Really Good Stuff<sup>®</sup> Activity Guide Biomes of the World Poster Set



Congratulations on your purchase of the Really Good Stuff<sup>®</sup> **Biomes of the World 8-in-1 Poster Set!** 

#### Inside this Really Good Stuff® set you'll find:

- One 19" x 24" laminated poster
- Eight 9¼" x 13 ¼" mini posters

This unique format allows you to display your new poster set in a variety of ways:

- Display posters one at a time. When mini posters are not being displayed, simply store them in the large poster, behind the mini poster on which you are focusing. (See A below)
- Place the mini poster that you are using in your current lesson in the center of the large poster, and display

mini posters that have already

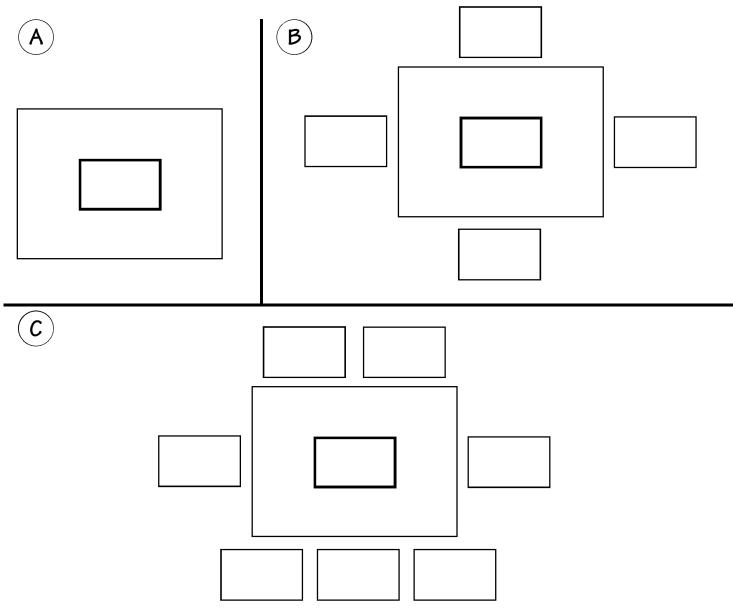
been taught around the outside of the large poster. (See **B** below)

• Display all of the mini posters at one time, placing one mini poster inside the large poster and the others around the outside of it. (See **C** below)

Our versatile design allows you to insert your mini posters into the main poster in two different ways:

- Tuck the mini posters into the slits at each corner of the display area.
- Tuck the mini posters into the tabs at the top and bottom of the display area.

Enjoy your new 8-in-1 poster set!



All activity guides can be found online:

## Deciduous Forest

The dominant plants in the **DECIDUOUS FOREST** Biome are broad-leaved trees that shed their leaves each fall. This biome has varying amounts of sunlight on the Earth's surface at different times of year, causing many seasonal changes. The seasonal changes then cause the plants to go through a yearly growing cycle. The deciduous trees allow enough sunlight to get through the canopy to allow shrubs, smaller trees, flowers, and ground cover to grow. These different layers of plants provide food and shelter for a large variety of animals, insects, and birds, such as those below.

#### FUNGI WOODPECKERS FIR SKUNK FROGS MICE FERN RHODODENDRON CHIPMUNKS BOBCATS SNAKES MOSSES WOLVES FOXES BEECH FLOWERS RACCOONS LICHEN PINE MAPLE AZALEAS 0AK DEER SQUIRREL WRENS Ε Ε Ε Ε Ε С А Ε S Ε R В F D U 0 0 W R Ν С Ε Н С L 0 D Ε Ε R R F S F W 0 S Μ F 0 E Ε S Ε F 0 Н L F Ε 0 Ν Ν Q 0 В 0 L P E С R R С Ε S 0 Κ U А С 0 M А L U 0 Μ Ε Ε E S S S R Ν Ζ P Н S С V 0 Ν D А W G S Ε G А М Ε W 0 V Ε Ν 0 R Ε P Τ Κ Ε Ε L S R F R P S S R T L С 0 R А E U | W U Ν А Ζ R Ε Ν В Ν 0 S В С Κ R E С С Ε Ν E S Ν Κ Ε А Κ Ε 0 R Н 0 R Ε 0 0 Κ Κ М W Ε S U L V Ε S S Ε Ζ D D L S S G Ε R Ε F 0 Х Ε S С А S P S С Ε Ν R С С 0 0 Ν Ν Κ М R 0 Ν 0 Ν Ε Ε М С R Н 0 D 0 D Ν D R 0 Ν S 0 R А Ε L Ε Ε S S 0 0 S R 0 D D D Ε 0 Ν Ν Κ Κ Ν L S С Ζ F R Ε P E Ε S Κ Κ С P Ν Ν А А 0 Ε Ε S G С С F Ε С 0 R χ С Κ U U Ν P А W F Ε S S В В Ε P G КМК А 0 Ν А W 0 А А

