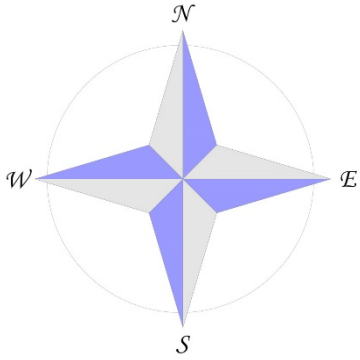

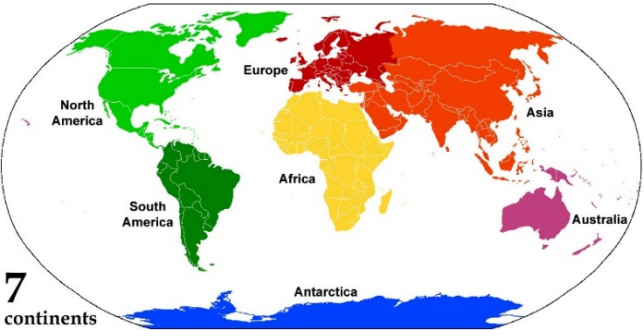




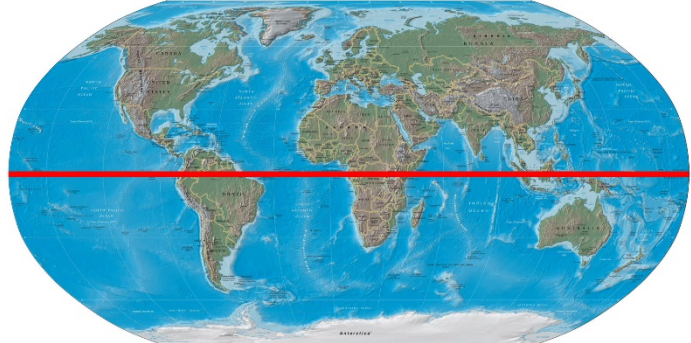

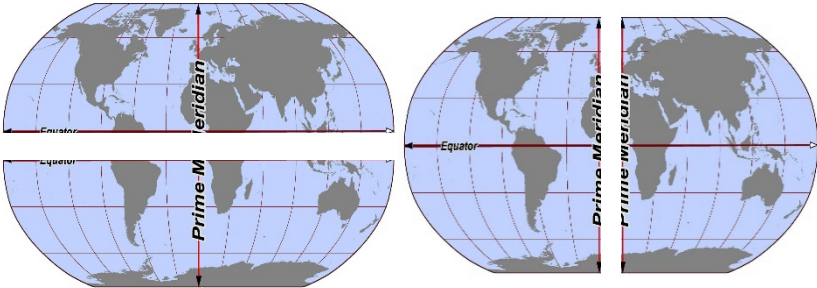
Lesson 1.1: Map Vocabulary and Introduction

**Vocabulary Matching: word, definition, image**

cardinal direction	(noun) One of the four main directions featured on a compass rose: north, south, east, and west	
compass rose	(noun) A symbol that represents a compass showing cardinal and intermediate directions	
continents	(noun) The seven large land masses on Earth	


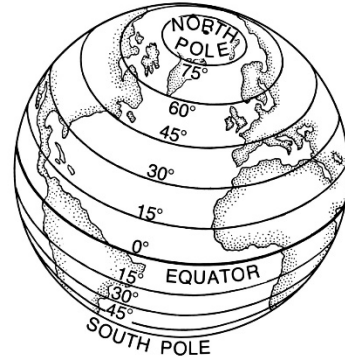
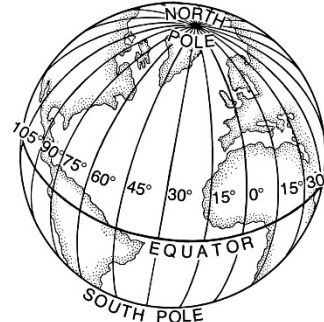


Lesson 1.1: Map Vocabulary and Introduction

equator	(noun) The imaginary line that runs east-west around the middle of Earth and represents zero degrees latitude	
geography	(noun) The study of the physical, biological, and cultural features of Earth's surface	
hemisphere	(noun) One half of Earth; the northern and southern ones are split by the equator and the eastern and western ones are split by the prime meridian	

