

HISTORY & GEOGRAPHY

STUDENT BOOK

▶ **4th Grade** | Unit 1

HISTORY & GEOGRAPHY 401

OUR EARTH

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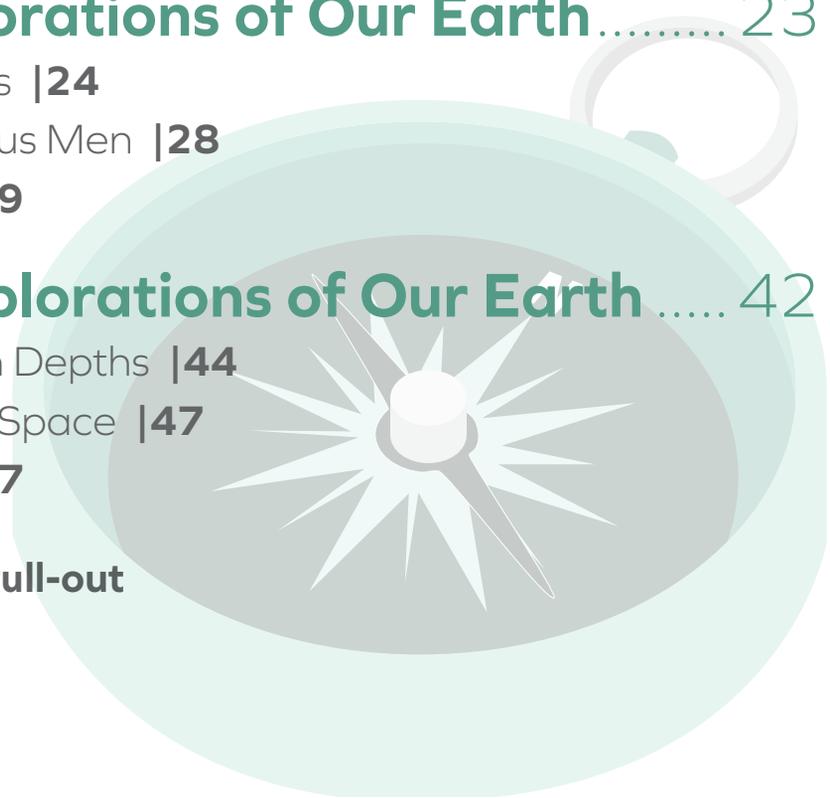
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Rock Rapids, IA 51246-1759**

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OUR EARTH

Man has always been curious about the unknown. This curiosity has led men to risk their lives to learn things they did not know about our earth, the heavens above it, and the deep oceans.

Man is still making new discoveries in our world. Someday you may do it, too. The Bible says in Psalms 19:1, "The heavens declare the glory of God and the firmament showeth his handiwork." You will study some of His handiwork in this LIFEPAC®.

Objectives

Read these objectives. The objectives tell you what you will be able to do when you have successfully completed this LIFEPAC. Each section will list according to the numbers below what objectives will be met in that section. When you have finished this LIFEPAC, you should be able to:

1. Define and find geographic features on a map or globe.
2. Identify and describe the continents and oceans.
3. Identify some of the great bodies of water in the world.
4. Know north, south, east, and west on a map.
5. Explain why Europeans began exploring the earth.
6. Explain the different ways Europeans tried to reach the Far East.
7. Describe what Prince Henry, Columbus, and Magellan did to become famous.
8. Explain what the Europeans learned about the earth during the Age of Exploration.
9. Describe the inventions used to explore under the ocean.
10. Describe what explorers found under the ocean.
11. Describe and name the stages of the American space program.
12. Name and describe some of the probes and satellites sent into space from earth.

1. THE SURFACE OF THE EARTH

In this section you will learn how to mark and divide a globe, which is a map of the whole earth. You will learn the names for the different **features** on the earth's surface. You will study the earth and its surface—the **continents, canals, oceans, and large rivers**. Perhaps you will someday travel and visit some of the places you study!

