Environmental Spring Benchmark 3 Study Guide

**Agriculture**

1. What is industrialized agriculture?

2. What is subsistence agriculture?

3. What are alternatives to using pesticides?

4. Explain soil conservation.

5. Why does agriculture use the greatest amount of water globally?

6. Why is agriculture considered the primary source of most water pollution?

7. Define arable land.

**Organic Farming**

1. What are the general organic principles?

2. In genetically modified plants, the DNA is integrated into what part of the bacteria to form a transgenic cell?

**Nutrition**

1. Define malnutrition.

2. Define undernutrition.

3. Define overnutrition.

4. What is overnutrition and what can it cause? Where is it most common?

5. What is a macronutrient? Example.

6. What is a micronutrient? Example.

7. What is a cause of blindness from ones diet?

**Waste**

1. What is solid waste?

2. What is the difference between industrial waste and municipal solid waste?

3. What are some advantages of burning waste? Disadvantages?

4. What is a sanitary landfill?

**Solid Waste**

1. What is the difference between waste management and waste reduction?

2. Explain the 3 R’s.

3. What is primary (closed loop) recycling?

4. What is secondary recycling?

5. What are the 3 types of waste that can be recycled?

6. Explain Composting.

**Mining and Minerals**

1. What are the 2 mineral types?

2. What is subsurface mining?

**Soil**

1. What is fertile soil?

2. What factors influence soil formation and how?

3. What is erosion?

4. What are ways to reduce soil erosion and protect topsoil?

**Water**

1. Be able to label and explain the water cycle and its processes.

2. What is a watershed?

3. The majority of water is used for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4. What are the types and causes of water pollution?

**Air**

1. Label the layers of the atmosphere.

2. What causes acid rain?

3. What is the Clean Air Act and what are some of its accomplishments since it began?

4. What causes global warming? What can we do to reduce it?

5. What causes ozone depletion? Why is depleting ozone bad?

6. List some solutions for indoor and outdoor air pollution.

7. Which layer of the atmosphere contains most of the Earth’s Weather?

8. What is the chemical formula for ozone?

9. What does the ozone layer absorb?

10. What is the most abundant gas in the atmosphere?

**Energy**

1. Where does most of the world’s energy come from?

2. Who is OPEC? List the contributing countries.

3. What are the top 3 places in the US to drill oil?

4. Natural Gas is the vapor form of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

5. What are solar panels made of?

6. Biofuels are mostly grown from \_\_\_\_\_\_\_\_\_\_\_\_\_.

7. Two major nuclear disasters (list place, year and what happened)

1.

2.

8. Most of the world’s oil is located beneath countries in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

9. How does a solar cell work?

10. What is natural gas? Which gases make it up?

11. 20. List the steps of the nuclear fuel cycle:

1.

2.

3.

4.

5.

12. How much energy could we potentially save if we improved our energy efficiency?