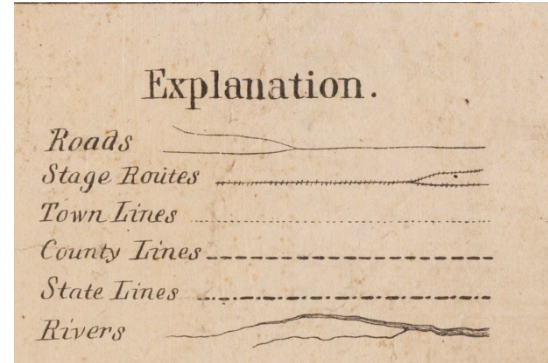
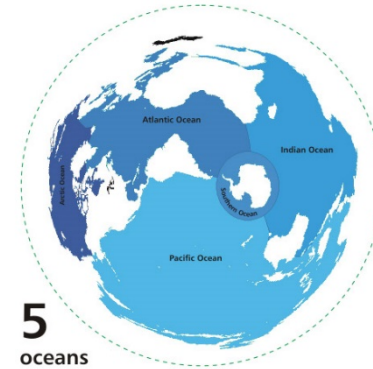



Lesson 1.1: Map Vocabulary and Introduction

human feature	(noun) An element added to Earth's surface by people, usually to provide shelter, create borders, or support transportation	 <p>United States at night</p> <p>Google Earth</p> <p>©2015 Google Imagery © DigitalGlobe Terrain © GeoEye, U.S. Navy, IGN, GEBCO</p> <p>Legend</p> <p>View from Space (Altitude: 3541 mi)</p>
latitude	(noun) The distance north or south of the equator, measured in degrees, represented by invisible parallel lines running east to west around Earth	
longitude	(noun) The distance east or west of the prime meridian, measured in degrees, represented by invisible parallel lines running north to south around Earth	

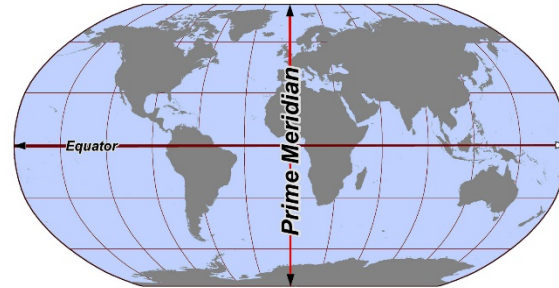



Lesson 1.1: Map Vocabulary and Introduction

key	(noun) An explanation of abbreviations or symbols used on a map, sometimes called a legend	
oceans	(noun) The five large bodies of water on Earth	
physical feature	(noun) A naturally occurring feature on Earth's surface such as a landform or body of water	



## Lesson 1.1: Map Vocabulary and Introduction

prime meridian	(noun) The imaginary line that runs north-south around the middle of Earth and represents zero degrees longitude	
scale	(noun) A tool, printed or drawn, to show how distances should be measured on a map	





Lesson 1.1: Map Vocabulary and Introduction

**Question/Answer Loop Cards**

<b>Starting Card</b>	<b>This is one of the four main directions featured on a compass rose: north, south, east, and west</b>
<b>What are the cardinal directions?</b>	<b>The imaginary line that runs east-west around the middle of Earth and represents zero degrees latitude</b>
<b>What is the equator?</b>	<b>These are the seven large land masses on Earth: Antarctica, Asia, Africa, North America, South America, Europe, and Australia</b>
<b>What are the continents?</b>	<b>This is one half of Earth; the northern and southern ones are split by the equator and the eastern and western ones are split by the prime meridian</b>
<b>What are hemispheres?</b>	<b>This is the study of the physical, biological, and cultural features of Earth's surface</b>



Lesson 1.1: Map Vocabulary and Introduction

<b>What is geography?</b>	<b>The distance north or south of the equator, measured in degrees, represented by evenly spaced invisible parallel lines running east to west around Earth</b>
<b>What is latitude?</b>	<b>An explanation of abbreviations or symbols used on a map, sometimes called a legend</b>
<b>What is a key?</b>	<b>The imaginary line that runs north-south around the middle of Earth and represents zero degrees longitude</b>
<b>What is the prime meridian?</b>	<b>This is a naturally occurring feature on Earth's surface such as a landform or body of water</b>
<b>What is a physical feature?</b>	<b>A symbol that represents a compass showing cardinal and intermediate directions</b>



Lesson 1.1: Map Vocabulary and Introduction

<b>What is a compass rose?</b>	<b>These are the five large bodies of water on Earth: Arctic, Atlantic, Indian, Pacific, and Southern</b>
<b>What are oceans?</b>	<b>A tool, printed or drawn, to show how distances should be measured on a map</b>
<b>What is scale?</b>	<b>This is an element added to Earth's surface by people, usually to provide shelter, create borders, or support transportation</b>
<b>What is a human feature?</b>	<b>The distance east or west of the prime meridian, measured in degrees represented by evenly spaced invisible parallel lines running north to south around Earth</b>
<b>What is longitude?</b>	<b>This is the last card</b>





