

BioRecycling/BioEnergy Knowledge Check

1. True/False: Waste is waste and cannot be reused or recycled.
 - a. True
 - b. False
2. Which of the following CANNOT be used to produce electricity?
 - a. Sunlight
 - b. Natural gas
 - c. Wind
 - d. Glass
3. True/False: Composting and anaerobic digestion are good ways of recycling food waste.
 - a. True
 - b. False
4. For growth, plants and algae need all of the following, EXCEPT _____.
 - a. Nutrients
 - b. Water
 - c. Sunlight
 - d. Methane
5. Of the following, which photosynthetic organism grows the fastest?
 - a. Algae
 - b. Squirrels
 - c. Oak trees
 - d. Humans
6. True/False: Biogas is a renewable energy source.
 - a. True
 - b. False
7. What does anaerobic digestion produce?
 - a. Oxygen
 - b. Biogas
 - c. Light
 - d. Helium
8. True/False: Microalgae and plants can be turned into biofuel.
 - a. True
 - b. False
9. Air is composed of several constituents. Which air component do plants need most?
 - a. Oxygen
 - b. Nitrogen
 - c. Carbon dioxide
 - d. Argon
10. Plants help to control the Earth's temperature by removing _____ from the atmosphere.
 - a. Oxygen
 - b. Nitrogen
 - c. Carbon dioxide
 - d. Helium

11. Anaerobic means without _____.
- a. Oxygen
 - b. Nitrogen
 - c. Methane
 - d. Carbon dioxide
12. Which of the following is not a decomposer?
- a. Fungi
 - b. Bacteria
 - c. Earth worms
 - d. Plants
13. True/False: Composting requires oxygen and bacteria to break down the food waste.
- a. True
 - b. False
14. If you provide enough oxygen, water and food to a compost pile, what happens?
- a. The compost pile heats up
 - b. The compost pile smells
 - c. The compost pile becomes cooler in the center
 - d. Biogas is produced
15. Compost can be used for _____.
- a. Construction material
 - b. Growing plants
 - c. Producing paper
 - d. Filling empty space in landfills
16. Sequestering carbon dioxide means to _____.
- a. Convert it to heat
 - b. To steal it
 - c. Dissolve it in water
 - d. Lock it up, or store it in organic materials
17. What device do engineers use to grow algae?
- a. Anaerobic digester
 - b. Photobioreactor
 - c. Nuclear reactor
 - d. Business incubator
18. What device do engineers use to produce biogas?]
- a. Anaerobic digester
 - b. Photobioreactor
 - c. Nuclear reactor
 - d. Business incubator
19. Biogas is a combination of _____ and _____.
- a. Oxygen and methane
 - b. Oxygen and carbon dioxide
 - c. Methane and carbon dioxide
 - d. Carbon dioxide and nitrogen
20. A bioreactor is _____.
- a. a group of radioactive organisms
 - b. a device that does some type of work using microorganisms
 - c. the place where most superheroes come from
 - d. an Oscar award-winning bacteria