#### Find these inhabitants of the DECIDUOUS FOREST in the Puzzle Below.

#### SHOW what you KNOW about the DECIDUOUS FOREST biome

Write a letter to a relative or friend who lives in a different biome. In the letter describe the biome where you live. Be sure to include things about the climate and plants and animals in your area. Ask the person in the different biome you are writing to write back and describe it.

### Desert

The **DESERT** Biome is an area that receives very little rainfall. Although conditions are often harsh for humans, many plants and animals have adapted to life in the DESERT.

Before you look at the DESERT Poster, write a paragraph describing conditions in a DESERT biome. Write as though you are walking in the DESERT, describe what you think you would feel, see, smell, and hear. Use lots of descriptive words.

Circle one or more of the choices below which helped you get your ideas for the paragraph. Visited Desert Movie TV show Book News Video game Imagination

Next, read the DESERT poster carefully. Notice that there are several types of DESERT ecosystems. The different DESERT ecosystems have some things in common and some things which are different.

Now, circle or highlight all of the things in your paragraph which agree with the information shown on the DESERT poster.

Finally, list 3 new specific things you have learned about the DESERT biome that were not in your paragraph. Write new facts in complete sentences.

1.	
0	
Ζ.	
3.	

### SHOW what you KNOW about a DESERT biome

Pick one of the 4 DESERT ecosystems and draw a colored picture showing that system.

Try to include something in your picture which shows each of the bullet points on the poster. You may use labels or words to make your picture clearer. Make sure you show both the non-living and living things in the ecosystem. Show your poster to another classmate to can guess which of the types of DESERT ecosystems you have drawn.

### Freshwater

A water biome is an ecosystem with a specific set of properties or conditions. The plants and animals that live in the **FRESHWATER** Biome have adapted to life in water which usually contains less than \_\_\_\_\_\_ percent salt.

First, skim the poster on the FRESHWATER biome and name the 3 different types of FRESHWATER biomes. Be prepared to support your answers by showing where you found the information on the poster.

3 Types of FRESHWATER biomes

1.	 	 	
2.	 	 	
3.			

Although all of the above contain fresh water, different types of organisms live in each because of differences in the water such as depth of water, amount of water, water temperature, and water speed. Complete the chart below with as many of the types of FRESHWATER biomes that apply to each statement on the right (your answers may include one, two, or all three types of the FRESHWATER biomes).

Characteristic or living things in FRESHWATER Biome	type of FRESHWATER Biome (Rivers/streams, ponds/lakes or wetlands)
4. contain less than 1% salt	
5. water is always moving	
6. contains fish	
7. has cattails growing	
8. clams are found here	
9. includes places like marshes and swamps	
10. water is often cleanest at its source	

### SHOW what you KNOW about FRESHWATER biomes

In what ways do you think the plants and animals that live in the fast-moving water of rivers must be different from the animals and plants that live in a still lake? Do you think more plants and animals are likely to live in fast-moving water in rivers or in still or slow-moving water in lakes and ponds? Explain the reasons for your answers.

## Grasslands

Imagine standing in a spot and no matter which way you turn, you see only tall grasses. If so, you would most likely be standing in a Prairie GRASSLANDS in North America. There are two other types of GRASSLANDS called Steppe and Savanna which you will learn about. GRASSLANDS are found on every continent except for Antarctica. The **GRASSLANDS** Biome plays an important part in feeding humans and livestock.

