**Anaerobic Digestion: Putting Microbes to Work! Worksheet**

**AD stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**AD is the process in which microorganisms break down biodegradable material without using \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!**

**Where does AD happen in nature? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**Fill in the blanks in the diagram below:**



**People use these resources!**

**Anaerobic digestion’s main product is gas. Biogas is usually ~70% methane (flammable!) and about 30% CO2. Natural gas, which may be piped into your house, is ~90% methane.**

**For what might you use biogas? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Anaerobic digestion also produces a nutrient-rich water stream (lots of nitrogen and phosphorous). *For what do you think you could use this “waste” product?***

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**Now that you are familiar with anaerobic digestion, think about how it might be different from (or the same as) composting. *Write down your ideas:***

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