Lesson 1.1: Map Vocabulary and Introduction

Name \_\_\_\_\_

**Map Vocabulary**

human feature	latitude	oceans	equator	compass rose	scale	geography
continents	hemisphere	physical feature	key	longitude	prime meridian	cardinal direction

1. \_\_\_\_\_: One half of Earth
2. \_\_\_\_\_: The study of the physical, biological, and cultural features of Earth's surface
3. \_\_\_\_\_: The imaginary line that runs north-south and represents zero degrees longitude
4. \_\_\_\_\_: The imaginary line that runs east-west and represents zero degrees latitude
5. \_\_\_\_\_: One of the four main directions featured on a compass rose
6. \_\_\_\_\_: A symbol that represents a compass showing cardinal and intermediate directions
7. \_\_\_\_\_: The seven large land masses on Earth
8. \_\_\_\_\_: The distance north or south of the equator, represented by parallel invisible lines
9. \_\_\_\_\_: A tool to show how distances should be measured on a map
10. \_\_\_\_\_: The five large bodies of water on Earth
11. \_\_\_\_\_: An element added to Earth's surface by people
12. \_\_\_\_\_: A naturally occurring feature on Earth's surface such as a landform or body of water
13. \_\_\_\_\_: The distance east or west of the prime meridian, represented by parallel invisible lines
14. \_\_\_\_\_: An explanation of abbreviations or symbols used on a map





Lesson 1.1: Map Vocabulary and Introduction

Name \_\_\_\_\_ Answer Key \_\_\_\_\_

**Map Vocabulary**

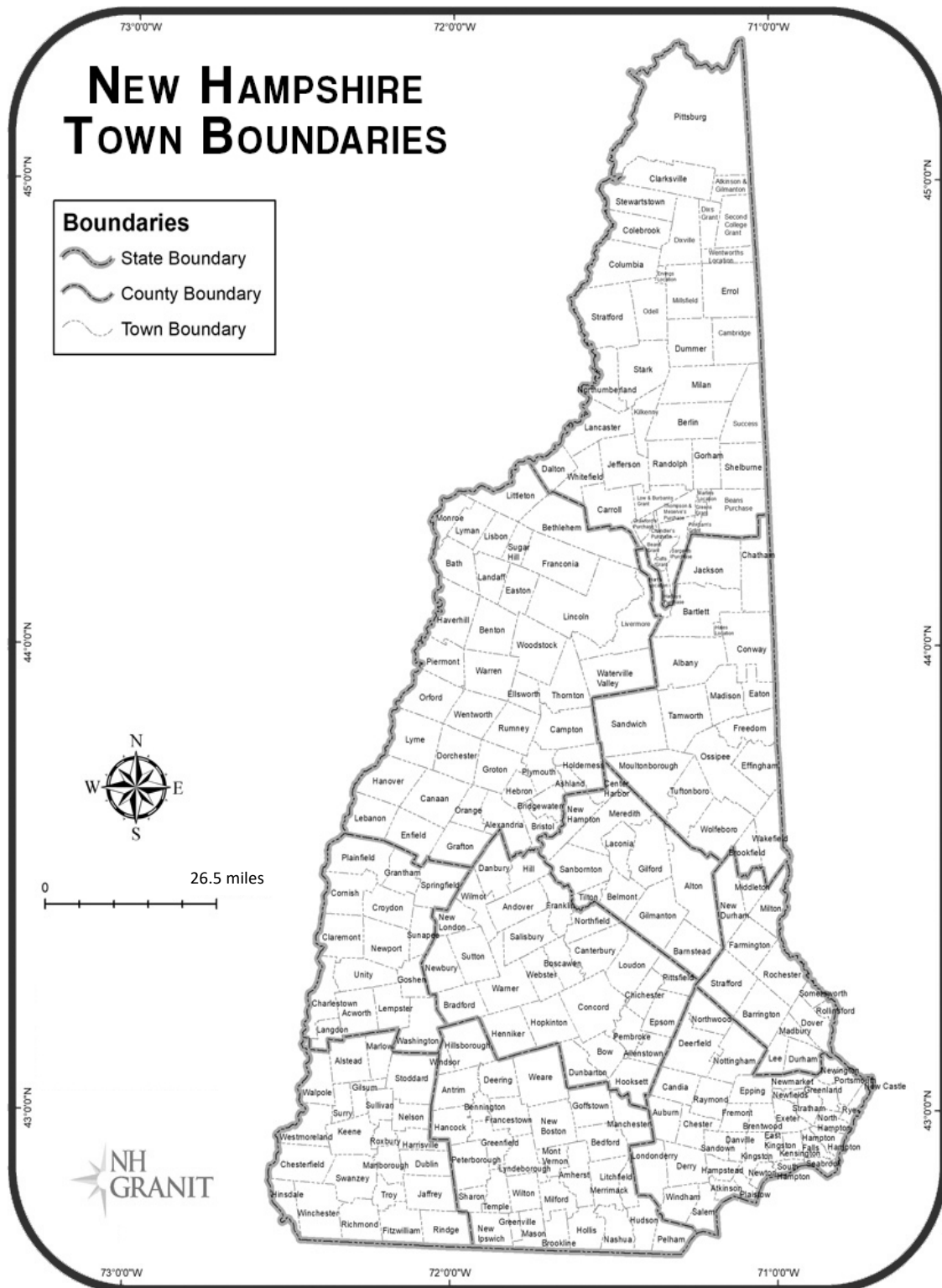
human feature	latitude	oceans	equator	compass rose	scale	geography
continents	hemisphere	physical feature	key	longitude	prime meridian	cardinal direction

