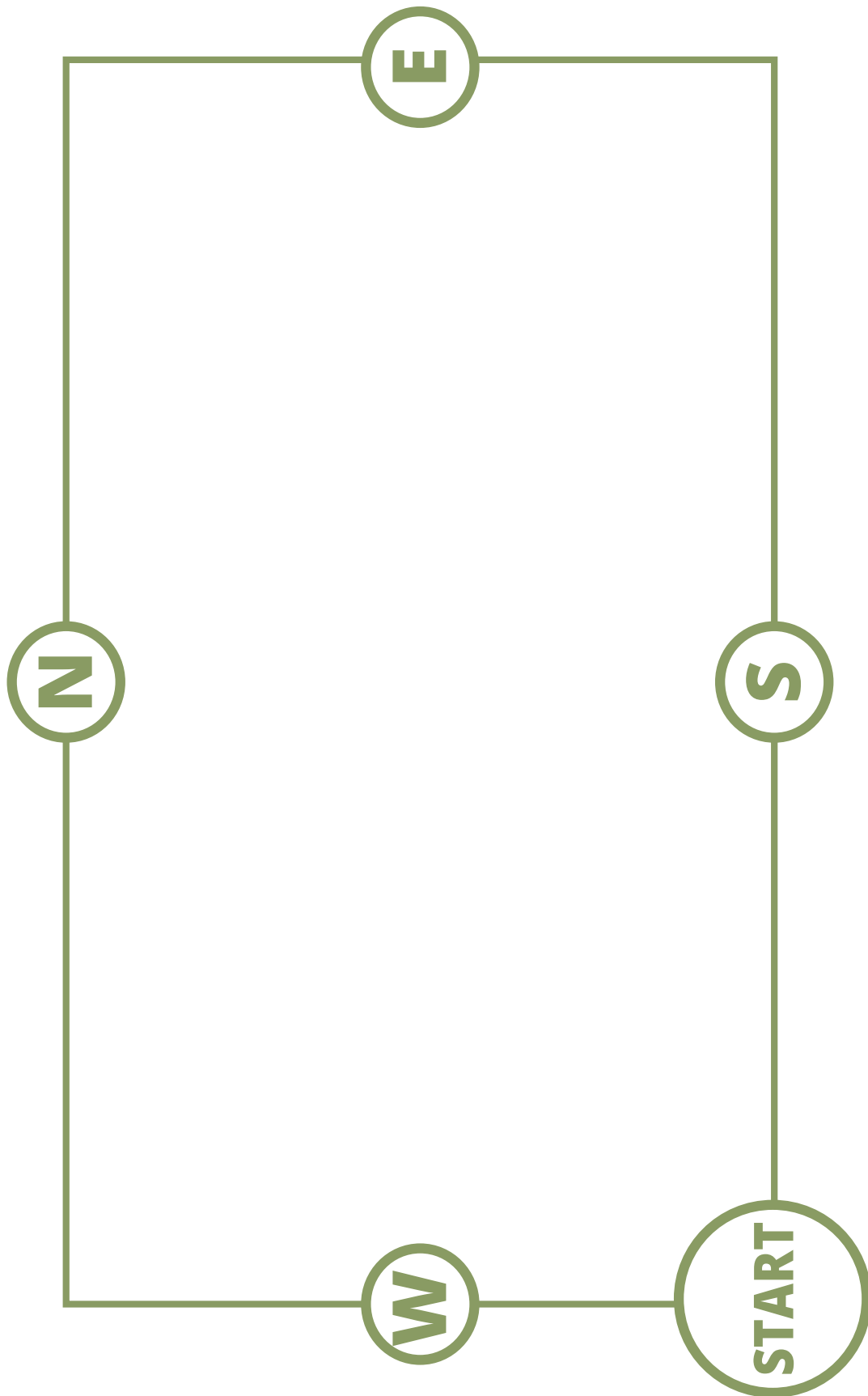
Team 4 Map



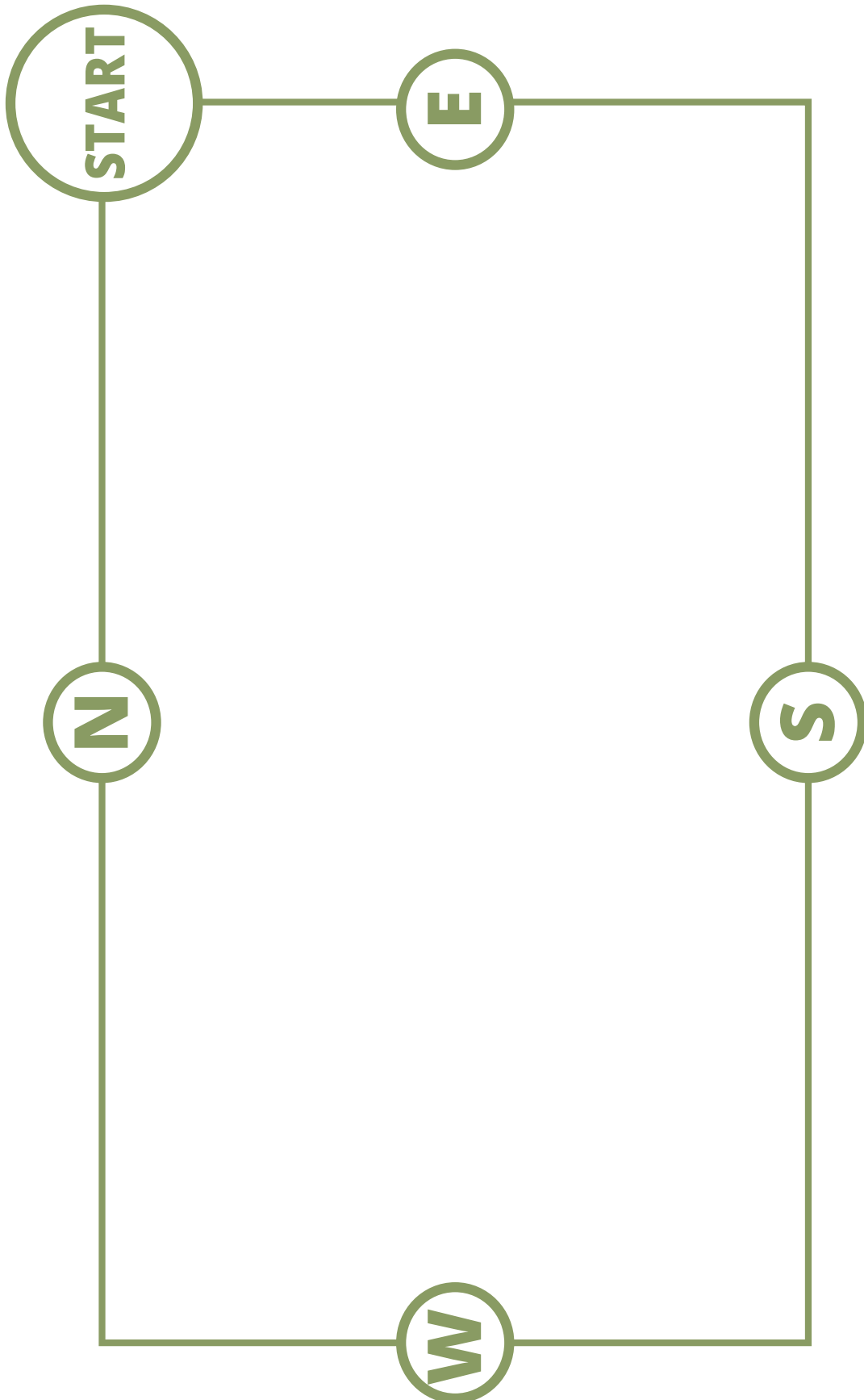
# Team 1 Map



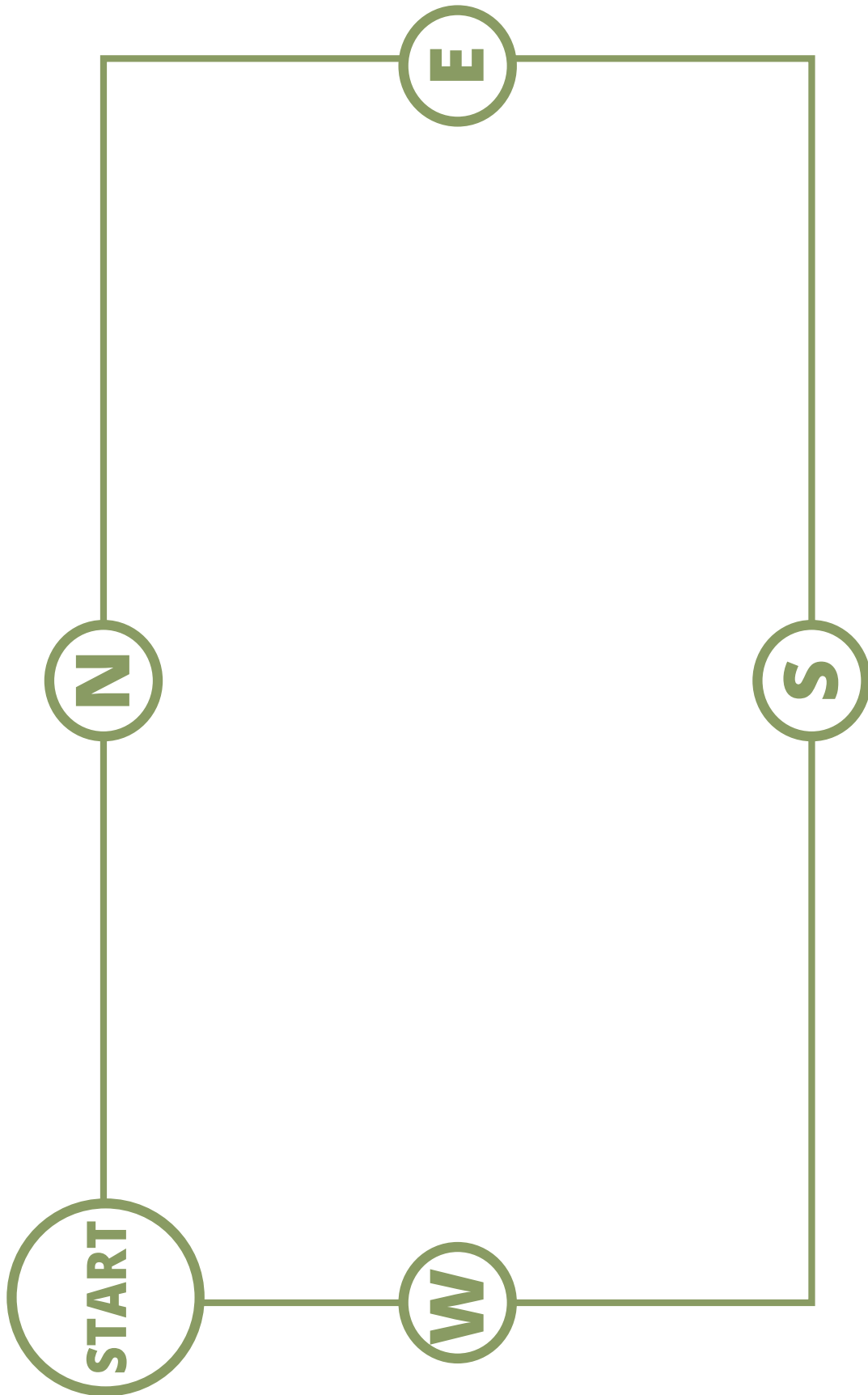
# Team 2 Map



# Team 3 Map



# Team 4 Map



## GLOSSARY OF TERMS

**Boundaries** – the defined edges of an area.

**Compass** – an instrument that uses a magnetized pointer to show the direction of north, which can also be used to locate south, east, and west. Compasses were used to keep colonial surveyors on track when measuring land and making maps. Still used today, they can help you stay on a trail so you don't get lost hiking outside.

