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Swansea University Science for Schools Scheme

Watch the video here: youtu.be/JGRiVvDyF\_Q



## CELLS THAT CAPTURE LIGHT

#### **SOLAR HEATERS**



### **Materials**

- Thermometer
- Stopwatch or timer
- Clear container with lid
- Water

- 1. Fill your container with water.
- 2. Place your container of water in a sunny area (a garden or a windowsill).
- 3. Use the thermometer to measure the starting temperature of the water.
- 4. Put the lid on the container and start the stopwatch.
- Measure the temperature of the water at regular intervals (every minute or two) for 20 minutes.
- 6. Think about how you could improve the design of your container to heat the water more efficiently. Could you use a container of a different shape, size, colour, material, etc?
- Repeat this procedure for different containers to find out which designs work best.





How do plant cells make energy? Draw, or write, your answer below.

#### **SOLAR POWER**

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How do solar cells make energy? Draw, or write, your answer below.

Tick the sentences which you think are true.

Solar power is good for the Earth.Image: Constant of the Earth.Solar panels can be put on a roof to make energy to use in the house.Image: Constant of the Earth.Solar power can always make energy, in any weather.Image: Constant of the Earth.Solar power will eventually run out.Image: Constant of the Earth.Solar panels are cheap to build.Image: Constant of the Earth.Solar power is renewable.Image: Constant of the Earth.The sun shines on solar panels, which can then heat water or make electricity.Image: Constant of the Earth.Solar panels need a lot of space.Image: Constant of the Earth.

Write one reason why solar power is good.

Write one reason why solar power is bad.