1. hemisphere: One half of Earth
2. geography: The study of the physical, biological, and cultural features of Earth's surface
3. prime meridian: The imaginary line that runs north-south and represents zero degrees longitude
4. equator: The imaginary line that runs east-west and represents zero degrees latitude
5. cardinal direction: One of the four main directions featured on a compass rose
6. compass rose: A symbol that represents a compass showing cardinal and intermediate directions
7. continents: The seven large land masses on Earth
8. latitude: The distance north or south of the equator, represented by parallel invisible lines
9. scale: A tool to show how distances should be measured on a map
10. oceans: The five large bodies of water on Earth
11. human feature: An element added to Earth's surface by people
12. physical feature: A naturally occurring feature on Earth's surface such as a landform or body of water
13. longitude: The distance east or west of the prime meridian, represented by parallel invisible lines
14. key: An explanation of abbreviations or symbols used on a map



Lesson 1.1: Map Vocabulary and Introduction

Name \_\_\_\_\_



New Hampshire Town Boundaries

Source: NH GRANIT Database, Complex Systems Research Center, University of New Hampshire, and New Hampshire Historical Society.

Distance data added by New Hampshire Historical Society staff.



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

## Analyze It! New Hampshire Town Boundaries Map

**Encounter**

1. Have you ever seen a map of New Hampshire? Where? How was it being used?
2. Now look at the map you're analyzing. What's your first impression of what this map is about?
3. Describe this map as if you were talking to someone who couldn't see it.
4. Who made this map? How do you know?





Now that you've become familiar with the map, it's time to take a closer look at it.

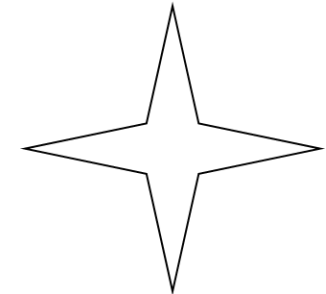
5. Look for the heading or title. What information is there to help you understand the map better?

6. Get your bearings! Decode the map's features using this chart:

**Key:** Draw the three symbols used and circle an example of each on the map.

**Orientation:** Draw a square around the compass rose. Find your hometown on the map, circle it, and then write it in the middle of the compass.

Find and then write in what towns are to the north, south, east, and west of your town.



**Grid:** Find the longitude and latitude of two locations. Use the markings on the side to help you.

_____	_____	_____
_____	_____	_____
Location	Longitude	Latitude

**Scale:** About how many miles are in one inch on the scale?

Use the scale to find the approximate distance in miles between

Concord and Nashua.	_____
Berlin and Portsmouth.	_____

7. What else do you notice in this map? Is there anything missing? Anything that surprises you?



Once you've learned everything you can from the map, it's time to build on your knowledge.

8. Are there more human or physical features on this map? What are they?

9. How would a historical map of New Hampshire town boundaries possibly look different than this map?

10. What is a question you have about this map? How can you answer it? Extra challenge: Answer your question!

**Build**



**How can you add to the story? Choose one of these questions to answer.**

- \* What other features could you add to this map to make it useful?
- \* How could someone use this map?
- \* If you extended this map beyond its borders, what would you see?