**Global Positioning System (GPS)** – a network of satellites in space that send signals to receivers on Earth. The receivers then calculate their location and time. Cell phones are an example of a receiver that uses GPS. Every picture that a smartphone takes is tagged with a GPS location.

**Great Serpent Mound** – a large mound of earth built in the shape of a serpent located in Adams County in southern Ohio. It is 1,300 feet long (four football fields stretched end-to-end). It is believed to be more than 2,000 years old, and was built by ancient Indigenous peoples.

**Map Grid** – a network of columns and rows used to divide a map into equally sized rectangles.

**Land Surveyor** – a person who measures land to establish boundaries and property lines, creates maps, and sometimes defines natural features (like rivers or lakes) and vegetation (like prairies or forests).

**Native peoples** – the original inhabitants of an area before the arrival of other cultures or people; Indigenous peoples is also used in this way.

**Northwest Ordinance of 1787** – a law passed by Congress in 1787 that 1) established the boundaries of the Northwest Territory; 2) provided guidance for settlers to govern themselves as they settled the land but before an area became a state; 3) defined a pathway to statehood; and 4) established important new laws for new states in the Northwest Territory

**Northwest Territory** – the region of the United States that was transferred from Great Britain to the American colonies after the American Revolutionary War. It was public domain land and included parts of present-day Ohio, Indiana, Illinois, Michigan, Wisconsin, and Minnesota.

**Ohio Country** – before Ohio was a state, the name describing an area of land that included parts of present-day Ohio, Pennsylvania, Indiana, West Virginia, and Kentucky.

Plat (plating the land) – organizing land by measuring it into plots or shapes, most often squares or rectangles. Land surveyors plat the land and create maps showing boundaries and sometimes natural features (like lakes, rivers, or forests).

**Public domain land** – land and water that is owned by a government and managed for various purposes.

**Public Land Survey System** – the system invented to measure land, mark boundaries, and create maps to organize territories of the western United States. It has been used to measure townships across most of the U.S., east of the Ohio River.

**Range** – a strip of land that runs north to south and is six miles wide, creating a vertical column of townships, in the Public Land Survey System.

**Section** – a unit of land within a township, usually 1 square mile in size. Each township is divided into 36 sections.

**Settlement** – a community of people living in a new or undeveloped area, often after land had been surveyed.

**Sovereign nations** – Native tribes in the United States hold the ability to govern themselves and their people separately from the U.S. Constitution and U.S. laws. They establish their own governments and laws to protect and enhance to health, safety, and well-being of tribal citizens living in the tribal territory.

**Squatters** – United States citizens from the eastern colonies who were living in the Northwest Territory before it was legally opened for settlement. They were trespassing on public land and breaking the law by living on land they didn't own.

**Statehood** – the process by which a territory becomes an official state in the United States. Ohio became a state in 1803.

**Survey** – a process of measuring and mapping land to document its boundaries and features.

**Survey Marker** – a physical marker placed on the land to indicate the boundaries or specific points of a survey.

**Township** – a unit of land measurement, typically 6 miles by 6 miles, divided into sections.

## BONUS ACTIVITIES

We hope you enjoy the additional activities to help students retain the concepts!

**Ohio - The Start of it All! Word Search**

**Ohio - The Start of it All! Word Jumble**

**Ohio - The Start of it All! Crossword Puzzle**

During their travels, surveyors mentioned soil types, vegetation, tree species, and natural features like lakes, streams, and gorges in their journal notes. This information is being

used by the Ohio Department of Natural Resources, Division of Natural Areas and Preserves to create an updated map of Ohio's pre-settlement native vegetation, which was originally created in 1962.

Below are **two activity books** that include coloring pages, word searches, and word scrambles featuring some of Ohio's native wildflowers.



**The Heart of it All was The Start of it All - Celebrating Ohio's Native Flora and Northwest Expansion" project was funded in part by the America 250-Ohio Commission. Any views, findings, conclusions or recommendations expressed in this publication do not necessarily represent those of the America 250-Ohio Commission.**



## MAP AND IMAGE SOURCES

<sup>1</sup> Juchnowicz, Anna, [https://en.wikipedia.org/wiki/Three\\_Sisters\\_\(agriculture\)#/media/File:Three\\_Sisters\\_companion\\_planting\\_technique.jpg](https://en.wikipedia.org/wiki/Three_Sisters_(agriculture)#/media/File:Three_Sisters_companion_planting_technique.jpg)

<sup>2</sup> Created for the “St. Clair’s Defeat Revisited: A New View of the Conflict” traveling exhibit created by Christine Thompson and colleagues (<https://bit.ly/StClairsDefeatRevisited>). The exhibit was created with funding from National Endowment for the Humanities (awards: GE-261129-18 and GI-280460-21)

<sup>3</sup> Isochrone, [https://commons.wikimedia.org/wiki/Category:Northwest\\_Territory#/media/File:Northwest\\_Territory\\_locator\\_map\\_\(1787\).svg](https://commons.wikimedia.org/wiki/Category:Northwest_Territory#/media/File:Northwest_Territory_locator_map_(1787).svg)

<sup>4</sup> From the U.S. National Archives, <https://catalog.archives.gov/id/45273747?objectPage=28>. Public domain.

# OHIO – THE START OF IT ALL! WORD SEARCH

Name: \_\_\_\_\_

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

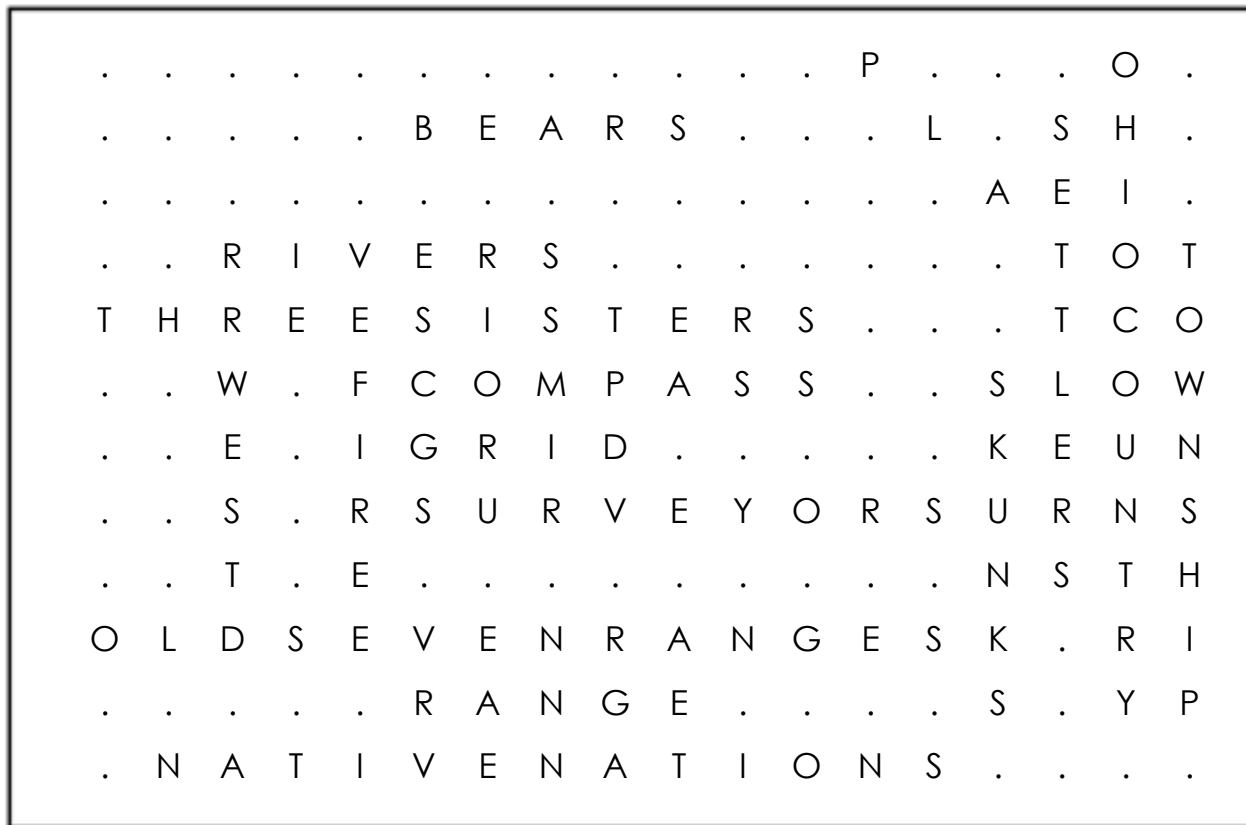
Find the following words in the puzzle.  
Words are hidden →, ↓, and ↘.

