

Hex game - The Green Deal - Environmental Technologies

This activity is best suited to paired and small group work. This game is an excellent resource for those interested in learning more about the Green Deal as it covers one of the main elements: Environmental Technologies.

Object of the game

Players are given the task of matching the correct answers to the correct questions. Once they have achieved this, the triangles together will represent a hexagon shape, with the outside of the hexagon not having any questions or answers on it.

Topic

Environmental Technologies

What is included

1. A set of 24 triangles.
2. Instructions with questions and answers.

Additional Requirements

1. None

Rules of the Game

Players take turns to see if they can match an answer to a question, in the same manner as dominoes. The matched questions and answers will form a hexagon shape. The outside of the hexagon will be a blank side of the triangle.

Notes

Some of the statements are intended to stimulate debate.

The game can be personalised to decide how long a player can take to answer a question.

This game can be played in teams, where the question is discussed and players take it in turns to give the answer decided on.

1	Why is a condensing boiler more efficient than a non-condensing boiler?	It extracts a greater proportion of heat
2	What does CFL stands for?	Compact Fluorescent Lights
3	Why are microgeneration technologies good for the Environment?	Less/no energy distribution costs and so can be more efficient
4	Why are microgeneration technologies good for the Economy?	They create new jobs in their respective industries
5	How do Air Source Heat Pumps work?	Exchange heat from outside air to provide heating/ cooling/ hot water indoors
6	An appliance similar but opposite to an Air Source Heat Pump	Refrigerator
7	How do Ground Source Heat Pumps work?	Exchange heat with the ground to provide heating/ cooling/ hot water
8	Why are Air and Ground Source Heat Pumps defined as 'fit and forget technology'?	They need little maintenance
9	Solar thermal panels are most efficient when facing in which direction?	South
10	Do photovoltaic cells need cloudless skies to work?	No, they can still generate electricity on a cloudy day
11	Main benefits of solar electricity	Cut your electricity bills and carbon footprint
12	How much CO2 a year do you save with a 4kW home solar PV?	One tonne
13	40% of all the wind energy in Europe blows over which country?	The UK
14	What is 'micro-wind' or 'small wind turbine' also known as?	Domestic turbine
15	Pole-mounted turbines cost less to install than building-mounted turbines. True or False?	False
16	Most building-mounted turbines produce less electricity than pole-mounted ones. True or False?	True
17	What do wood-fuelled heating systems burn to produce energy?	Wood pellets, wood chips or logs
18	The main energy source used for domestic microgeneration?	Energy from sunlight
19	Two main types of solar thermal panels	Flat plate systems, and evacuated tube systems
20	What does CHP stand for?	Combined Heat and Power
21	What is a CHP used for?	The simultaneous production of domestic electricity and heat
22	How does a CHP work?	Mostly natural gas is used by a boiler system to generate heat and electricity
23	What is a Biomass system?	This is where energy is produced using organic material
24	A benefit of rain water harvesting systems?	Reduce demand for mains water
25	Is charcoal a form of biomass fuel?	Yes (as it is made from wood)
26	Why is an inverter needed for PV panels?	PV Panels produce DC current; an inverter converts DC to AC
27	What is anaerobic digestion used for?	Producing bio-gas
28	In a micro-hydropower turbine system, what causes the turbine to rotate?	Water passing through the turbine
29	What are grey water supplies most commonly used for?	Flushing WC cisterns
30	Do photovoltaic panels produce greenhouse gases during operation?	No