## Tips for Studying Maps

### Vocabulary

**Scale** (noun) A tool, printed or drawn, to show how distances should be measured on a map

**Boundary** (noun) A real or imaginary line that divides two places

**Cardinal direction** (noun) One of the four main points on a compass: north, south, east, or west

**Compass rose** (noun) A symbol that represents a compass showing cardinal and intermediate directions

**Equator** (noun) The imaginary line that runs east-west around the middle of Earth

**Intermediate direction** (noun) A point between two of the main points on a compass, such as northeast or southwest

**Key** (noun) An explanation of abbreviations or symbols used on a map, sometimes called a legend

**Latitude** (noun) The distance north or south of the Equator, measured in degrees

**Longitude** (noun) The distance east or west of the prime meridian, measured in degrees

**Prime meridian** (noun) The imaginary line that runs north-south around the middle of Earth

### Types of Maps

**Economic Map:** This type of map displays information about the resources available across a certain area or the way the land is used to support the local economy. Look for symbols or colors representing crops or industries.

**Physical Map:** This type of map is focused on the natural features of a certain area. Look for labeled bodies of water like rivers, lakes and oceans and labeled landforms like mountains, valleys, hills, and plateaus.

**Political Map:** This type of map shows how people have organized the land and water in a certain area. Look for dashed or solid lines representing boundaries and borders between states, towns and, countries. Dots of different sizes may mark towns and cities.

**Road Map:** This type of map shows how people have added to land and water to make it easier to transport people and goods. Look for highways, bridges, and railroad tracks on this type of map.

**Thematic Map:** This type of map provides information on a specific topic and how it relates to a certain area by adding a layer of data to a base map. For example, a population density map might use different colors to show which towns have more people living in them than others.

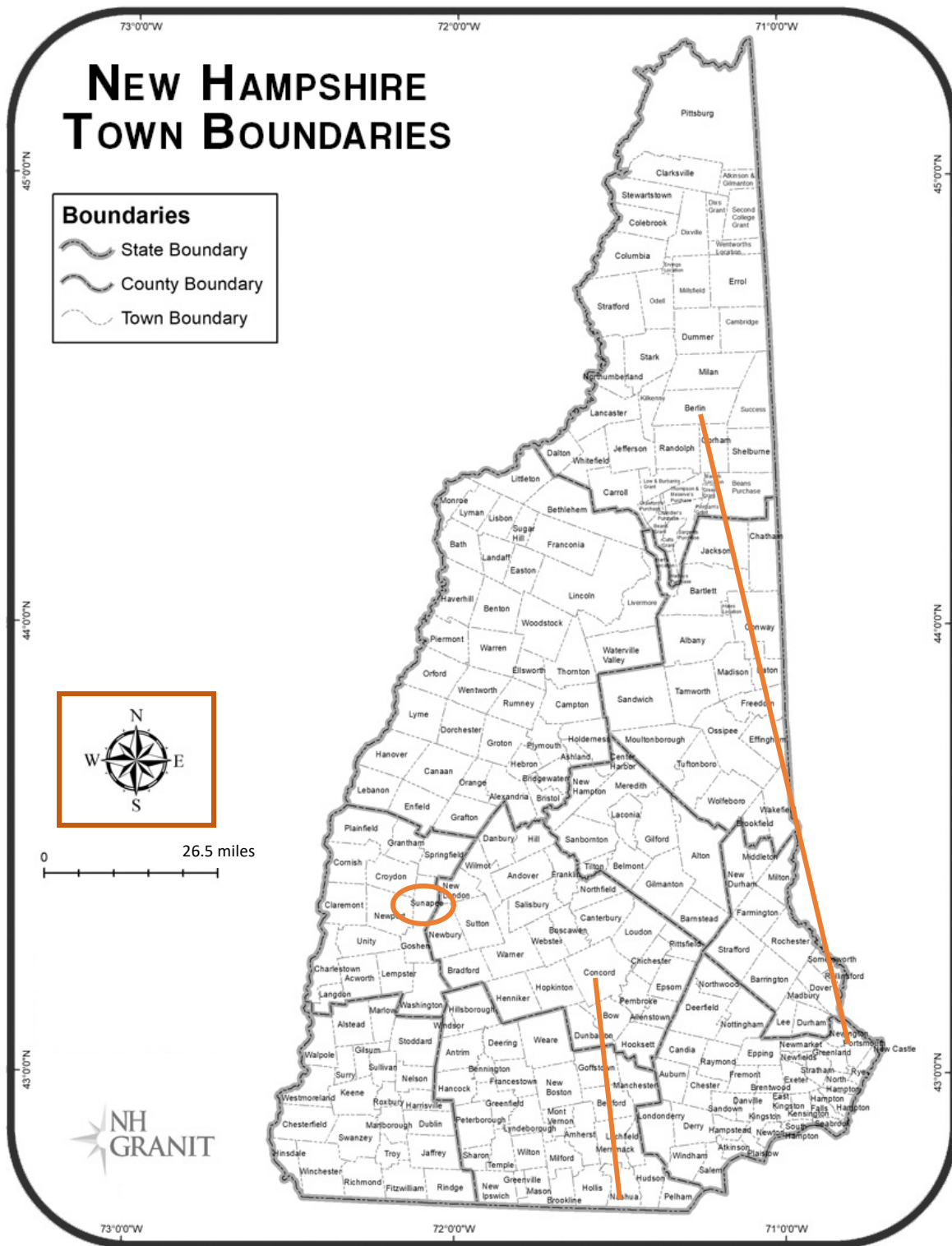
**Topographical Map:** This type of map shows the shape of the land and how the elevation, or the height of the land, changes across a certain area. Look for shading that creates the effect of raised land, or changes in color on the map as the land rises up above sea level.