OLD SEVEN RANGES  
NATIVE NATIONS  
THREE SISTERS  
OHIO COUNTRY  
SURVEYORS  
TOWNSHIP

SETTLERS  
COMPASS  
RIVERS  
SKUNKS  
RANGE  
BEARS

FIRE  
WEST  
PLAT  
GRID

# OHIO – THE START OF IT ALL! WORD SEARCH ANSWERS



Word directions and start points are formatted: (Direction, X, Y)

- |                           |                   |                |
|---------------------------|-------------------|----------------|
| OLD SEVEN RANGES (E,1,10) | SETTLERS (S,16,2) | FIRE (S,5,6)   |
| NATIVE NATIONS (E,2,12)   | COMPASS (E,6,6)   | WEST (S,3,6)   |
| THREE SISTERS (E,1,5)     | RIVERS (E,3,4)    | PLAT (SE,13,1) |
| OHIO COUNTRY (S,17,1)     | SKUNKS (S,15,6)   | GRID (E,6,7)   |
| SURVEYORS (E,6,8)         | RANGE (E,6,11)    |                |
| TOWNSHIP (S,18,4)         | BEARS (E,6,2)     |                |

# OHIO – THE START OF IT ALL! WORD SCRAMBLE

Name: \_\_\_\_\_

ENITVA NITNASO

\_\_\_\_\_

FERI

\_\_\_\_\_

IOOH YCRTUON

\_\_\_\_\_

RERVIS

\_\_\_\_\_

NOCAE

\_\_\_\_\_

TESTNWHOR TYERRORTI

\_\_\_\_\_

TSWE

\_\_\_\_\_

EVSUOYRR

\_\_\_\_\_

SSOCMPA

\_\_\_\_\_

RAESB

\_\_\_\_\_

OLD SENEV NASERG

\_\_\_\_\_

HTNSIOPW

\_\_\_\_\_

RIDG

\_\_\_\_\_

APMS

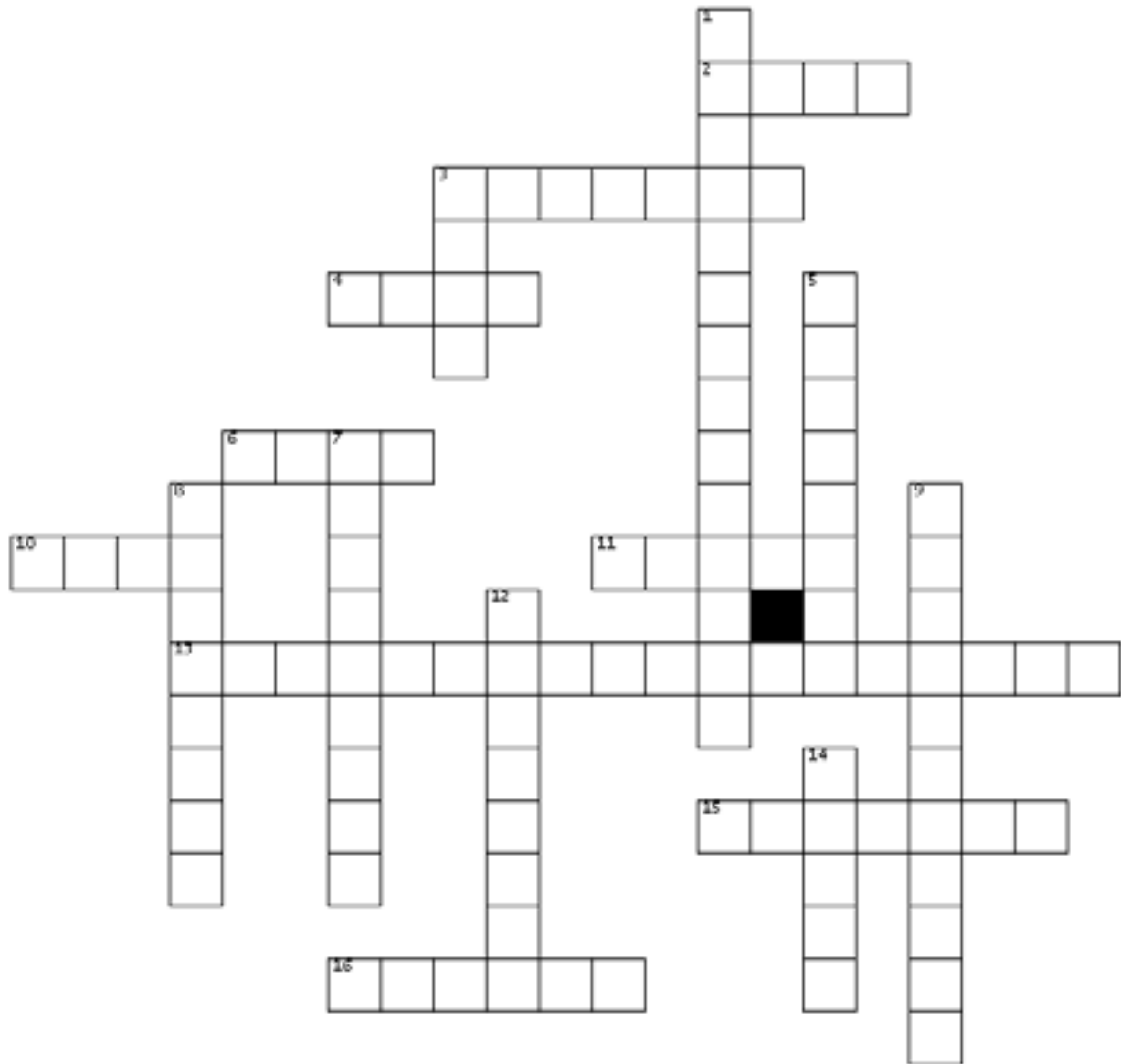
\_\_\_\_\_

## OHIO – THE START OF IT ALL! WORD SRAMBLE ANSWERS

ENITVA NITNASO	<u>NATIVE NATIONS</u>
FERI	<u>FIRE</u>
IOOH YCRTUON	<u>OHIO COUNTRY</u>
RERVIS	<u>RIVERS</u>
NOCAE	<u>CANOE</u>
TESTNWHOR TYERRORTI	<u>NORTHWEST TERRITORY</u>
TSWE	<u>WEST</u>
EVSUOYRR	<u>SURVEYOR</u>
SSOCMPA	<u>COMPASS</u>
RAESB	<u>BEARS</u>
OLD SENEV NASERG	<u>OLD SEVEN RANGES</u>
HTNSIOPW	<u>TOWNSHIP</u>
RIDG	<u>GRID</u>
APMS	<u>MAPS</u>

# OHIO - THE START OF IT ALL! CROSSWORD PUZZLE

Name: \_\_\_\_\_



**Use the clues to fill in the words above.**

Words can go across or down.

Letters are shared when the words intersect.

## OHIO – THE START OF IT ALL! CROSSWORD PUZZLE

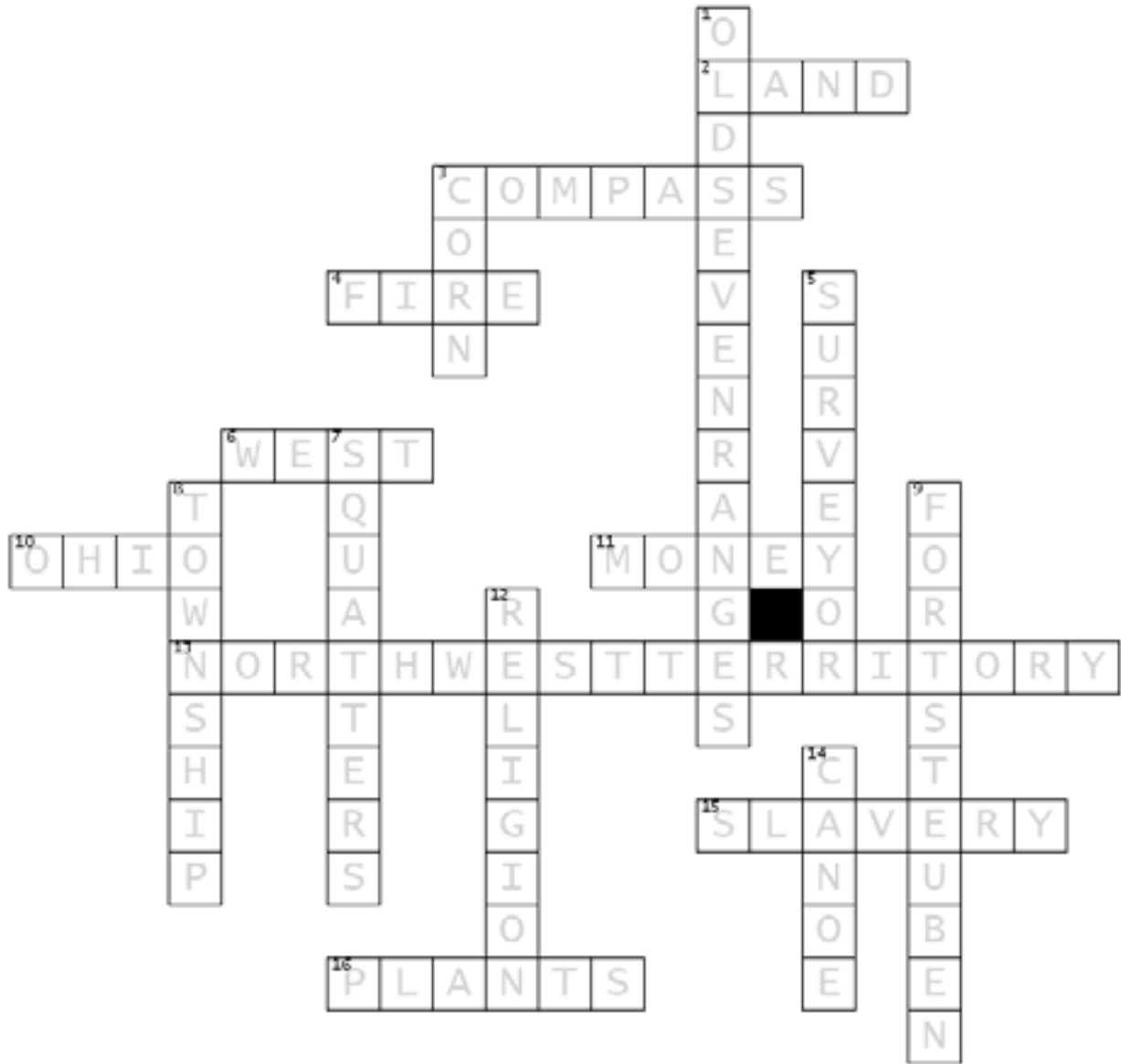
### ACROSS

2. What the U.S. Government sold to raise money after the American Revolutionary War
3. An instrument / tool that points in the direction of North and is used by surveyors to stay on track while they measure the land and make maps
4. A land management tool used by Native peoples to replenish soil nutrients and clear the land
6. The direction Americans were moving to settle in new land in the 1700s.
10. The first state in the Northwest Territory, the starting point of America's westward expansion, and "The Heart of if All"
11. What the U.S. Government needed to raise after the American Revolutionary War
13. The large area of land transferred from Great Britain to the American colonies after the Revolutionary War. Congress opened this land for sale in 1787.
15. The Northwest Ordinance of 1787 abolished \_\_\_\_\_ in new states
16. Native \_\_\_\_\_ were used as medicine, food, and building materials by Native peoples.