Objectives

Review these objectives. When you have completed this section, you should be able to:

1. Define and find geographic features on a map or globe.
2. Identify and describe the continents and oceans.
3. Identify some of the great bodies of water in the world.
4. Know north, south, east, and west on a map.

Vocabulary

Study these new words. Learning the meanings of these words is a good study habit and will improve your understanding of this LIFE PAC.

aquifer (ak' wə fè r). A large body of water underground.

axis (ak' sis). An imaginary line through the earth around which the earth turns.

cargo (kär' gō). The load of goods carried by a ship.

equator (i kwā' tər). An imaginary circle around the earth halfway between the North and South Poles. It divides the earth into the Northern and South-ern Hemispheres.

feature (fē' cher). A thing that stands out and attracts attention.

globe (glōb). A model of the earth.

hemisphere (hem' ə sfir). Half of a sphere.

planet (plan' it). A large body of matter, like the earth, that moves around the sun in space.

rotate (rō ' tāt). To turn on an axis.

sphere (sfir). A ball-shaped object.

Note: All vocabulary words in this LIFEPAK appear in **boldface** print the first time they are used. If you are unsure of the meaning when you are reading, study the definitions given.

Pronunciation Key: **h**at, **ā**ge, **cā**re, **fā**r; **l**et, **ē**qual, **tē**rm; **i**t, **ī**ce; **h**ot, **ō**pen, **ō**rder; **o**il; **o**ut; **u**p, **ū**le; **ch**ild; **l**ong; **th**in; /ʃh/ for **th**en; /zh/ for **meas**ure; /u/ or /ə/ represents /a/ in **ab**out, /e/ in **tak**en, /i/ in **pen**cil, /o/ in **le**mon, and /u/ in **circ**us.



| Map of Geographical Terms

GEOGRAPHICAL TERMS

archipelago (är' kə pel' ə gō). A group of many islands.

bay (bā). A small area of sea or lake partly enclosed by land. A bay is usually smaller than a gulf.

canal (kə nal'). A waterway dug across land for ships or small boats to go through.

coast (kōst). The land along the sea; seashore.

continent (kon' ti nent). One of the seven great masses of land on earth.

delta (del' tā). A fan-shaped deposit of dirt and sand that collects at the mouth of some rivers.

gulf (gulf). A large part of an ocean or sea with land around it. A gulf is usually larger than a bay.

harbor (här' bär). A deep bay used to shelter ships.

island (ī' land). A body of land surrounded by water.

isthmus (is' mäs). A narrow bridge of land, with water on both sides of it, connecting two larger pieces of land.

lake (lāk). A body of water, usually fresh, surrounded by land.

mountain (moun' tən). A very high hill.

mouth (mouth). The part of a river where its waters flow into some other body of water, usually a lake or ocean. Also, the opening of a harbor or bay into the ocean.

ocean (ō' shən). Any of four major divisions of the great body of salt water that covers almost three-fourths of the earth.

peninsula (pə nin' sə læ). A piece of land almost surrounded by water, or extending far out into the water.

river (riv' er). A large natural stream of water that flows into a lake or ocean.

sea (sē). Any large body of salt water, smaller than an ocean. Often it is a part of the ocean surrounded by some land or islands.

source (sôrs). The beginning of a brook or river.