Lesson 1.1: Map Vocabulary and Introduction

Name \_\_\_\_\_ Answer Key \_\_\_\_\_



New Hampshire Town Boundaries  
Source: NH GRANIT Database, Complex Systems Research Center, University of New Hampshire, and New Hampshire Historical Society.  
Distance data added by New Hampshire Historical Society staff.



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

## Analyze It! New Hampshire Town Boundaries Map

1. Have you ever seen a map of New Hampshire? Where? How was it being used?

**I've seen my parents use a map on their phone while they drive. I've also seen a map of New Hampshire at the rest stop on the highway. People were looking at where they were and where they were going. There were also stores and activities listed on the map.**

2. Now look at the map you're analyzing. What's your first impression of what this map is about?

**It's a map of the state of New Hampshire. I don't see any rivers or mountains, but I do see lots of lines, so maybe it's about borders in New Hampshire?**

3. Describe this map as if you were talking to someone who couldn't see it.

**The state of New Hampshire is outlined in a thick line, and then the 10 counties are outlined in heavy dotted lines. All the towns are then outlined in lighter dotted lines, and the names of each town are written. There are three kinds of boundaries listed on the key, and a scale. In some places, like in the south, the names are hard to read because they are small and close together, but in some places, like up north, they are much easier to read because the towns are bigger.**

4. Who made this map? How do you know?

**NH Granit made this map because it says that the data came from them to make the map. I think it has to do with the University of New Hampshire.**





Now that you've become familiar with the map, it's time to take a closer look at it.

5. Look for the heading or title. What information is there to help you understand the map better?

**The title says "New Hampshire Statewide Map Atlas Town Boundaries." Now I know that the littler areas are definitely towns.**

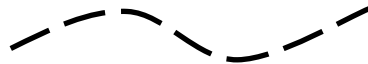
6. Get your bearings! Decode the map's features using this chart:

Investigate

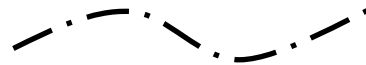
**Key:** Draw the three symbols used and circle an example of each on the map.



= state boundary



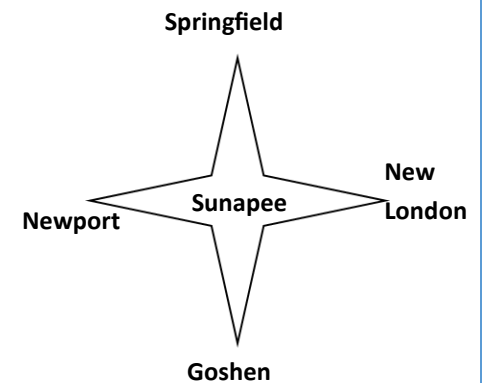
= county boundary



= town boundary

**Orientation:** Draw a square around the compass rose. Find your hometown on the map, circle it, and then write it in the middle of the compass.

Find and then write in what towns are to the north, south, east, and west of your town.



**Grid:** Find the longitude and latitude of two locations. Use the markings on the side to help you.

<u>Brentwood</u>	<u>71°0'0"W</u>	<u>43°0'0"N</u>
<u>Benton</u>	<u>72°0'0"W</u>	<u>44°0'0"N</u>
Location	Longitude	Latitude

**Scale:** About how many miles are in one inch on the scale?

**There are about 26.5 miles in one inch.**

Use the scale to find the approximate distance in miles between

Concord and Nashua.

$$26.5 \times 1.5 = 40 \text{ miles}$$

Berlin and Portsmouth.

$$26.5 \times 4 = 106 \text{ miles}$$

7. What else do you notice in this map? Is there anything missing? Anything that surprises you?

**I notice the boundaries of the counties, but the names of the counties are missing. I also don't see any lakes or mountains and I know New Hampshire has a lot of both.**



Once you've learned from the map, it's time to build on your knowledge.