### DOWN

1. The first area of land surveyed in the Northwest Territory, in the land that would become Ohio
3. One of the plants of the "Three Sisters"
5. Someone who measures land, establishes property lines, and sometimes defines natural resources on the land
7. Americans who moved west and lived on the land before it was legal to do so
8. A 6-mile square of land that surveyors measured in Ohio before it was a state; you live in one today that was measured by a surveyor hundreds of years ago!
9. The place built in 1786 to protect the surveyors who were mapping the Ohio region, you can visit an exact replica in Steubenville OH today.
12. The Northwest Ordinance of 1787 protected freedom of \_\_\_\_\_ in new states
14. Native peoples used this to travel on rivers and streams

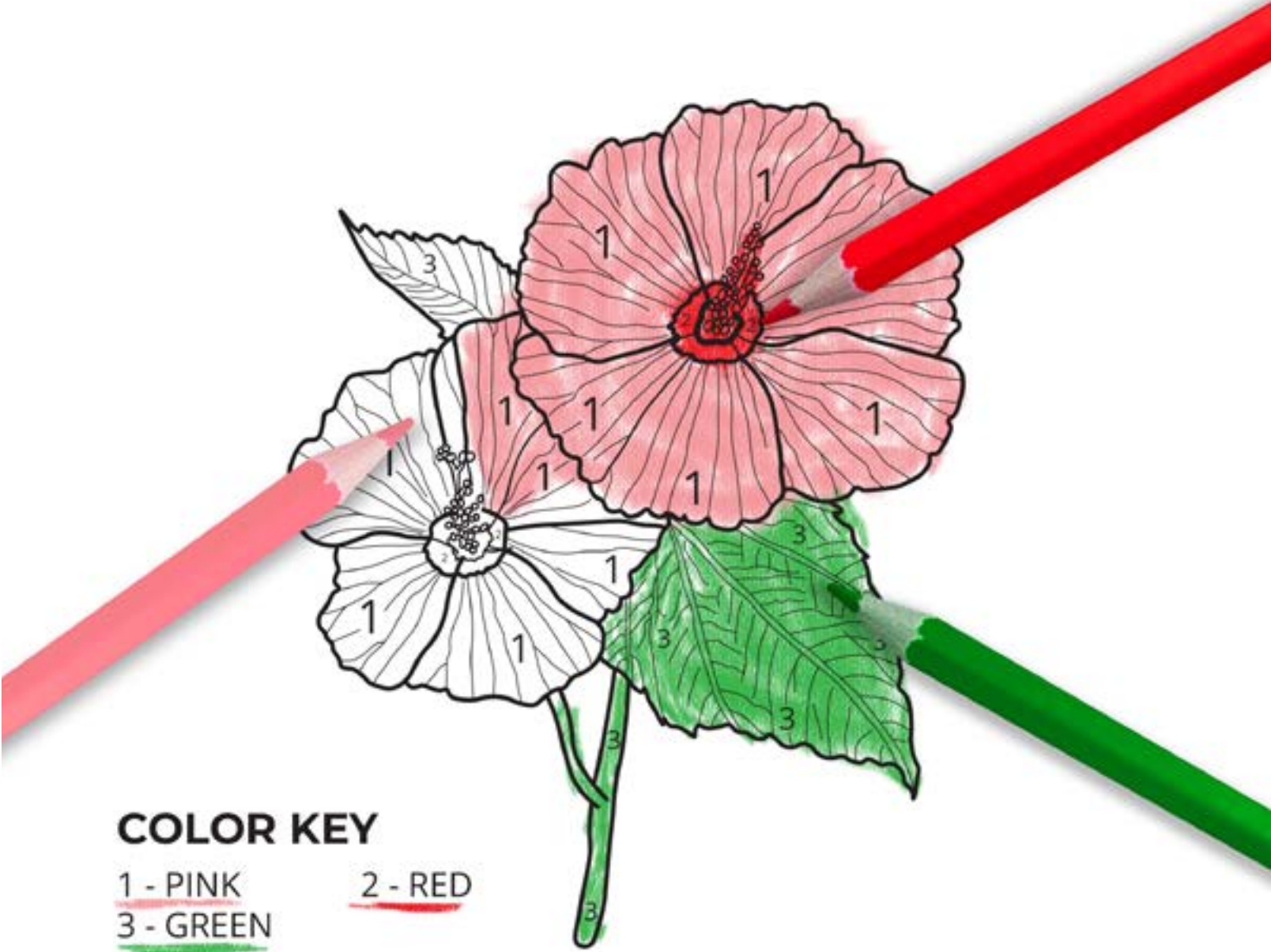
# OHIO - THE START OF IT ALL! WORD CROSSWORD ANSWERS



# Ohio's Summer Wildflower

## ACTIVITY BOOK

DIVISION OF NATURAL AREAS & PRESERVES  
OHIO DEPARTMENT OF NATURAL RESOURCES



### COLOR KEY

1 - PINK  
3 - GREEN

2 - RED



DIVISION OF  
**NATURAL AREAS  
& PRESERVES**  
OHIO DEPARTMENT OF NATURAL RESOURCES

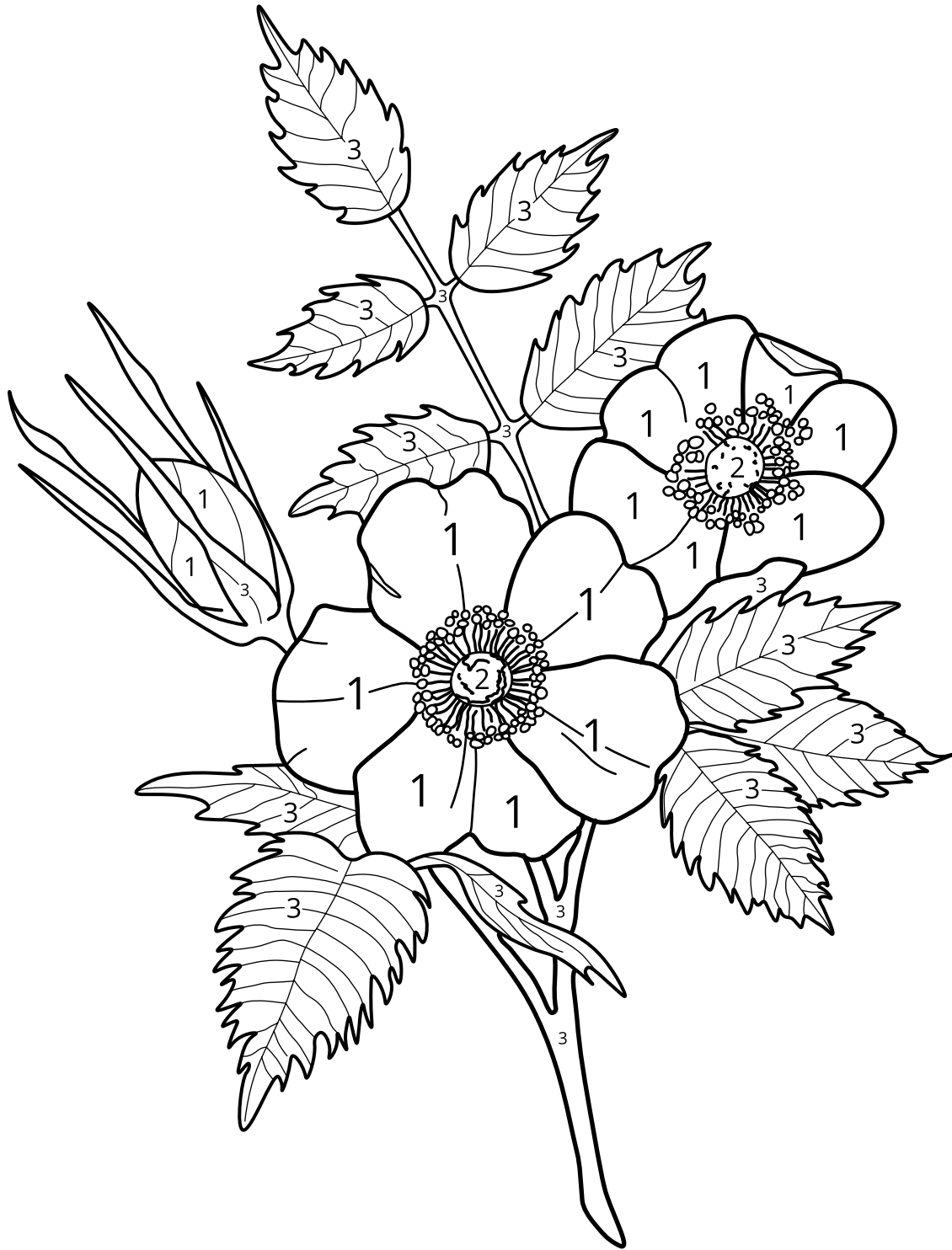
Illustrations by  
Ryan Moss

# Pasture Rose

(*Rosa caroliniana*)

## FLOWER FACTS

Pasture rose is a prickly plant that grows in sunny, open areas like prairies. Its prickles help prevent animals like deer and rabbits from eating it. The pink flowers have five petals and smell very nice. Many animals like to eat the fruit, which helps to spread its seeds.

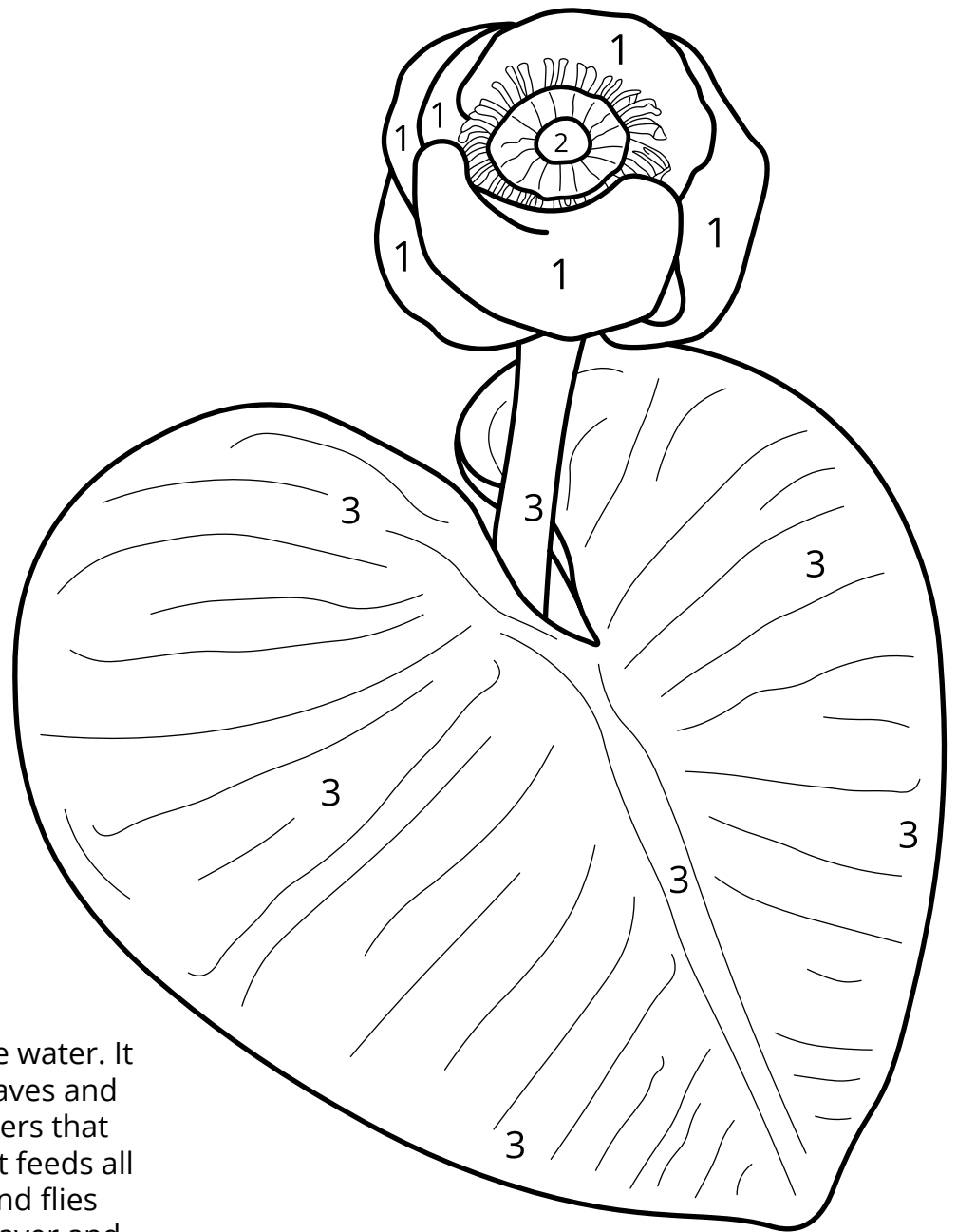


## COLOR KEY

1 - PINK            2 - YELLOW  
3 - GREEN

# Spatterdock

(*Nuphar advena*)