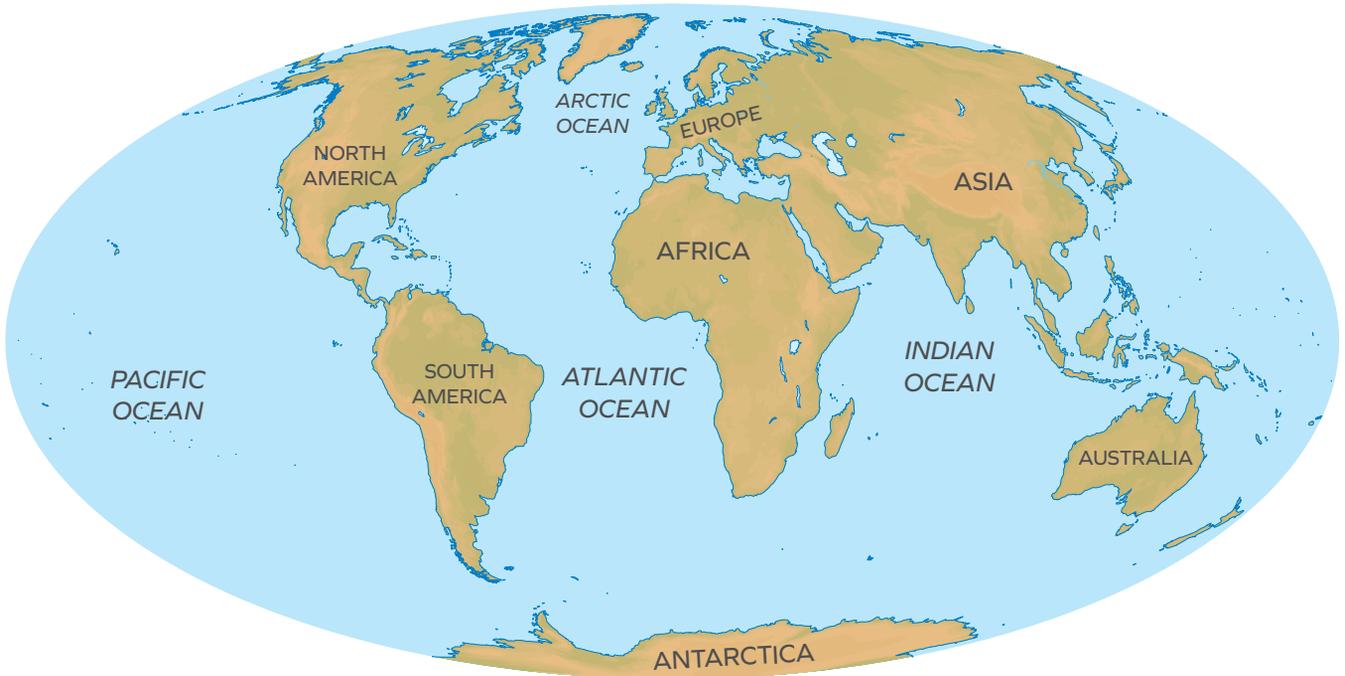
strait (strāt). A narrow waterway that connects two larger bodies of water.

tributary (trib' yə ter' ē). A stream or river that flows into a larger river.

Maps

It is difficult to make a map of our earth on a flat piece of paper, because the earth is not flat. The earth is shaped like a ball, and only a map on a ball can show it correctly. Look at the following map. This is one way to make a flat map of our world.

The map shows the main features of our earth. It shows the **oceans** and the continents in their correct places. It is difficult to see things along the sides and bottom of this map, however. The map cannot show these very well because they should be going around on the other side of a ball, not lying flat on a piece of paper.



| A map of the world.



Map exercises.

- 1.1** List the names of the seven continents: _____

- 1.2** List the four oceans: _____

- 1.3** Between Asia and Australia is a large **archipelago**. Circle it.
- 1.4** The **peninsula** of Florida is on the right side of North America. Put an "X" on it.
(Use a United States map if you need help.)
- 1.5** Below Florida along the **coast** of North America is a large **gulf** called the Gulf of Mexico. Put a big star in the middle of it.
- 1.6** North and South America are connected by an **isthmus**. Circle it.
- 1.7** Put a square around the large **island** on the right side of Africa.



Teacher check:

Initials _____ Date _____

The best map of our earth is a **globe**. A globe is a model of our **planet**. It is a world map drawn on a ball shape. We call this ball shape a **sphere**. The globe shows the big bodies of water and land. If you have one you will want to look at it and compare it to the pictures in the LIFE PAC.

When you look at the globe, you can only see half of it at a time. This half is called a **hemisphere** ("hemi" means half). You live in the Western Hemisphere if you are in the United States. North and South America are both in the Western Hemisphere. Africa, Europe, and Asia are on the opposite side in the Eastern Hemisphere. The next two maps show these two hemispheres.

