

## **Carbon, Nitrogen, and Water Cycles**

Use your diagrams, notes, and pages 66-68, 85, 137, 158-159, 171-172 for the answers.

### **Rock**

1. Name the 3 main types of rock.
2. What are the two ways that magma becomes rock?
3. What is sedimentary rock made of?
4. Where do metamorphic rocks form?
5. What process causes all rocks to break down over time?
6. Where does the energy that powers the rock cycle come from?

### **Carbon**

1. Name 3 ways in which carbon can enter the atmosphere.
2. Name 3 ways in which carbon can leave the atmosphere.
3. Explain how photosynthesis works.
4. What is the importance of plants in the carbon cycle?
5. In what form can you find carbon in the atmosphere?
6. Humans have a big influence on the carbon cycle. What would the carbon cycle be like without humans?
7. Where does the energy that powers the carbon cycle come from?

### **Nitrogen**

1. What are two ways in which nitrogen can get into the ground?
2. What role do plants have in the nitrogen cycle?
3. What role do decomposers have in the nitrogen cycle?
4. What is the role of bacteria in the nitrogen cycle?
5. Where does the energy that powers the nitrogen cycle come from?

### **Water**

1. What fraction of the earth's surface is covered in water?
2. Where is most of Earth's water located?
3. How is Earth's water cycle balanced?
4. Where is groundwater located under the surface?
5. What percentage of all the Earth's water is in a form that is useable to humans and land animals?
6. Where does the energy that powers the water cycle come from?