## FLOWER FACTS

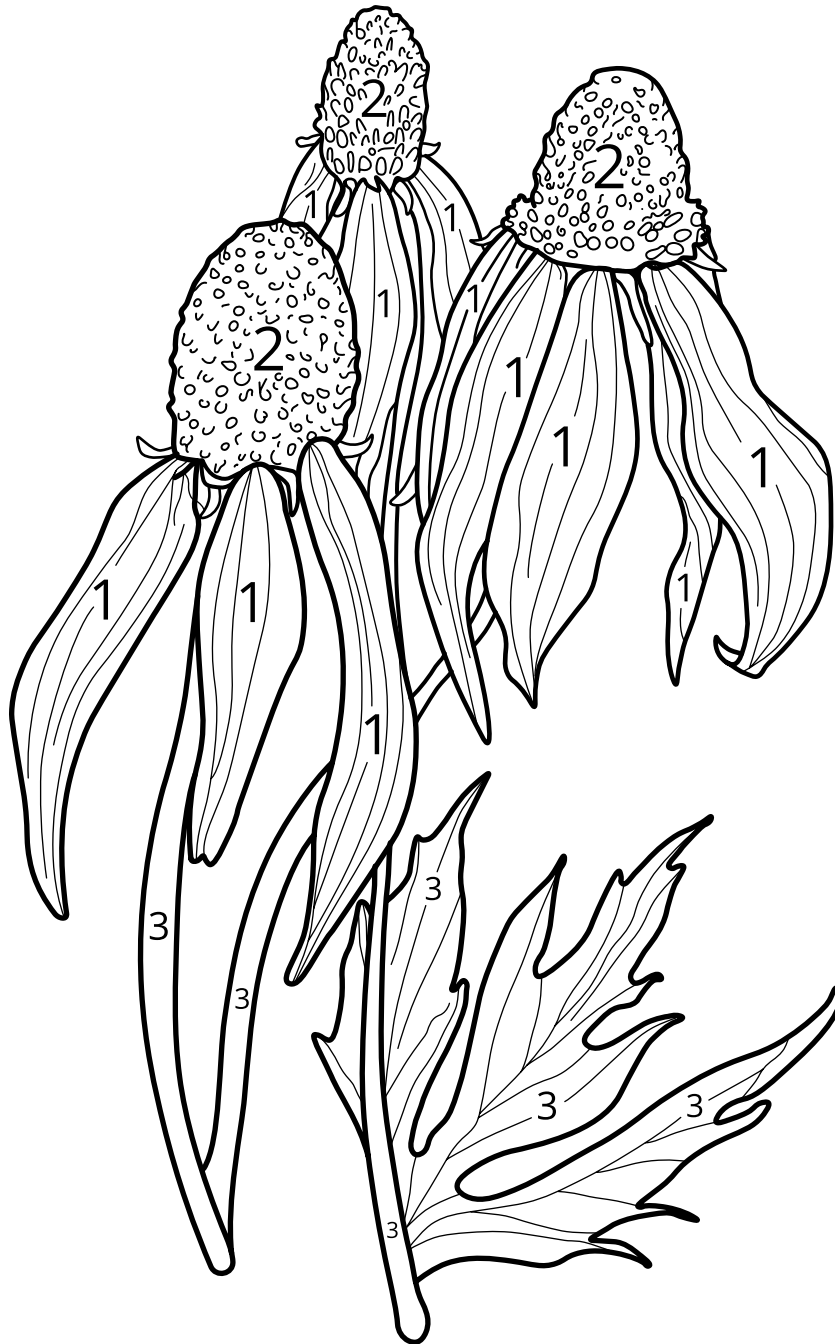
Spatterdock grows in the water. It has large, lily pad-like leaves and yellow, golf ball-like flowers that appear in the summer. It feeds all kinds of animals: bees and flies pollinate the flowers, beaver and muskrats eat the roots, and ducks and turtles eat the seeds.

## COLOR KEY

1 - YELLOW    2 - ORANGE  
3 - GREEN

# Gray-headed coneflower

*(Ratibida pinnata)*



## FLOWER FACTS

Gray-headed coneflower is a tall plant that has yellow flowers with dangling petals. It grows in open, sunny spots like prairies. It is pollinated by a variety of insects, especially bees. Groundhogs often eat the leaves and stems.

## COLOR KEY

1 - YELLOW    2 - BROWN  
3 - GREEN

# Prairie Dock

*(Silphium terebinthinaceum)*

## FLOWER FACTS

Prairie dock is one of our tallest native wildflowers. It has yellow, sunflower-like blossoms on stems that can grow to be taller than a school bus! Its big leaves feel like sandpaper when you touch them. It grows in open, sunny spots like prairies and attracts pollinators like bees, butterflies, and even Ruby-throated hummingbirds.

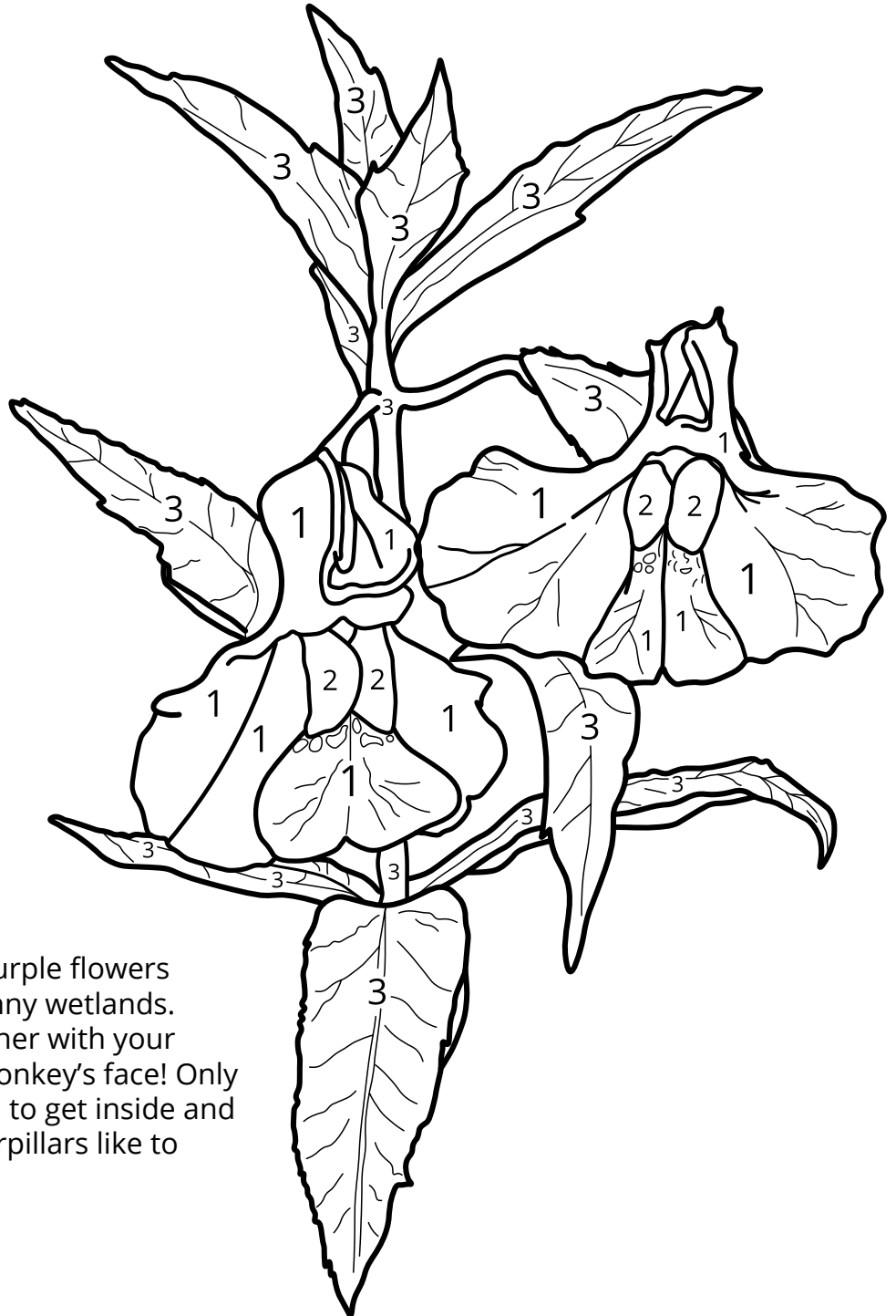


## COLOR KEY

- 1 - GREEN
- 2 - LIGHT GREEN
- 3 - YELLOW

# Common Monkey Flower

*(Mimulus ringens)*



## FLOWER FACTS

Common monkey flower has purple flowers on long stems and grows in sunny wetlands. If you squeeze the flower together with your fingers, it's said to look like a monkey's face! Only bumblebees are strong enough to get inside and pollinate the flower. Some caterpillars like to munch on its leaves.