8. Are there more human or physical features on this map? What are they?

**There are more human features on the map. The state boundary, the county boundaries, and the town boundaries are all human features. Longitude and latitude are also human features.**

9. How would a historical map of New Hampshire town boundaries possibly look different than this map?

**Maybe some New Hampshire towns didn't exist 300 years ago, so it's possible that a historical map would have fewer towns. It's possible too that there were different or fewer counties in the past.**

10. What is a question you have about this map? How can you answer it? Extra challenge: Answer your question!

**I wonder where the big lakes and the mountains are in relation to the towns on the map. I could answer it by looking at a different kind of map, one that has more physical features.**

**Build**



**How can you add to the story? Choose one of these questions to answer.**

- \* What other features could you add to this map to make it useful?
- \* How could someone use this map?
- \* If you extended this map beyond its borders, what would you see?



## Tips for Studying Maps

### Vocabulary

**Scale** (noun) A tool, printed or drawn, to show how distances should be measured on a map

**Boundary** (noun) A real or imaginary line that divides two places

**Cardinal direction** (noun) One of the four main points on a compass: north, south, east, or west

**Compass rose** (noun) A symbol that represents a compass showing cardinal and intermediate directions

**Equator** (noun) The imaginary line that runs east-west around the middle of Earth

**Intermediate direction** (noun) A point between two of the main points on a compass, such as northeast or southwest

**Key** (noun) An explanation of abbreviations or symbols used on a map, sometimes called a legend

**Latitude** (noun) The distance north or south of the Equator, measured in degrees

**Longitude** (noun) The distance east or west of the prime meridian, measured in degrees

**Prime meridian** (noun) The imaginary line that runs north-south around the middle of Earth

### Types of Maps

**Economic Map:** This type of map displays information about the resources available across a certain area or the way the land is used to support the local economy. Look for symbols or colors representing crops or industries.

**Physical Map:** This type of map is focused on the natural features of a certain area. Look for labeled bodies of water like rivers, lakes and oceans and labeled landforms like mountains, valleys, hills, and plateaus.

**Political Map:** This type of map shows how people have organized the land and water in a certain area. Look for dashed or solid lines representing boundaries and borders between states, towns and, countries. Dots of different sizes may mark towns and cities.

**Road Map:** This type of map shows how people have added to land and water to make it easier to transport people and goods. Look for highways, bridges, and railroad tracks on this type of map.

**Thematic Map:** This type of map provides information on a specific topic and how it relates to a certain area by adding a layer of data to a base map. For example, a population density map might use different colors to show which towns have more people living in them than others.

**Topographical Map:** This type of map shows the shape of the land and how the elevation, or the height of the land, changes across a certain area. Look for shading that creates the effect of raised land, or changes in color on the map as the land rises up above sea level.