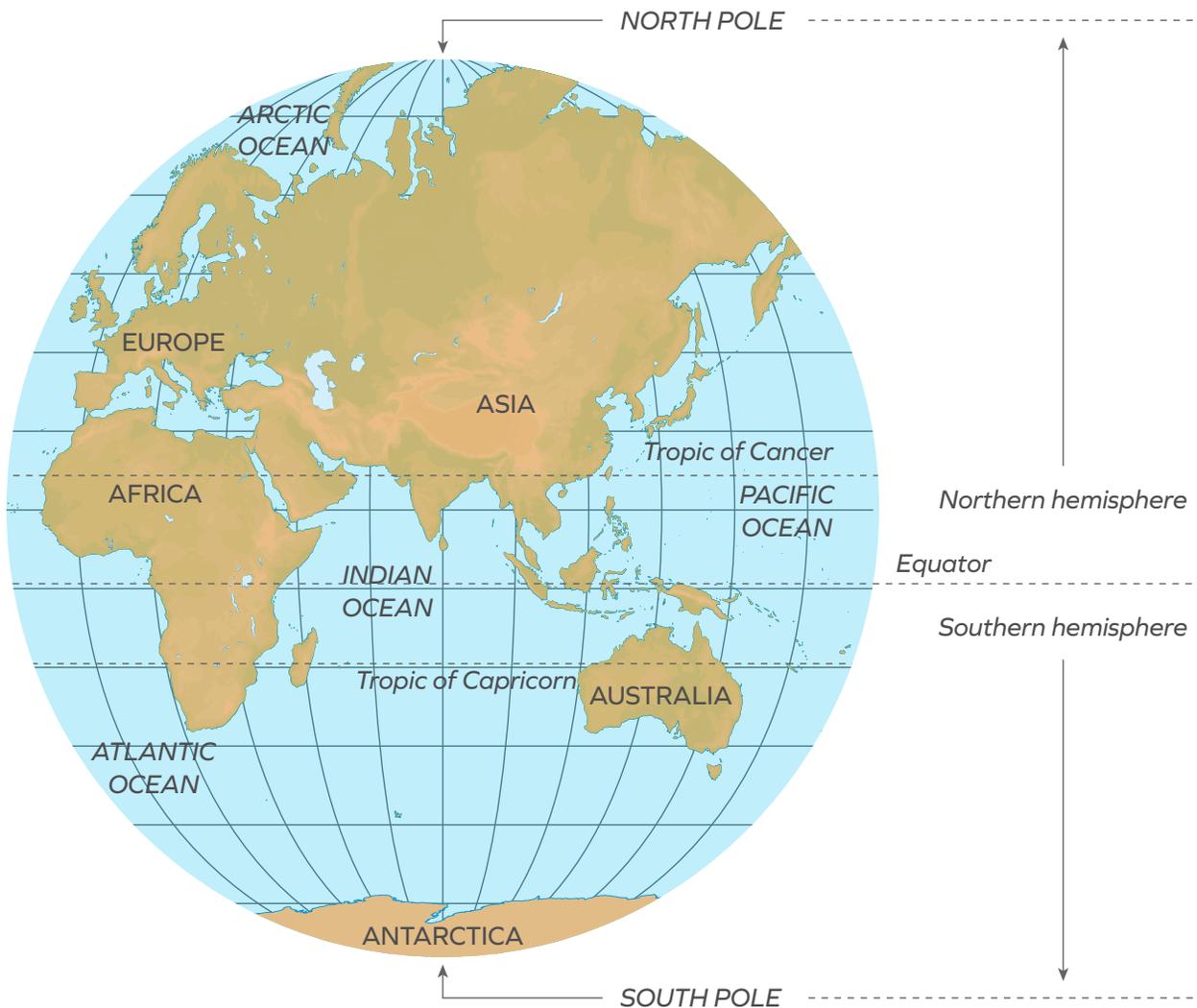
Directions on a map are shown by north, south, east, or west. There is an easy way to remember the directions. On a map, north is always put at the top. Therefore, going up on a map is always going north, and going down is always south. East is to the right (Remember: East right, West left.), and west is to the left. The only time this will not work is if north is not at the top of your map, which almost never happens.