## COLOR KEY

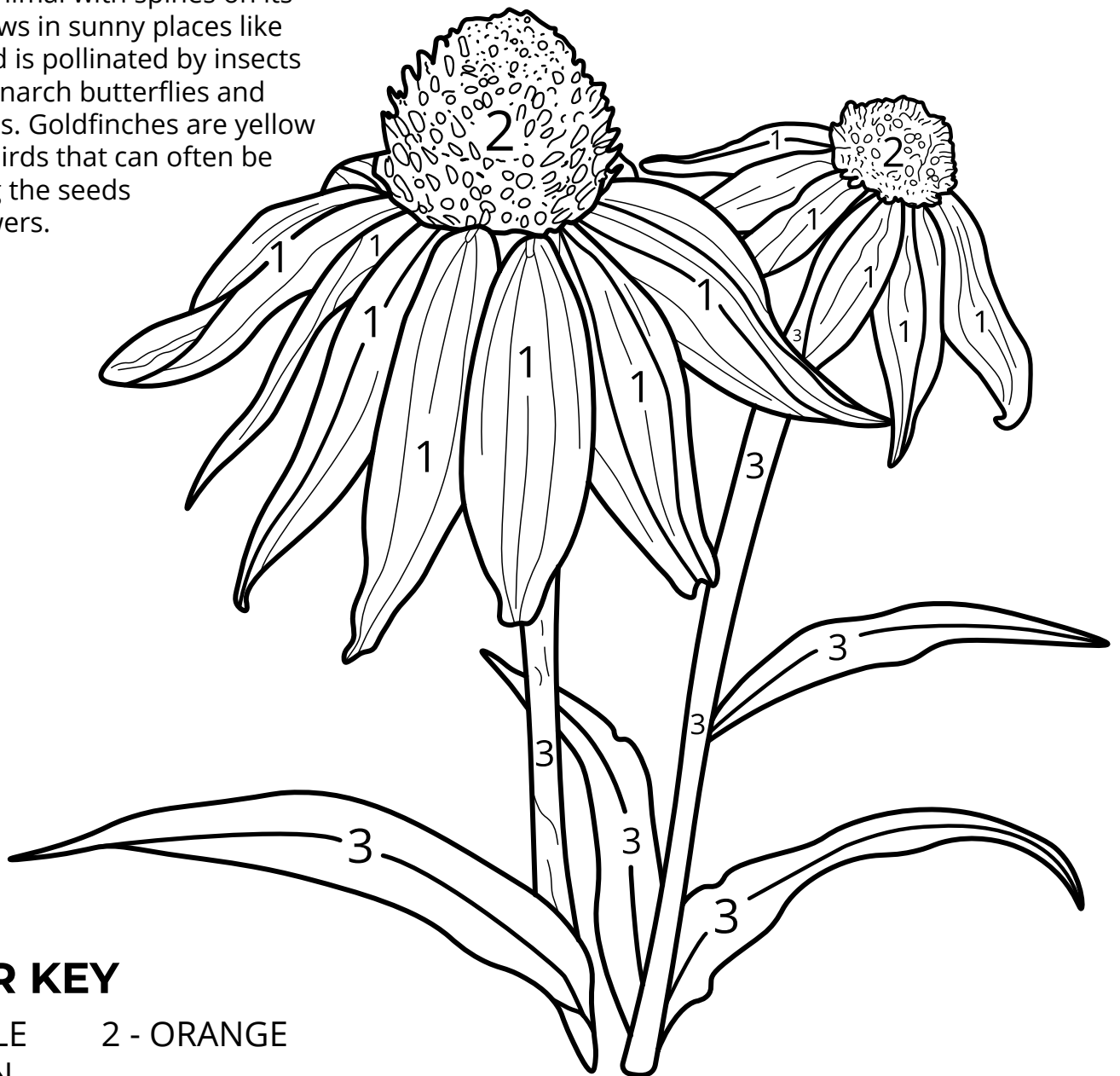
1 - PURPLE      2 - YELLOW  
3 - GREEN

# Purple Coneflower

*(Echinacea purpurea)*

## FLOWER FACTS

Purple coneflower is a plant that gets its name from its cone-shaped flower with purple petals. It is sometimes called hedgehog coneflower, because the orange center looks like a hedgehog, which is a small animal with spines on its back. It grows in sunny places like prairies and is pollinated by insects such as monarch butterflies and bumblebees. Goldfinches are yellow and black birds that can often be seen eating the seeds of coneflowers.

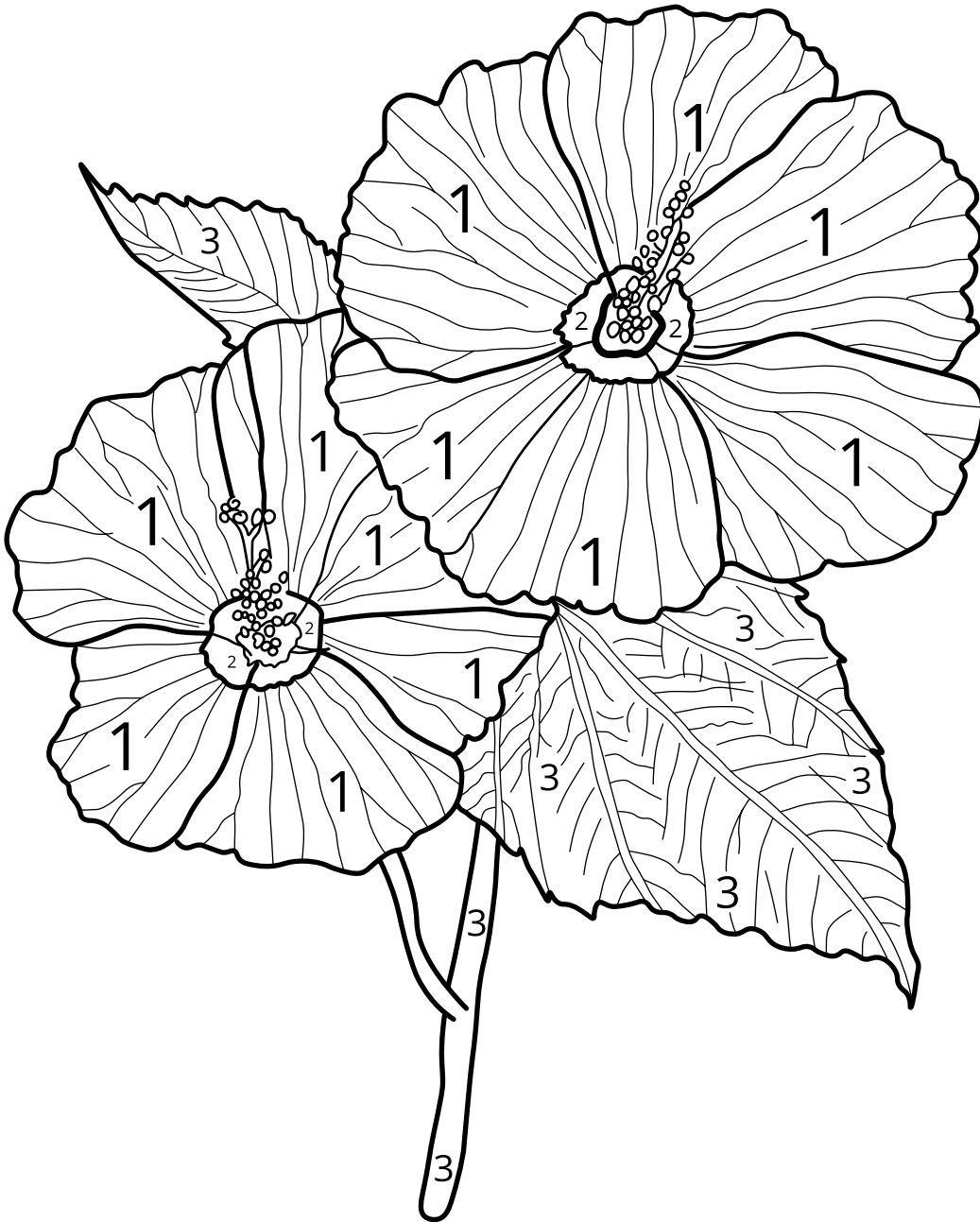


## COLOR KEY

1 - PURPLE      2 - ORANGE  
3 - GREEN

# Swamp Rose-Mallow

*(Hibiscus moschetos)*



## FLOWER FACTS

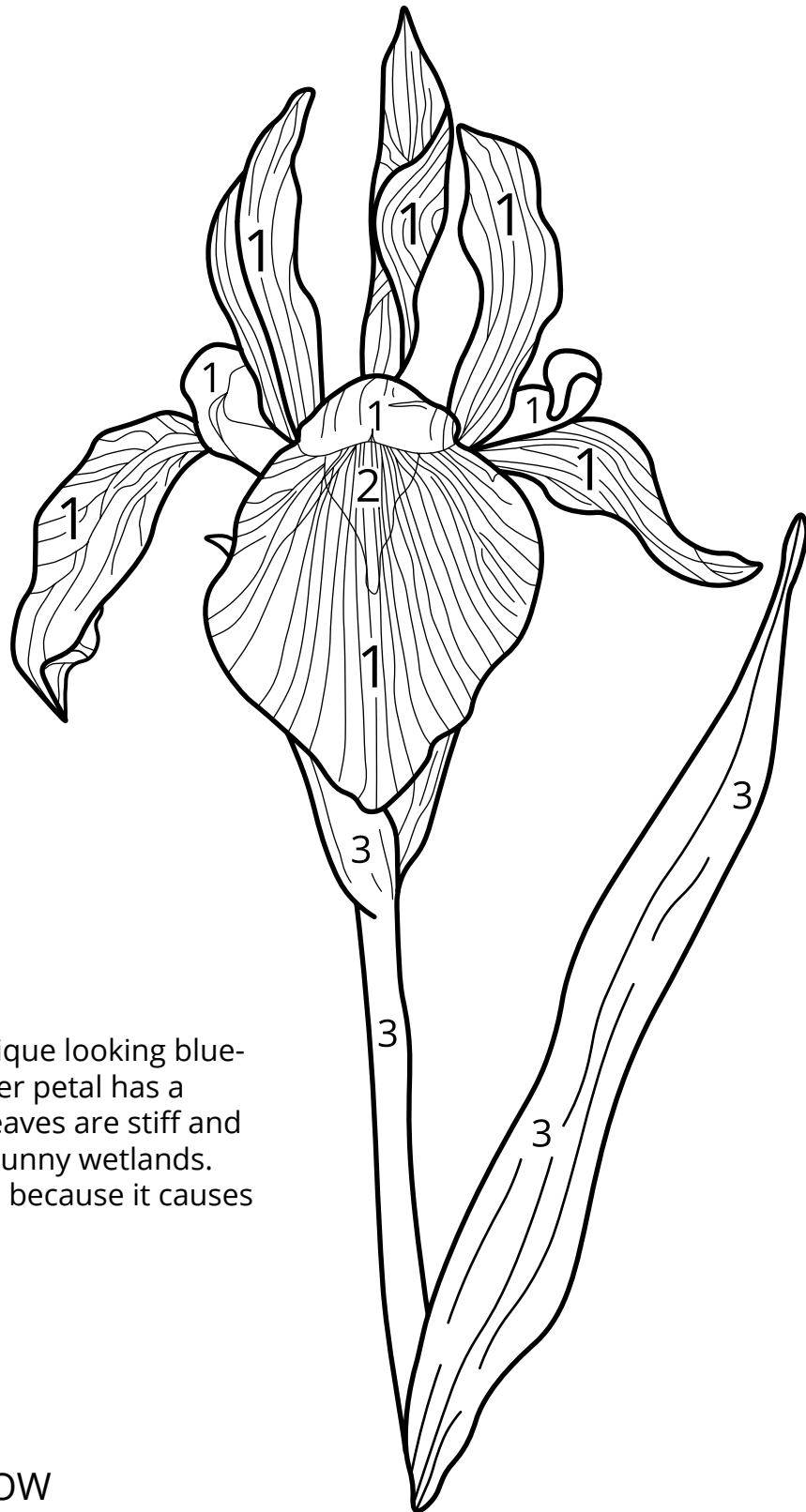
Swamp rose-mallow is a beautiful wildflower. It has large, five-petaled flowers that can be pink or white and are as large as your hand! It grows in sunny wetlands and sometimes forms large colonies with hundreds of flowers.

