



RENEWABLE ENERGY WORKSHEET - MODULE 1

NAMES:

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ENERGY

1. Name some things we use energy for

Transport, houses (e.g. heating), industry and many other things!

2. Where does most of our energy come from?

Burning fossil fuels

3. Suggest a problem with this

This produces greenhouse gases which cause climate change; also the fossil fuels are used up and not replaced

4. Suggest an advantage of renewable energy?

It does not produce greenhouse gases which causes climate change; renewable energy does not get used up

5. Name some sources of renewable energy

Water (e.g. hydro-electric), wind, solar



ELECTRICITY

6. When you connect up the motor, how can you get it to rotate in the opposite direction?

Swap over the motor connectors attached to the solar panel.

7. To get as much electricity as possible from a solar panel, what orientation should it be at relative to the sun's rays?

The solar panel should be at right angles to the sun's rays to optimise its performance.

LIGHT

8. What could happen if you look directly at the sun?

You could damage your eyes.

9. What causes shadows to form?

Shadows are formed when the light is blocked by an opaque object.

EXTENSION QUESTION

10. Explain how a solar powered electric fan works

Sunlight falling on the solar panel causes electricity to be produced. The solar panel is connected to the motor, and electricity travelling round the circuit makes the motor turn. A propeller is mounted on the motor. The propeller is shaped so that when it rotates the blades push the air, making a breeze. This breeze makes you feel cool.