

Hex Game: The Green Deal - Insulation/Energy Reduction

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: Insulation/Energy Reduction

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

Insulation/Energy Reduction

What is included

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

Additional Requirements

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	What is the Green Deal?	It is the Government Policy for improving the energy efficiency of buildings
2	What is the Golden Rule?	All savings must cover the expected outlay
3	Percentage of the UK's CO2 emissions to be reduced by 2020 on 1990 levels	34%
4	Three main types of insulation used in cavity walls	Foam Insulation, Mineral Wool, Granules/ Beads
5	Insulated doors must have a U-value of 1.8W/m2K. A lower U-value means?	Better insulation properties
6	Does the Green Deal cover better insulated windows (e.g. double glazing)?	Yes
7	Percentage of savings in switching from incandescent bulbs to LEDs?	90%
8	One disadvantage of internal solid wall insulation	Floor space is reduced
9	Homes built before 1920 usually have what type of walls?	Solid
10	Most homes built after 1920 usually have what type of walls?	Cavity
11	When insulating a flat roof, how much of a gap should one have?	50 mm of ventilation space to avoid condensation
12	A disadvantage of exterior wall insulation	May require planning permission
13	Before installing micro-generation technologies, it is important to	Reduce the building's energy consumption
14	A gas heated three-bed property installing solid wall insulation should expect to save?	£475 per year
15	What is an R-value (insulation)?	A measure of thermal resistance
16	What is the purpose of a cavity in a cavity wall?	Prevent dampness moving from the outside wall to the inner
17	When insulating a hot water cylinder it is good practice to also do what?	Insulate the pipe-work at the same time
18	What must be considered prior to the installation of Solar Water Heating?	Roof structure/condition, scaffolding requirements
19	Before installing a wind turbine what issues need to be considered?	Access issues/rights, neighbours, wind availability
20	Where would one use draught sealing?	Windows, doors, suspended floorboards
21	What are the two ways to draught-proof an unused chimney?	Cap the chimney pot; use a chimney balloon
22	What is the easiest way to cut lighting bills?	Turn the lighting off, even if it is for a short time
23	What do most wind turbines do during high wind speeds?	Auto shut down
24	How is heat distributed using a solar thermal panel?	A solution, usually glycol, moves from within the panels to a tank of water
25	What is the key benefit of intelligent lighting controls?	Energy savings
26	What is the Feed-In-Tariff?	A scheme which pays you for generating electricity using renewable sources
27	What type of insulation material is light-weight yellow, pink, or white?	Fibreglass
28	Type of insulation material made up of loose fibres that are small greyish flat pieces	Cellulose
29	What type of insulation material is dense grey or off white?	Rock wool
30	Once involved in the Green Deal can someone switch their electricity company?	As long as the new supplier is participating