## COLOR KEY

1 - PINK      2 - RED  
3 - GREEN

# Southern Blue Flag Iris

*(Iris virginicus var. shrevei)*



## FLOWER FACTS

Blue flag iris has large and unique looking blue-purple flowers, and each flower petal has a bright yellow spot on it. The leaves are stiff and look like a sword. It grows in sunny wetlands. Mammals don't eat the leaves because it causes stomach aches.

## COLOR KEY

1 - BLUE            2 - YELLOW  
3 - GREEN

# Obedient Plant

*(Physostegia virginiana)*



## FLOWER FACTS

Obedient plant grows in prairies and has tall stems covered in pink, tube-shaped flowers. A plant can't really be obedient, but it gets its name because you can push a flower side to side, and it will stay where you put it! It's also called false dragonhead because the flowers look like a dragon's mouth.

## COLOR KEY

1 - PINK            2 - PURPLE  
3 - GREEN

# Obedient Plant

*(Physostegia virginiana)*



## FLOWER FACTS

Obedient plant grows in prairies and has tall stems covered in pink, tube-shaped flowers. A plant can't really be obedient, but it gets its name because you can push a flower side to side, and it will stay where you put it! It's also called false dragonhead because the flowers look like a dragon's mouth.

## COLOR KEY

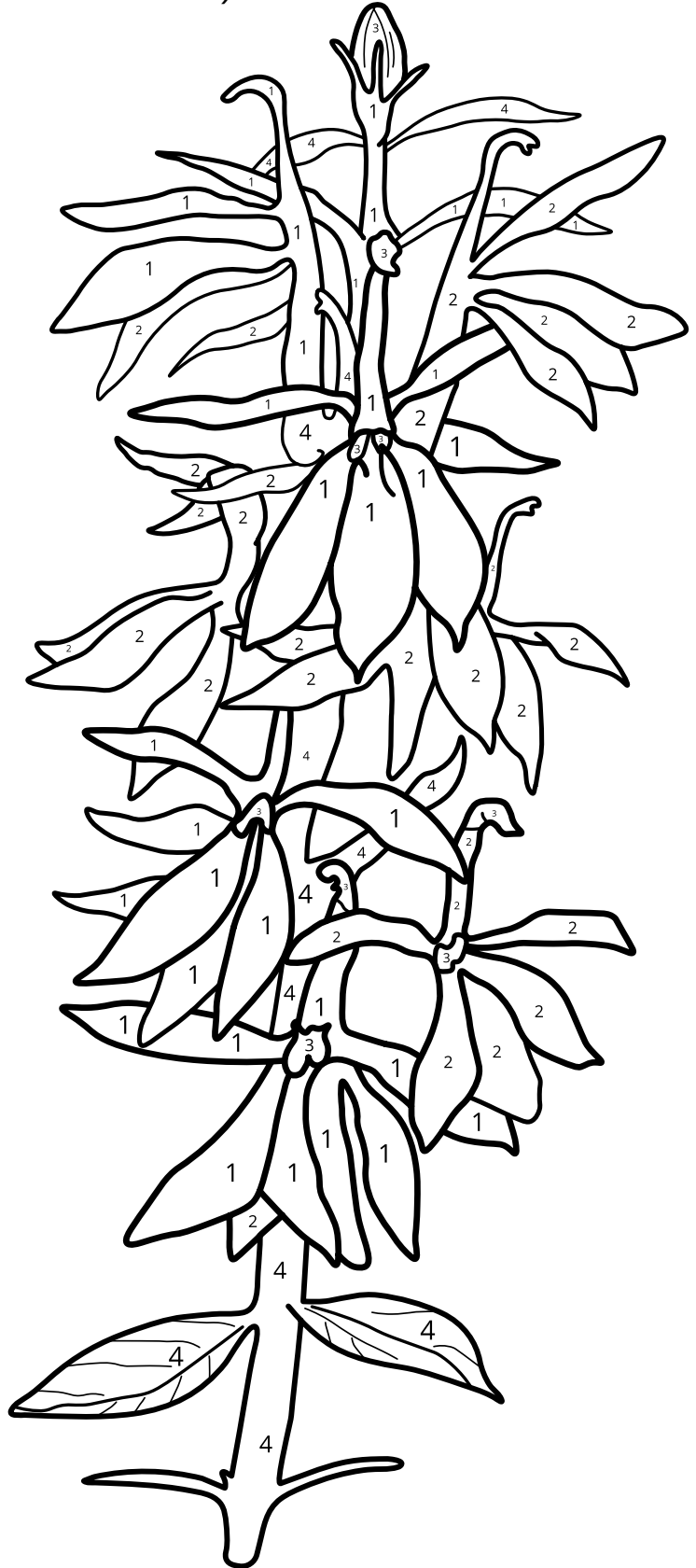
1 - PINK      2 - PURPLE  
3 - GREEN

# Cardinal Flower

*(Lobelia cardinalis)*

## FLOWER FACTS

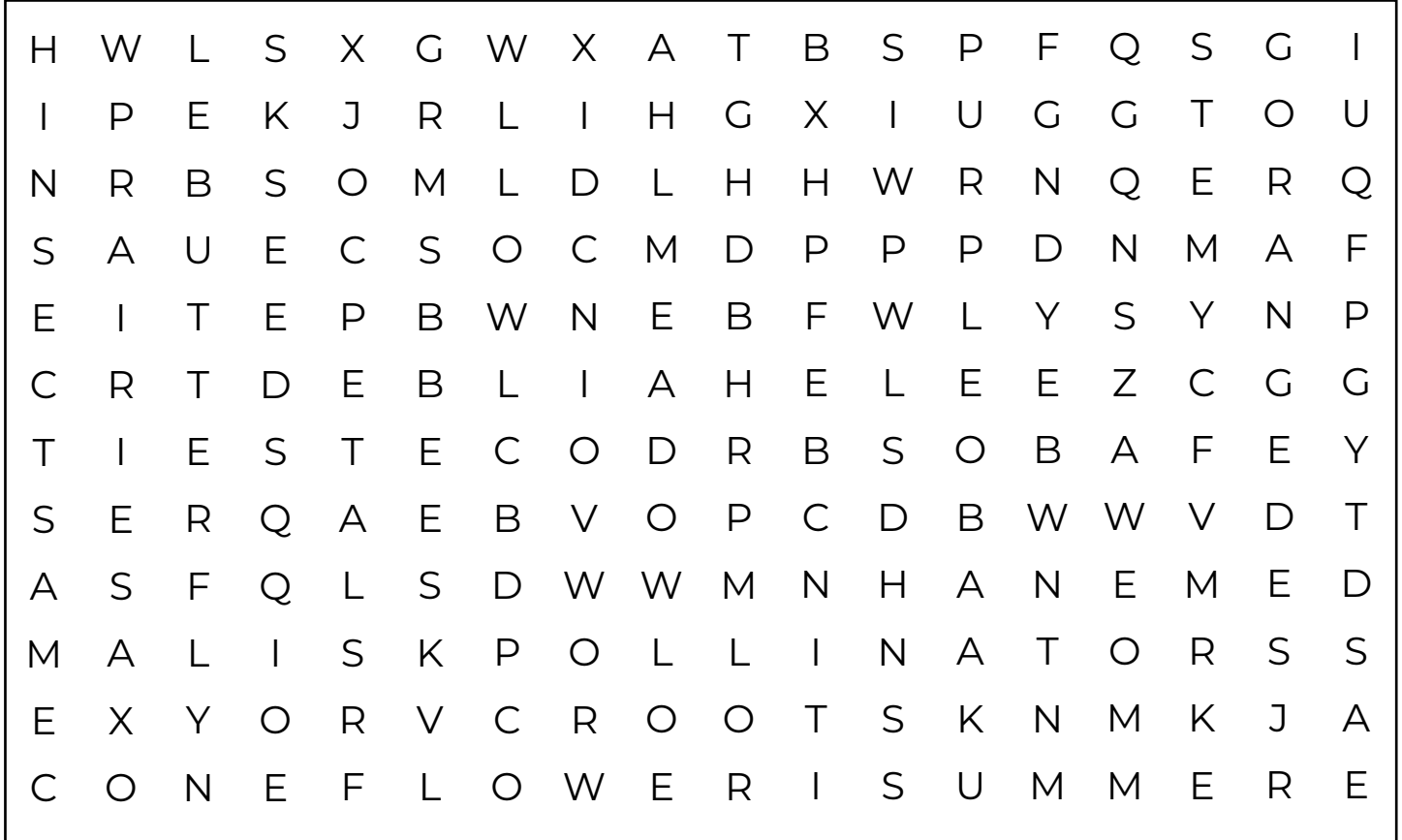
Cardinal flower has bright, red flowers, and it gets its name from the male Cardinal bird, which is also bright red. As Ruby-throated hummingbirds search the flowers for nectar, they get pollen on them, and then help pollinate the plants as they move from flower to flower. It grows in sunny, wet areas.



## COLOR KEY

- |          |              |
|----------|--------------|
| 1 - RED  | 2 - DARK RED |
| 3 - PINK | 4 - GREEN    |

# Word Search



Find the following words in the puzzle.

Words are hidden → ↓ and ↘.

