STUDY GUIDE

Unit 3 Test: Air and Water Resources

STEM II

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Atmosphere as a Resource

1. Which greenhouse gas is most efficient at absorbing infrared radiation?
2. What federal agency monitors and regulates air quality in the United States?
3. Where is the largest concentration of CFCs in the atmosphere? Why is this significant?
4. What is emissions trading and why is it important?
5. Which greenhouse gas is causing the most climate change?
6. What is local atmospheric circulation caused by?
7. What is acid rain and where in the US is it a problem?
8. What is the main source of CFCs?
9. Describe and explain the temperature pattern in the stratosphere.
10. Which greenhouse gas is no longer increasing in the atmosphere?
11. Where do most deaths from air pollution occur most often in the world?
12. List the possible effects as a result of climate change on Earth.
13. 16% of methane emissions comes from what source?
14. What does inert mean; in the case of an atmospheric gas?
15. Which country is the leading producer of carbon dioxide?
16. Describe one way you can help to reduce climate change.
17. Explain how your idea from #16 will reduce climate change.

Water as a Resource

1. What element is concentrated by rice plants but can also cause groundwater pollution?
2. How quickly is US groundwater being withdrawn compared to its rate of replenishment?
3. What happened to Elwha Dam?
4. The primary nutrients involved in eutrophication are:
5. The underground surface below which the ground is wholly saturated with water is the:
6. Define a watershed
7. What uses the most surface water?
8. Looking at the map of water conflict potential, which state appears to have the most widespread conflict potential?
9. When we used 1 liter of water in front of the class to demonstrate how much readily accessible surface water there was, how much was there?
10. The underground surface below which the ground is wholly saturated with water is the:
11. In the Olalla Creek watershed, the best water quality parameter is:
12. In the Olalla Creek watershed, the worst water quality parameter is:
13. How much of the world’s freshwater supply is lost annually due to evaporation and inefficient use, as in irrigation?
14. List the leading causes of water pollution.
15. List two efficient irrigation techniques.
16. List several ways to convert sewer water to drinking water.
17. How many countries are projected to be experiencing fresh water scarcity stress by 2050?
18. Name two disadvantages of dams.
19. On the watershed map below, identify the Devil’s Lake, Siletz, Yaquina, Beaver Creek, and Lincoln beach watersheds.