Directions: Read the poster on GRASSLANDS. Tell which type of Grassland ecosystem—Prairie, Steppe, or Savanna—is best described by each statement below.

	Physical Property or Inhabitants of GRASSLAND biome.	Type of GRASSLAND biome Choose Prairie, Steppe, or Savanna. Choose as many as apply for each.
1.	main type of plant life is grasses	
2.	climate is mostly dry	
3.	climate is hot and dry	
4.	in danger of becoming a semiarid desert	
5.	inhabited by different types of animals	
6.	has a seasonal dry season and rainy season	
7.	has the tallest grasses	
8.	plays a big part in feeding humans and animals	
9.	contains many endangered species	
10.	contains very few tall trees	

### SHOW what you KNOW about the GRASSLANDS

Listed below are some of the things you could observe in a GRASSLAND biome.

<u>Animals</u>: herds of hoofed animals, prairie dogs burrowing underground, lions racing after their prey <u>Plants</u>: grass with long slender leaves, roots that are thick and spread out, very few trees <u>Climate</u>: few clouds in the sky, little rain most of the year, hot during the summer

List each of the plants and animals above; explain how the plants and animals have adapted to living in the GRASSLANDS. Make sure you name the adaptation and explain how the adaptation has helped the plant or animal survive in this biome.

#### Example:

Herds of hoofed animals—Adaptation: animals stay in groups. Reason: no place to hide and therefore, easily seen by predators. If the animals stay in large groups, it gives them some protection from predators.

## Marine

The **MARINE** Biome is the largest biome on earth. Many species of animals and plants live there and it provides humans and animals with large amounts of food. It is important to learn about the Marine biome and to learn to protect this biome.

#### Matching

Carefully read the information on the Marine biome Poster. Use the information from the poster to help match the two columns below.

DOIOW.					
		a. b. c. d. e. f.	Marine Ocean Estuary Temperature Swordfish Seal	g. h. i. j. k. I.	Echinoderms Clams Coral Arthropods Reptiles Phytoplankton
	1.	Mollusk	s that are found in the Marine bion	1 <i>e</i>	
	2.	A sea n	nammal in the Marine biome		
	3.	Name o	f both a plant and an animal found	in the Ma	arine biome
	4.	Depend	s on depth and location of water		
	5.	Importa	ant plants found in the Marine biom	е	
	6.	Largest	type of Marine biome		
	7.	Example	es include sea turtles and sea snak	(65	
	8.	Starfis	h and sea urchins belong to this fa	mily	
	9.	An anin	nal in the Marine biome		
	10.	Place w	here fresh-water river empties into	an ocean	
	11.	Largest	; biome in the world		
	12.	Example	es include lobsters and crabs		

#### SHOW what you KNOW about MARINE biomes

Oceans are home to many living things. Because the oceans are so enormous several very different saltwater ecosystems exist. Each of these ecosystems has differences in amount of sunlight, nutrients in the water, temperature of the water, and movement of the water. Organisms have adapted in different ways to survive in these environments. The three Saltwater Ecosystems are the intertidal zone, the near-shore zone, and open ocean zone.

Use books or the Internet to find out about these ecosystems. Make a chart showing the environmental conditions of each zone, the organisms living in each zone, and the adaptations the plants and animals have made to survive.

# Really Good Stuff<sup>®</sup> Activity Guide

### Taiga

Plants and animals that live in the **TAIGA** Biome are well adapted to long harsh winters, little precipitation, and very short summers. The dominant plant is the coniferous tree. Conifers are trees that are cone-shaped rather than flat-topped. They have waxy, small, needlelike leaves rather than large flat leaves, and shed their leaves a few at a time rather than losing them all at one time. The animals that live in the TAIGA have shorter ears, snouts, legs and tails, grow thick coats of fur, and may hibernate or migrate to escape the coldest parts of the winter.

*Read* the information on the poster describing the TAIGA biome. Pay close attention to the description of the climate, and then think about the ways the plants and animals have adapted to their environment. Use this information to complete the chart below.

