Green Deal Hex-Game

Environmental Technologies: - 30 Questions

1. Q: Why is a condensing boiler more efficient than a non-condensing boiler?
   A: It extracts a greater proportion of heat

2. Q: What does CFL stands for?
   A: Compact Fluorescent Lights

3. Q: Why are microgeneration technologies good for the Environment?
   A: Less/no energy distribution costs and so can be more efficient

4. Q: Why are microgeneration technologies good for the Economy?
   A: They create new jobs in their respective industries

5. Q: How do Air Source Heat Pumps work?
   A: Exchange heat from outside air to provide heating/ cooling/ hot water indoors

6. Q: An appliance similar but opposite to an Air Source Heat Pump
   A: Refrigerator

7. Q: How do Ground Source Heat Pumps work?
   A: Exchange heat with the ground to provide heating/ cooling/ hot water

8. Q: Why are Air and Ground Source Heat Pumps defined as 'fit and forget technology'?
   A: They need little maintenance

9. Q: Solar thermal panels are most efficient when facing in which direction?
   A: South

10. Q: Do photovoltaic cells need cloudless skies to work?
    A: No, they can still generate electricity on a cloudy day

11. Q: Main benefits of solar electricity
    A: Cut your electricity bills and carbon footprint

12. Q: How much CO_2 a year do you save with a 4kW home solar PV?
    A: One tonne

13. Q: 40% of all the wind energy in Europe blows over which country?
    A: The UK

14. Q: What is 'micro-wind' or 'small wind turbine' also known as?
    A: Domestic turbine

15. Q: Pole-mounted turbines cost less to install than building-mounted turbines. True or False?

A: False

16. Q: Most building-mounted turbines produce less electricity than pole-mounted ones. True or False?
    A: True

17. Q: What do wood-fuelled heating systems burn to produce energy?
    A: Wood pellets, wood chips or logs

18. Q: The main energy source used for domestic microgeneration?
    A: Energy from sunlight

19. Q: Two main types of solar thermal panels
    A: Flat plate systems, and evacuated tube systems

20. Q: What does CHP stand for?
    A: Combined Heat and Power

21. Q: What is a CHP used for?
    A: The simultaneous production of domestic electricity and heat

22. Q: How does a CHP work?
    A: Mostly natural gas is used by a boiler system to generate heat and electricity

23. Q: What is a Biomass system?
    A: This is where energy is produced using organic material

24. Q: A benefit of rain water harvesting systems?
    A: Reduce demand for mains water

25. Q: Is charcoal a form of biomass fuel?
    A: Yes (as it is made from wood)

26. Q: Why is an inverter needed for PV panels?
    A: PV Panels produce DC current; an inverter converts DC to AC

27. Q: What is anaerobic digestion used for?
    A: Producing bio-gas

28. Q: In a micro-hydropower turbine system, what causes the turbine to rotate?
    A: Water passing through the turbine

29. Q: What are grey water supplies most commonly used for?
    A: Flushing WC cisterns

30. Q: Do photovoltaic panels produce greenhouse gases during operation?
    A: No