| Western Hemisphere

Look at the maps. Do you see the line drawn across the middle of each one? This line is called the **equator**. The equator is a line that divides the earth into two equal hemispheres. The half above the equator is the Northern Hemisphere. Most of the people in the world live in this hemisphere, because most of the land is there. Below the equator is the Southern Hemisphere. It is mostly water, with much less land for people to live on.

To the north and south of the equator are the Tropic of Cancer and the Tropic of Capricorn. These lines mark the end of the *tropical zone* around the equator, which you will study in a later LIFEPAK. It is only between these two lines that the sun ever gets exactly overhead in the center of the sky. You can remember that Capricorn is the one south of the equator by imagining that it sinks to the bottom because it is a bigger, heavier word than Cancer.



| Eastern Hemisphere



Complete these sentences.

- 1.8** The best map of the earth is a _____.
- 1.9** The shape of a globe is a _____.
- 1.10** The imaginary line around the middle of the earth is called the _____.
- 1.11** The two imaginary lines that mark the ends of the tropical zone are the Tropics of _____ and _____.
- 1.12** The bottom half of the earth is called the _____ Hemisphere.
- 1.13** Most of the people in the world live in the _____ Hemisphere.



Write north, south, east, or west. Use the Western Hemisphere and Eastern Hemisphere maps.

- 1.14** The Tropic of Cancer is _____ of the equator.
- 1.15** Antarctica is _____ of the equator.
- 1.16** Australia is _____ of Africa.
- 1.17** Europe is _____ of Africa.
- 1.18** The Atlantic Ocean is _____ of the Indian Ocean.

At the top of the Northern Hemisphere is a point called the North Pole. This point is as far north as anyone can go on earth. At the bottom of the Southern Hemisphere is a point as far south as anyone can go. That is the South Pole. The north and south poles, like the equator and the Tropics of Cancer and Capricorn, are not really marks on the earth. They are just imaginary markings on a map to help us find places.

There is another imaginary line that connects the North and South Poles through the center of the earth. This line is called the **axis**. The earth turns, or **rotates**, around this line. If you spin a globe, it is rotating on its axis. The earth takes twenty-four hours to make a full rotation around its axis. We call this one day.

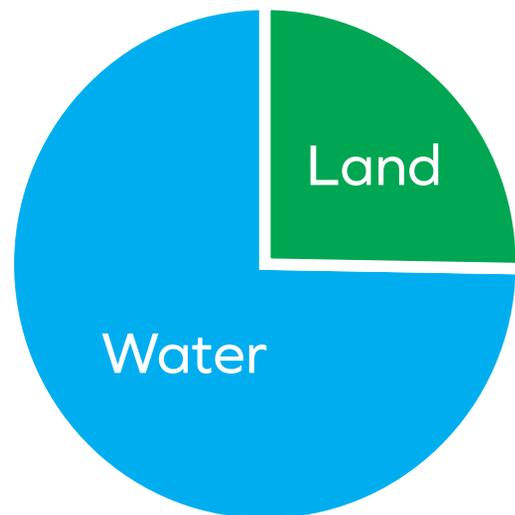
The earth turns toward the east. That makes the sun, which does not move, look like it is rising from the east. When our side of the earth is facing the sun, we have day. When our side turns away from the sun, we have night, and the other side of the world has day.

Oceans

The water of the world is colored blue on your map or globe. You can see that most of the earth is covered with water. If the earth's surface were divided into four parts, nearly three parts of it (three-fourths) would be water.

The largest bodies of water are the oceans. Look back at the map of the world. It shows four major oceans. The largest one is the Pacific Ocean. The Pacific separates North and South America from Asia and Australia. The next largest ocean is the Atlantic Ocean. It separates the Americas from Europe and Africa. The smallest ocean is the Arctic Ocean around the North Pole. The Indian Ocean is larger than the Arctic. It lies completely in the Eastern Hemisphere, south of Asia and east of Africa around the equator.