	Circle the choice which best shows the	Circle the choice words which best describes the
	adaptations of TAIGA plants and animals	conditions in the TAIGA biome
1.	LONG LEGS	NO VEGETATION ON THE FLOOR OR
1.	OR SHORT LEGS	LOTS OF THINGS TO WALK OVER
2.	COMPACT FACE THAT CONSERVES HEAT	HOT TEMPERATURES
۷.	OR FACE WITH LONG EARS & SNOUT THAT HELP COOL	OR COLDER TEMPERATURES
3.	THICK COATS OF FUR	LONG WINTERS
Ο.	OR HAIRLESS SKIN	OR LONG SUMMERS
4.	HIBERNATION	DENSE POPULATION OF THINGS TO EAT
4.	OR FORAGING FOR FOOD ALL YEAR	OR SPARSE POPULATION OF THINGS TO EAT
5.	MIGRATION	SAME CONDITIONS ALL YEAR
5.	OR STAYING IN SAME LOCATION	OR HARSHER CONDITIONS AT CERTAIN TIMES
6.	CONE-SHAPED TREES	OFTEN SNOWS
0.	OR FLAT-TOPPED TREES	OR RARELY SNOWS
7.	LEAVES THAT STAY ON ALL YEAR	LONG GROWING SEASON
/.	OR TREES THAT LOSE ALL LEAVES IN FALL	OR SHORT GROWING SEASON
a	THIN, WAXY LEAVES	COLD CLIMATE / NEED TO CONSERVE WATER
8.	OR BROAD OR FLAT LEAVES	OR MODERATE CLIMATE /PLENTY OF WATER

### SHOW what you KNOW about the TAIGA biome

Make a colored bar graph showing average rainfall/year for each biome listed below.

Tundra–25 cm/year Grasslands–76 cm/year Desert–25 cm/year Taiga–50 cm/year Deciduous Forest–127 cm/year Tropical Rain Forest–254 cm/year

Then write a paragraph comparing the rainfall in the TAIGA to the other biomes.

## **Tropical Rain Forest**

Read the poster on the TROPICAL RAIN FOREST Biome and then answer the questions below.

1. The TROPICAL RAIN FOREST covers only \_\_\_\_\_ percent of the Earth's surface. Yet scientist estimate that up to \_\_\_\_\_\_ percent of the animals and plants live in there. Explain what conditions encourage so many plants and animals to live in such a relatively small biome. Support your answer with facts from the poster.

2. Tell which part of the RAIN FOREST each statement best describes.

Facts about the TROPICAL RAIN FOREST	<b>Forest Floor, Understory, Canopy, Emergent</b> Write all the Rain Forest parts that apply
1. warm temperature all year	
2. very little light	
3. includes the very top of the trees	
4. high humidity	
5. few plants	
6. home to gorillas and wild boars	
7. home to insects	
8. home to birds	
9. place where orchids thrive	
10. very important ecosystem	

### SHOW what you KNOW about the TROPICAL RAIN FOREST biome

Scientists estimate an area of tropical forest large enough to cover North Carolina is deforested each year! Pictures from satellites are used to study the deforestation. These pictures also seem to show a relationship between building new roads in an area and the amount of deforestation.

Explain why you think these two things may be related? Should we be concerned about deforestation of the TROPICAL RAIN FOREST that is so far away? Explain why or why not.

## Tundra

A Biome is a distinct ecosystem with a specific climate. The plants and animals that live in the **TUNDRA** Biome have adapted to the climate and conditions there.

First, look at the poster about the TUNDRA biome and answer the questions below. Be prepared to support your answers by showing where you found the information on the poster.

Climate of the TUNDRA biome Temperature\_\_\_\_\_\_ Rainfall \_\_\_\_\_\_ Amount of Sunlight \_\_\_\_\_ Next, make a list of the type of plants and animals that live in the TUNDRA biome. Plants \_\_\_\_\_\_ Animals/Insects \_\_\_\_\_\_

Finally, list the two types of TUNDRA below and tell where you might find each type.

### SHOW what you KNOW about TUNDRAS

1. The chart below will help you remember important things about the TUNDRA. Complete the 2nd column by filling in a different word or phrase about Tundra for each letter. Use the information on the poster for your ideas.

Letters in TUNDRA	ADD a Word or phrase describing a TUNDRA
T	٢
U	Unusually Cold
N	Ν
D	D
R	R
А	A