Lesson 1.1: Map Vocabulary and Introduction

Name \_\_\_\_\_

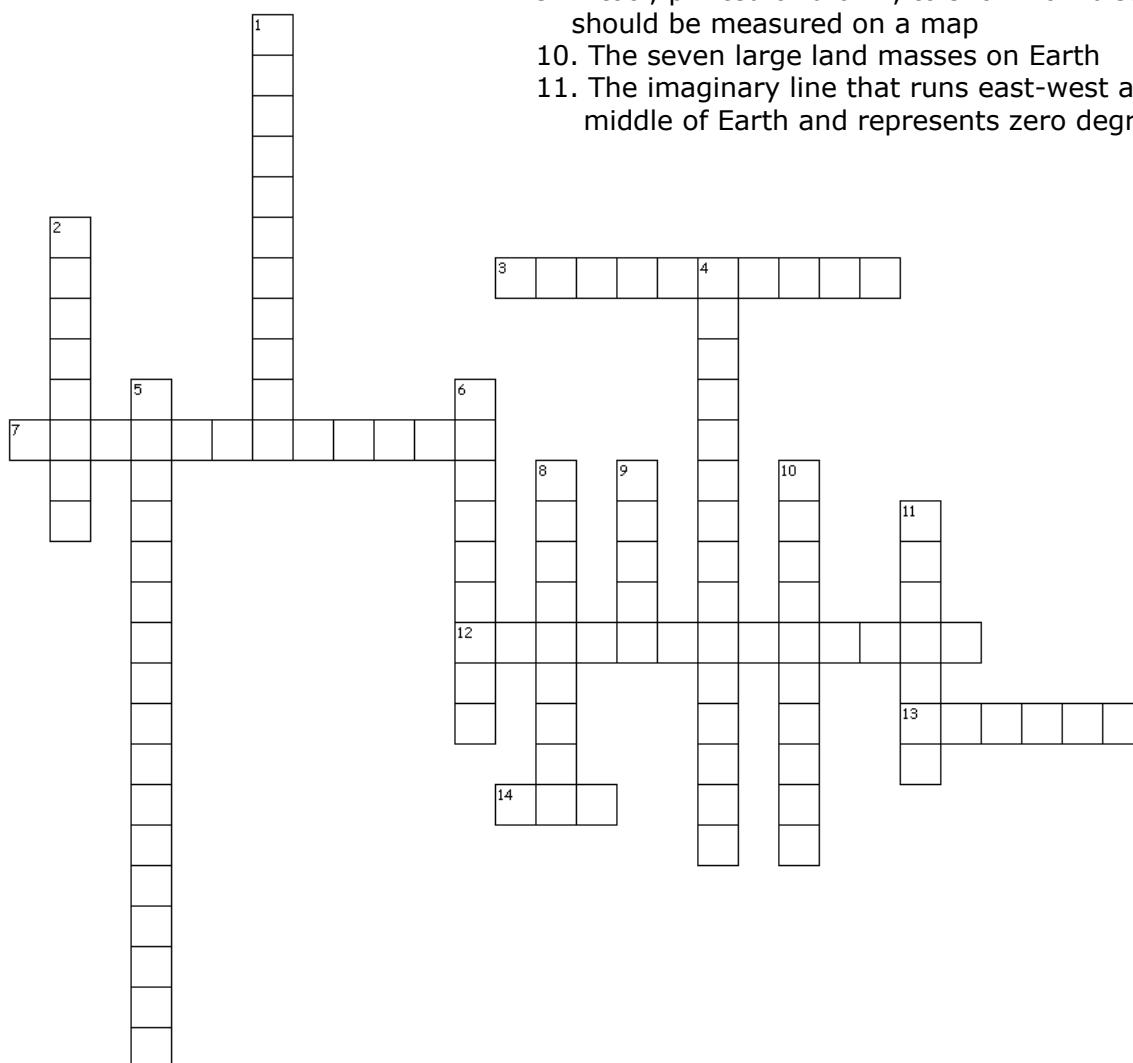
## Geography Vocabulary Crossword

### Across

3. One half of Earth
7. An element added to Earth's surface by people
12. The imaginary line that runs north-south around the middle of Earth and represents zero degrees longitude
13. The five large bodies of water on Earth
14. An explanation of symbols used on a map

### Down

1. A symbol that represents a compass showing cardinal and intermediate directions
2. The distance north or south of the equator, measured in degrees, represented by parallel invisible lines running east to west around Earth
4. A naturally occurring feature on Earth's surface
5. One of the four main directions featured on a compass rose: north, south, east, and west
6. The study of the physical, biological, and cultural features of Earth's surface
8. The distance east or west of the prime meridian, measured in degrees represented by parallel invisible lines running north to south around Earth
9. A tool, printed or drawn, to show how distances should be measured on a map
10. The seven large land masses on Earth
11. The imaginary line that runs east-west around the middle of Earth and represents zero degrees latitude





Lesson 1.1: Map Vocabulary and Introduction

Name \_\_\_\_\_ Answer Key (no spaces in answers) \_\_\_\_\_

## Geography Vocabulary Crossword

### Across

3. One half of Earth: **hemisphere**
7. An element added to Earth's surface by people: **human feature**
12. The imaginary line that runs north-south around the middle of Earth and represents zero degrees longitude: **prime meridian**
13. The five large bodies of water on earth: **oceans**
14. An explanation of symbols used on a map: **key**

### Down

1. A symbol that represents a compass showing cardinal and intermediate directions: **compass rose**
2. The distance north or south of the equator, measured in degrees, represented by parallel invisible lines running east to west around Earth: **latitude**
4. A naturally occurring feature on Earth's surface: **physical feature**
5. One of the four main directions featured on a compass rose: north, south, east, and west: **cardinal direction**
6. The study of the physical, biological, and cultural features of Earth's surface: **geography**
8. The distance east or west of the prime meridian, measured in degrees represented by parallel invisible lines running north to south around Earth: **longitude**
9. A tool, printed or drawn, to show how distances should be measured on a map: **scale**
10. The seven large land masses on Earth: **continents**
11. The imaginary line that runs east-west around the middle of Earth and represents zero degrees latitude: **equator**