Oceans have many smaller parts that flow into openings in the land. These parts are called **bays**, gulfs, or **seas**. You have already located the Gulf of Mexico on your world map. It is a part of the Atlantic Ocean. Another part of the Atlantic is the Mediterranean



Sea, the water between Africa and Europe. The small opening between the Atlantic Ocean and the Mediterranean Sea is the **Strait** of Gibraltar.

Bays are usually much smaller than gulfs and harder to find on a map of the entire world. One that you can find easily however, is Hudson Bay; one of the largest bays in the world. It is in the northeast part of North America in the country of Canada. See if you can find it. (Ask your teacher for help if you need it.)

Bays that are deep and well protected from ocean storms are often made into **harbors**. These are safe places for ocean ships to stop and unload **cargo**. Cities are often built on good harbors, since that makes it easier to trade with other countries in the world. San Francisco, New York, Baltimore, and New Orleans are all American cities built on harbors.

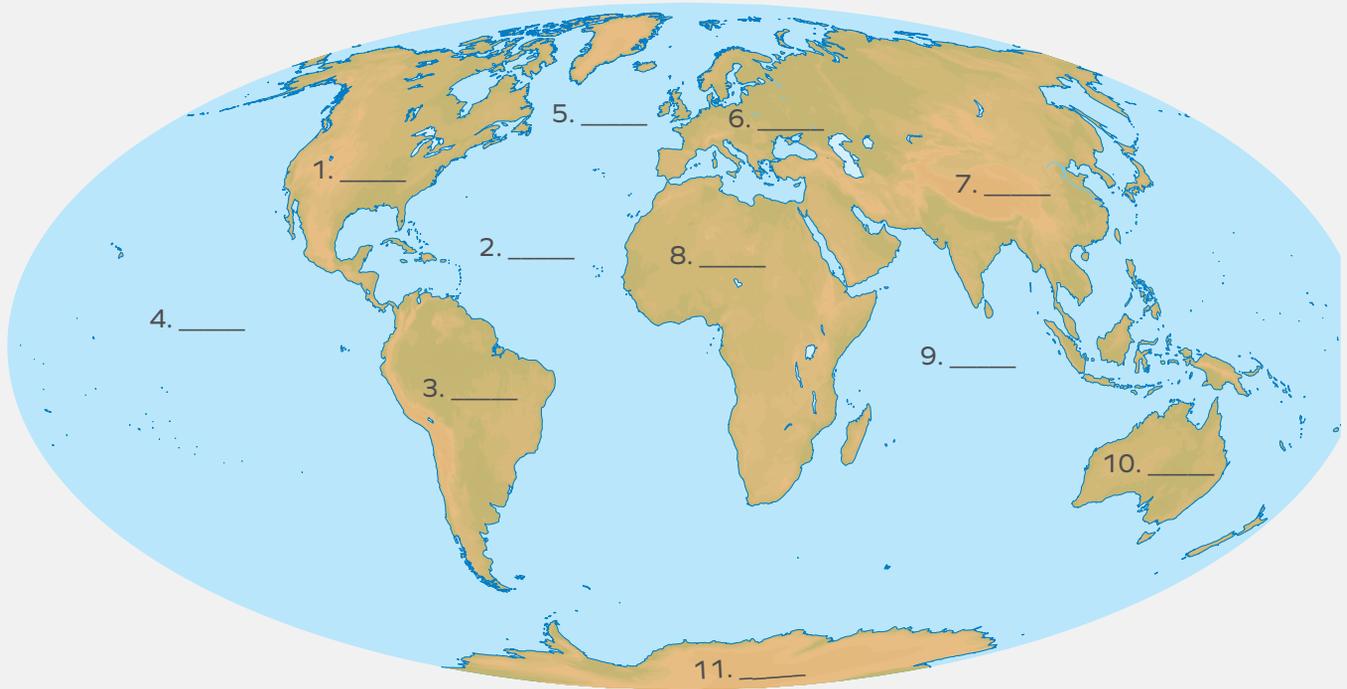


Complete these questions.

