Chapter 2, section 3

Biogeography

Pages TB 54-57

BW date (Sp page 112)

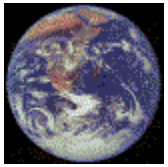
- What are some reasons that animals move from one place to another?

Answer to BW

- Seasonal migrations
- Overpopulation
- Too much competition in the original area
- Need for food or water

Biogeography

- The study of where organisms live.
- Bio- Life
- Geo- Earth
- Graph- Description



Reading Preview

- Read the key concepts on page 54.
- Read the key terms and try and guess what each word means without looking at the answers. (No writing.)

Get Your Spiral Set Up

- Make 5 flash cards (with drawings) from the key terms for 2-3. Study daily!

Introduction to Biography

- Read the introduction on TB page 54 and answer your notes on page 90, #1.
- (You will answer the graphic organizer on your notes when you read about the causes of dispersal. Don‘t forget to come back to this!)

Discover Activity- TB page 54

Spiral page 112

- Materials: beans, shallow pan, water, straw and tape
- WARNING- FOLLOW THE DIRECTIONS IN THE BOOK STEP BY STEP
- How can you move a seed using the materials above? Record your answer on sp page 52. (Answer this BEFORE you do the activity.)

- Each person in your group tries one of the ways you recorded.
- AFTER THE EXPERIMENT- Put a checkmark if it worked next to the idea you wrote down.

Continental Drift

- Read TB page 55 “Continental Drift” and answer the notes 2-4 in sp page 90.

Continental Drift (sp p 113)

- 1. What is Pangaea?
- Figure 10 shows a process that took hundreds of millions of years.
- 2. Why does Australia have so many unique organisms?
- 3. Have North and South America been connected ever since the breakup of Pangaea?

Go Online to these web sites

- Continental Drift- interactive online activity
  - Click “Start” and watch carefully.
  - Answer the 3 questions below the activity. No writing necessary.

- Animation of Pangea – read the information at the link first and then click on the map to see the continents moving.
  - Notice the time period at the bottom of the map while the animation is going on.

Means of Dispersal

- Read textbook pages 55-56.
- Complete notes #’s 5-10 in spiral pages 90-91.

Means of Dispersal sp p 114

- 1. What are some ways that organisms can be dispersed?
- 2. When might seed dispersal not be beneficial?

Review

- Read the next 5 slides as a recap of what you have learned.
- Nothing to write.

Dispersal

- Dispersal - The movement of organisms from one place to another
- 3 main means of dispersal.
  - **Wind**:
    - Seeds
    - Spores
    - tiny spiders
    - small light organisms

Dispersal

- **Water:**
  - Floating objects
  - Coconuts
  - Leaves
  - Insects

- **Other Living Things**
  - Birds: seeds
  - Ducks: algae and fish eggs
  - Dogs and Cats: organisms in their fur
  - Humans: (all sorts of things!!)
  - (Think about customs at the airport.)

Dispersal

- Native Species:
  - a species that has naturally evolved in an area.

Dispersal

- Exotic Species:
  - a species carried to a new location.
  - Consume food sources that native species would eat, leaving insufficient food.
  - Occupy safe or supportive habitat, leaving a reduced amount of habitat for natives.
  - Serve as food for native species but lack certain essential nutrients, leading to death of native offspring.
  - Consume eggs, young, and adults of native species

Dispersal

- There are limits to organisms reaching other parts of the world.
  - **Physical barriers:**
    - Water
    - Mountains
    - Deserts
  - **Competition:**
    - Organisms competing for r existing species.
  - **Climate:**
    - Organisms unable to survive and thrive due to the temperature or amount of water.

Limits to Dispersal

- Read TB pages 56-57
- Complete notes on spiral page 91, # 11-15

Limits to Dispersal Spiral page 115

- 1. What are 3 factors limiting species dispersal?
- 2. If the seed of a tropical plant floated to Hawaii, would the species disperse successfully?
- 3. Which factors that limit dispersal also limit a population's size?

Continental Drift and Dispersal sp. p 116

- Look at figure 10 on page 55.

- 1. Where would organisms still be able to move freely from one continent to another?
- 2. What happened to India?
- 3. What do you think happened to organisms on the continents that remained separated?

Answers to spiral page 114

- 1. By wind and other living things.
- 2. When seeds are carried to an area where you do not want them to grow.

Check you answers on your spiral page 115

KEY--

- 1. Physical barriers, Climate, competition

2. Yes, it could disperse… because

- Seed overcame physical barriers
- Climate suits a tropical plant

OR

Didn't work because

existing plants can outcompete new species

3 Competition AND Physical barriers

- **NOT** weather and climate

Answers to Spiral ?'s page p 116

1. North America and Europe/Asia
- Africa and South America
- Antarctica and Australia

2. It joined Europe/Asia.

3. They evolved into unique species found nowhere else in the world.

Section Assessment 2-3 spiral page 117

- Complete the questions from textbook page 57. You do NOT have to do the Lab Zone Activity.

1. a

   b

   c

   2. a.

      b

      c

      3. a

         b