BEES

BIRDS

BLOOM

BUTTERFLY

CONEFLOWER

INSECTS

LEAVES

MEADOW

MONARCH

ORANGE

PETALS

POLLINATORS

PRAIRIES

PURPLE

ROOTS

SEEDS

STEM

SUMMER

SUNNY

WILDFLOWER

# Ohio's Spring Wildflower **ACTIVITY BOOK**

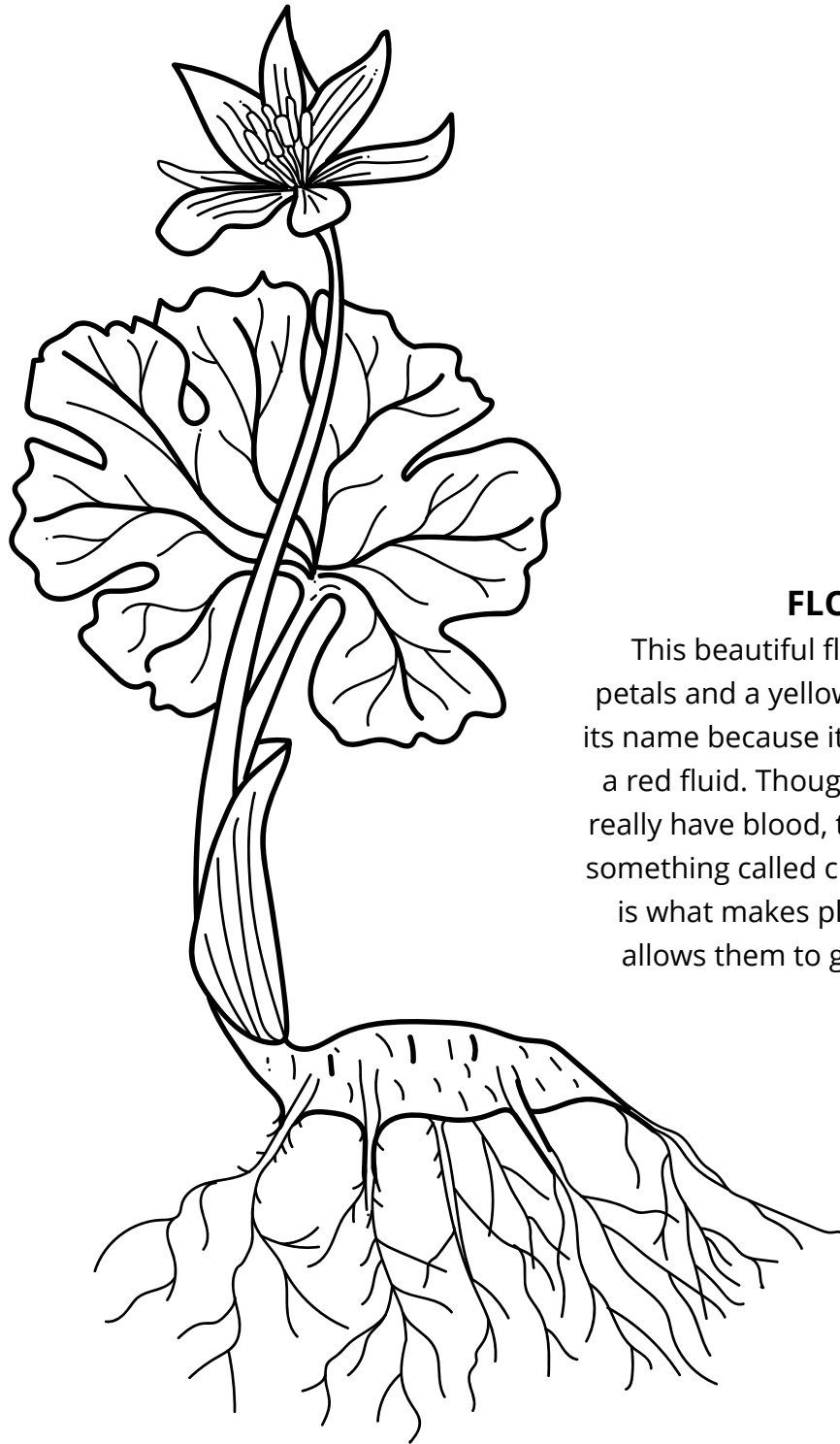
**DIVISION OF NATURAL AREAS & PRESERVES**  
OHIO DEPARTMENT OF NATURAL RESOURCES



DIVISION OF  
**NATURAL AREAS  
& PRESERVES**  
OHIO DEPARTMENT OF NATURAL RESOURCES



# Ohio's Spring Wildflowers



## FLOWER FACTS:

This beautiful flower has white petals and a yellow center. It gets its name because its roots contain a red fluid. Though plants do not really have blood, they do contain something called chlorophyll. This is what makes plants green and allows them to get energy from the sun!

**UNSCRAMBLE THE WORD TO NAME THIS NATIVE FLOWER:**

ORODOTOLB

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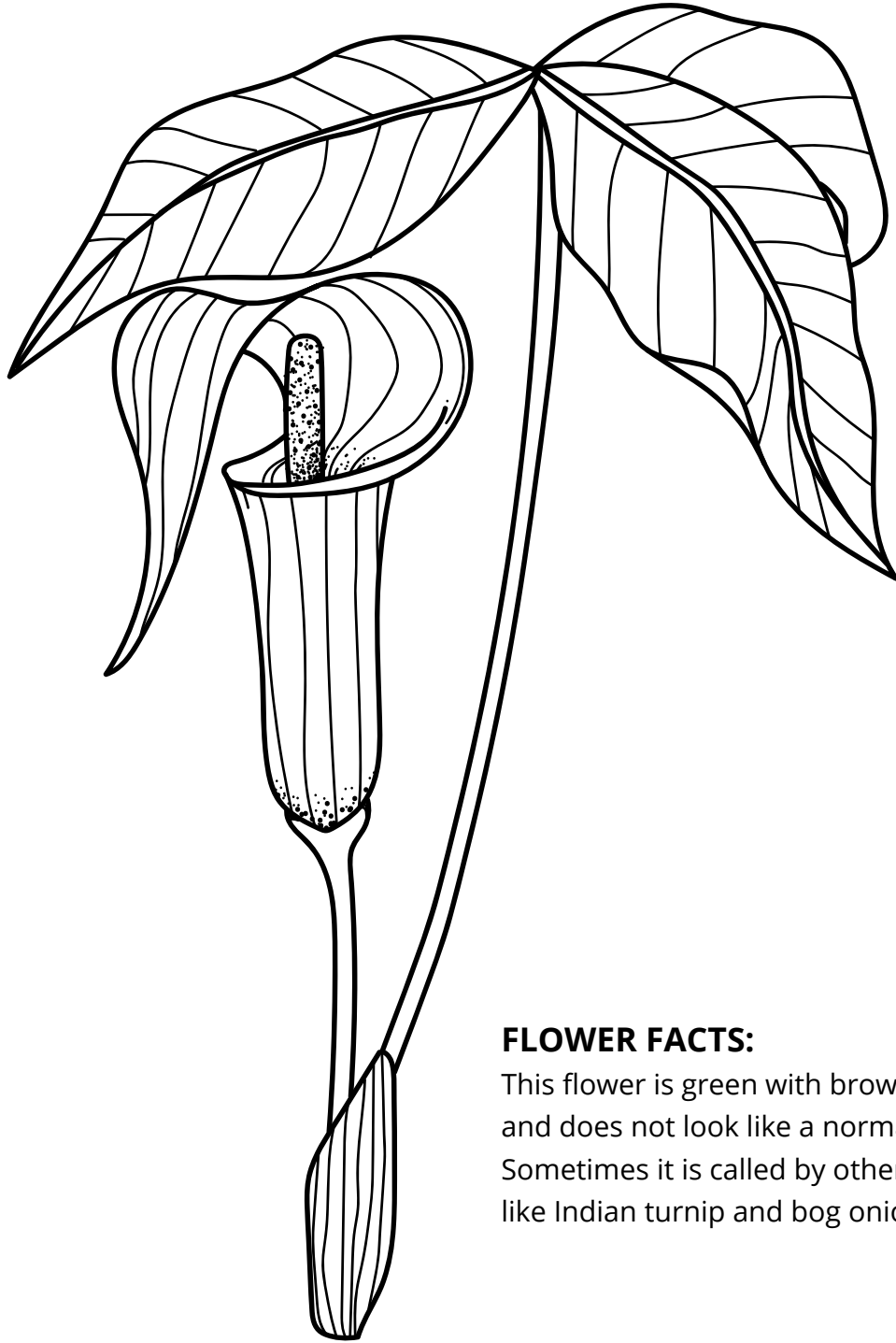
**IT'S IN OUR NATURE**







# Ohio's Spring Wildflowers



## FLOWER FACTS:

This flower is green with brown stripes and does not look like a normal flower. Sometimes it is called by other names, like Indian turnip and bog onion.

**UNSCRAMBLE THESE WORDS TO NAME THIS NATIVE FLOWER:**

CAKJ-NI-HET-LUPTPI

				-			-											
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IT'S IN OUR NATURE







# Ohio's Spring Wildflowers

## FLOWER FACTS:

This is a white flower with a yellow center. It gets its name because it blooms in May and develops fruit that looks like little apples. It has very large leaves that look like a green umbrella!



**UNSCRAMBLE THE WORD TO NAME THIS NATIVE FLOWER:**

PELMAAYP

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**IT'S IN OUR NATURE**

# COMPONENTS OF OHIO'S MODEL CURRICULUM

## Social Studies – Grade 4 supported by this study guide

### The resources above cover the following components of Ohio's Model Curriculum – Social Studies – Grade 4

OhiosModelCurriculumSocialStudies.pdf (p 34)

#### STRAND: HISTORY

##### TOPIC: HERITAGE

###### CONTENT STATEMENT

3. Various groups of people have lived in Ohio over time including American Indians, migrating settlers and immigrants. Interactions among these groups have resulted in cooperation, conflict, and compromise.

EXPECTATIONS FOR LEARNING Explain how interactions among these groups have resulted in cooperation, conflict, and compromise

###### CONTENT STATEMENT

5. The Northwest Ordinance incorporated democratic ideals into the territories. It provided a process for territories to become states and recognized them as equal to the other existing states.

EXPECTATIONS FOR LEARNING Explain how the Northwest Ordinance influenced the incorporation of democratic ideals in the states formed from the Northwest Territory

#### STRAND: GEOGRAPHY

##### TOPIC: SPATIAL THINKING AND SKILLS

###### CONTENT STATEMENT

9. A map scale and cardinal and intermediate directions can be used to describe the relative location of physical and human characteristics of Ohio and the United States.

EXPECTATIONS FOR LEARNING Use a map scale, cardinal directions and intermediate directions to describe the relative location of physical and human characteristics of Ohio and the United States.

10. The economic development of the United States continues to influence and be influenced by agriculture, industry, and natural resources in Ohio

EXPECTATIONS FOR LEARNING Explain how Ohio's agriculture, industry, and natural resources influence the economic development of the United States.

11. People have modified the environment throughout history resulting in both positive and negative consequences in Ohio and the United States.

EXPECTATIONS FOR LEARNING Explain why human modifications to the environment are positive and/or negative.

#### STRAND: GOVERNMENT

##### TOPIC: RULES AND LAWS

###### CONTENT STATEMENT

17. Laws can protect rights, provide benefits, and assign responsibilities.

EXPECTATIONS FOR LEARNING Describe ways in which laws protect rights, provide benefits, and assign responsibilities to citizens.

**THIS CURRICULUM GUIDE WAS GENEROUSLY SUPPORTED BY AN AMERICA 250-OHIO GRANT.**