**Biomes** (p. 168 – 180)

**I. Tropical Rain Forest**

**1. Identify where tropical rain forests are located.**

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**2. Determine whether the statement is true or false. If false, then correct the statement to**

**make it true. (X = True; O = False)**

1. \_\_\_\_\_ Tropical rain forests have nearly year-round 12 hours days of daylight.

2. \_\_\_\_\_ Tropical rain forests receive about 6.6 feet of rain per year.

3. \_\_\_\_\_ Most nutrients in a tropical rain forest are located in the soil.

4. \_\_\_\_\_ Tropical rain forests possess nutrient-rich soils.

5. \_\_\_\_\_ Tropical rain forest plants are bright to attract pollinators, since little wind exists.

**3. Match each tropical rain forest term with the correct definition.**

1. \_\_\_\_\_ Understory A. Top layer with tallest trees; Trees look umbrella-like

2. \_\_\_\_\_ Canopy B. Plants that grow on other plants (not soil)

3. \_\_\_\_\_ Emergent Layer C. Dark, ground layer; Plants have big leaves & shallow roots

4. \_\_\_\_\_ Epiphytes D. Large aboveground prop roots

5. \_\_\_\_\_ Buttresses E. Dense collection of tall trees; 50-80 meters above ground

**II. Tropical Dry Forest**

**1. Identify where tropical dry forests are located.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Determine whether the statement is true or false. If false, then correct the statement to**

**make it true. (X = True; O = False)**

1. \_\_\_\_\_ Tropical dry forests exhibit significant seasonal changes in precipitation.

2. \_\_\_\_\_ Tropical dry forests experience drastic seasonal temperature changes.

3. \_\_\_\_\_ Wet and dry seasons typically occur in tropical dry forests.

4. \_\_\_\_\_ Most trees in tropical dry forests are deciduous.

5. \_\_\_\_\_ Some animals estivate (deep-sleep dormancy) during difficult times of the year.

**III. Savanna**

**1. Identify where savannas are located.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Determine whether the statement is true or false. If false, then correct the statement to**

**make it true. (X = True; O = False)**

1. \_\_\_\_\_ Savannas receive more rain than tropical dry forests and deserts.

2. \_\_\_\_\_ Distinct dry and rainy seasons occur in savannas.

3. \_\_\_\_\_ Plants in savannas have waxy coverings, grow quickly, and possess thick bark.

4. \_\_\_\_\_ Savanna plants do not tolerate fires well.

5. \_\_\_\_\_ Savanna animals include lions, elephants, zebras, wildebeests, and giraffes.

**IV. Desert**

**1. Identify where deserts are located.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Determine whether the statement is true or false. If false, then correct the statement to**

**make it true. (X = True; O = False)**

1. \_\_\_\_\_ Deserts are the driest biomes on Earth.

2. \_\_\_\_\_ Temperatures remain relatively stable during the day and night in deserts.

3. \_\_\_\_\_ Many desert animals developed survival adaptations, such as being diurnal.

4. \_\_\_\_\_ Succulents are desert plants that store water.

5. \_\_\_\_\_ Some desert plants have shallow, spread out roots to gather water.

**V. Temperate Rain Forest**

**1. Identify where temperate rain forests are located.**

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**2. Determine whether the statement is true or false. If false, then correct the statement to**

**make it true. (X = True; O = False)**

1. \_\_\_\_\_ Temperate rain forest annually experience heavy rainfall & cool temperatures.

2. \_\_\_\_\_ Most trees in temperate rain forests are deciduous trees.

3. \_\_\_\_\_ Evergreens, such as spruces, hemlocks, and fir trees, replace needles regularly.

4. \_\_\_\_\_ Some of the world’s tallest trees are located in temperate rain forests.

5. \_\_\_\_\_ Moss, slugs, and amphibians inhabit the damp, shaded temperate forest floor.

**VI. Temperate (Deciduous) Forest**

**1. Identify where temperate (deciduous) forests are located.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Determine whether the statement is true or false. If false, then correct the statement to**

**make it true. (X = True; O = False)**

1. \_\_\_\_\_ Temperate forests experience hot summers and frigid, harsh winters.

2. \_\_\_\_\_ Soils in temperate forests are nutrient-poor.

3. \_\_\_\_\_ Precipitation occurs evenly throughout the year in temperate forests.

4. \_\_\_\_\_ Temperate forest animals hibernate due to cold weather, not lack of water.

5. \_\_\_\_\_ Temperate forest animal adapt by migrating, hiding food, & using camouflage.

**VII. Temperate Grassland**

**1. Identify where temperate grasslands are located.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Determine whether the statement is true or false. If false, then correct the statement to**

**make it true. (X = True; O = False)**

1. \_\_\_\_\_ Temperate grasslands are also known as prairies or steppes.

2. \_\_\_\_\_ Precipitation in grasslands is extreme, but the temperatures are moderate.

3. \_\_\_\_\_ The world’s richest soil are present in temperate grasslands.

4. \_\_\_\_\_ Grasses grow from their tips, not bases.

5. \_\_\_\_\_ Animals disperse most seeds on grasslands.

**VIII. Chaparral**

**1. Identify where the chaparral is located.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Determine whether the statement is true or false. If false, then correct the statement to**

**make it true. (X = True; O = False)**

1. \_\_\_\_\_ Chaparral biomes experience cold, dry winters and warm, wet summers.

2. \_\_\_\_\_ Water loss is combated by chaparral plants by growing thick, waxy leaves.

3. \_\_\_\_\_ Periodic fires characterize the chaparral biome.

4. \_\_\_\_\_ Sage, eucalyptus, and thyme contain oils that deter the spread of fires.

5. \_\_\_\_\_ Jackrabbits have long ears to dissipate heat during hot, dry conditions.

**IX. Boreal Forest (Taiga)**

**1. Identify where boreal forests (taiga) are located.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Determine whether the statement is true or false. If false, then correct the statement to**

**make it true. (X = True; O = False)**

1. \_\_\_\_\_ Compared to temperate forests, boreal forests are cooler and drier.

2. \_\_\_\_\_ Conifers thrive in boreal forests.

3. \_\_\_\_\_ Conifers are conical shape in order to shed snow easily.

4. \_\_\_\_\_ Annually, animal feeding, breeding, & rearing occurs during a few warm months.

5. \_\_\_\_\_ Some taiga animals have thick insulation for warmth & change color seasonally.

**X. Tundra**

**1. Identify where the tundra is located.**

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**2. Determine whether the statement is true or false. If false, then correct the statement to**

**make it true. (X = True; O = False)**

1. \_\_\_\_\_ The tundra has mild, bright winters and cold, dark summers.

2. \_\_\_\_\_ Tundra climate is based on latitude location, but not the tilt of the Earth.

3. \_\_\_\_\_ Mosses and lichens are rare in the tundra.

4. \_\_\_\_\_ Permafrost in the tundra soil remains frozen all year long.

5. \_\_\_\_\_ Caribou survive year-round in the tundra.

**XI. Polar Ice**

**1. Identify where polar ice is located.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Determine whether the statement is true or false. If false, then correct the statement to**

**make it true. (X = True; O = False)**

1. \_\_\_\_\_ Polar ice is a frozen region almost devoid of plant life.

2. \_\_\_\_\_ A continent exists under polar ice in the Northern Artic Circle.

3. \_\_\_\_\_ Any soil under polar ice is permanently frozen.

4. \_\_\_\_\_ Polar ice caps are considered to be biomes.

5. \_\_\_\_\_ Some polar fish make natural antifreeze proteins to prevent blood from freezing.