**STUDY GUIDE**

**Unit 5 Test: Energy and Solid Waste**

**STEM II/BI 111**

NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Energy

1. What percentage of commercial energy in the world comes from fossil fuels?
2. List 2 advantages of fossil fuels.
3. List 2 disadvantages of fossil fuels.
4. Approximately when will proven oil reserves will be 80% depleted?
5. What is OPEC and where are most OPEC countries found?
6. Most tar sands are found where?
7. List 2 disadvantages of tar sands.
8. Most shale oil deposits are found where?
9. List 2 disadvantages of shale oil.
10. Which type of fossil fuel burns the cleanest?
11. Which type of fossil fuel is the most abundant?
12. List 2 disadvantages of nuclear power.
13. List 2 advantages of nuclear power.
14. What is passive solar?
15. What is active solar?
16. Which direction should a solar panel be pointed in Toledo, Oregon?
17. Which country generates the most electricity from wind energy?
18. What is biomass?
19. How much energy lost along transmission lines?

1. In the typical household, what increases in efficiency would save the typical household the most money?
2. List 2 ways governments can encourage energy conservation.
3. List 2 benefits and drawbacks for using solar energy in Oregon:

 Benefits:

* 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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 Drawbacks:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. List 2 benefits and drawbacks for using wind energy in Oregon:

 Benefits:

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 Drawbacks:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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3. Name two places microhydro power could be efficient.
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. What are the pros and cons of a centralize power grid?

 Pros Cons

1. Draw a diagram showing the main idea of a centralized power grid:
2. What are the pros and cons of a distributed power grid?

 Pros Cons

1. Draw a diagram showing the main idea of a distributed power grid:

Solid Waste

1. What is e-waste? Provide a couple examples.
2. Approximately how much of the worlds e-waste ends up in land fills?
3. How much of the world’s e-waste does the United States recycle?
4. What is municipal solid waste?
5. How much of the municipal solid waste stream could actually be recycled?
6. How much of the municipal solid waste stream is actually recycled in the US?
7. For each one pound of electronics in a computer, how much solid and liquid wastes were created?
8. What is the most environmentally-conscious choice: paper bags, plastic bags, or cloth bags?
9. Define the 3 R’s of recycling.
10. Which of the 3 R’s is the most desirable environmentally?
11. Which of the 3 R’s is the least desirable environmentally?
12. What are hazardous wastes?
13. How are hazardous wastes most commonly disposed of?
14. Liquid hazardous waste is most often disposed of how?