- 1.19** List the oceans in order from largest to smallest.
 - 1. _____ 2. _____
 - 3. _____ 4. _____
- 1.20** The earth rotates on its axis once every _____.
- 1.21** The farthest south anyone can go is the _____.
- 1.22** The Strait of Gibraltar connects _____
to _____.
- 1.23** Deep bays that are protected from ocean storms often are made
into _____ for ships.
- 1.24** _____ of the earth is covered with water (how
much?).
- 1.25** The equator and the Tropic of Cancer are _____ lines.
- 1.26** The large bay in northeast North America is named
_____.

SELF TEST 1

On this map of the world, write the letter in the correct space for the name of each continent and major ocean in the following list (3 points each answer).



1.01

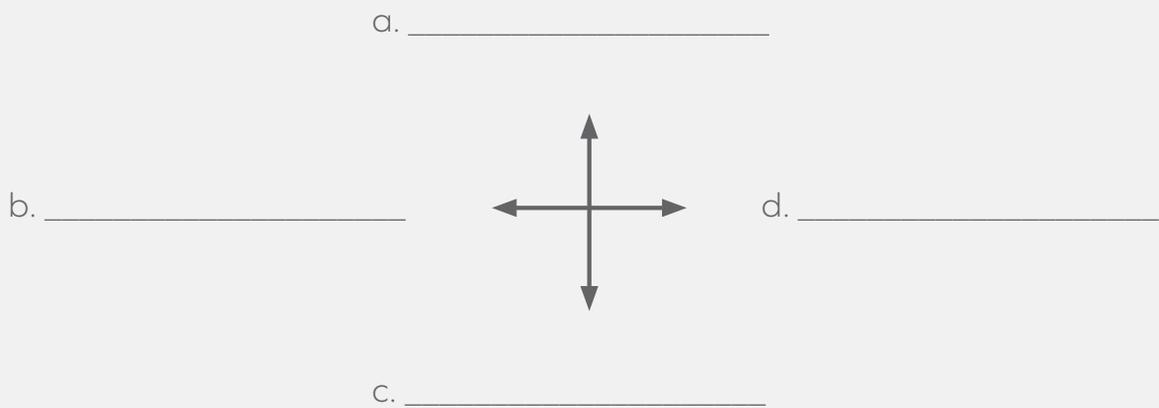
- | | | |
|-------------------|------------------|---------------|
| a. Atlantic Ocean | b. Europe | c. Australia |
| d. Arctic Ocean | e. Asia | f. Antarctica |
| g. Indian Ocean | h. North America | i. Africa |
| j. Pacific Ocean | k. South America | |

Put the correct letter on the blank (2 points each answer).

- | | | | | |
|-------|-------|-------------|----|--|
| 1.02 | _____ | archipelago | a. | waterway dug across land |
| 1.03 | _____ | canal | b. | land that connect two bigger pieces of land |
| 1.04 | _____ | mouth | c. | land almost all surrounded by water |
| 1.05 | _____ | source | d. | underground lake |
| 1.06 | _____ | sea | e. | small river that joins a bigger one |
| 1.07 | _____ | delta | f. | large body of salt water |
| 1.08 | _____ | isthmus | g. | group of many islands |
| 1.09 | _____ | peninsula | h. | triangle-shaped collection of dirt at the mouth of a river |
| 1.010 | _____ | tributary | i. | beginning of a river |
| 1.011 | _____ | aquifer | j. | end of a river |

North, south, east, and west are the four directions on a map. Put them in their correct places on this diagram (3 points each answer).

1.012





HIS GEO_Gr3-5



804 N. 2nd Ave. E.
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800-622-3070
www.aop.com

HIS0401 – Jan '16 Printing

ISBN 978-1-58095-151-7



9 781580 951517