

CLASS ACTIVITY: The Sun Factor!

SUNSHINE! IT MAKES PEOPLE SMILE AND IT'S GREAT AT GENERATING POWER WE CAN CAPTURE AND USE ON EARTH. PEOPLE ARE USING SOLAR POWER IN EVERYDAY LIFE TO REPLACE POLLUTING FORMS OF ENERGY LIKE COAL. FOR EXAMPLE, SOLAR PANELS ON THE ROOFS OF HOUSES CAN HEAT WATER FOR BATHS AND SHOWERS.

CHALLENGE CHAMPIONS!

Be a Sun-Factor winner and invent your own solar-powered machine! What would you like to see run on solar energy?

Imagine what you would do with solar power and come up with an invention. It might be as part of an eco-friendly house or for another purpose – anything you like! Get creative!

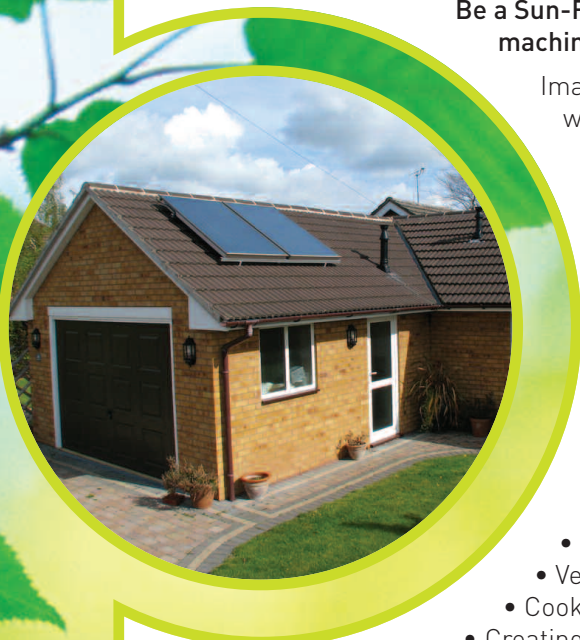
Remember, your invention will have to include a solar panel to capture the sun's energy.

- Draw a picture or diagram of your invention on the sheet. Label the different parts of the machine, and explain what it does.
- List on the sheet all the equipment you would need to build your invention.

HELPFUL HINT:

We can use solar power for:

- Heating
- Cooling
- Ventilating
- Cooking
- Creating
- Converting to electricity to power...all sorts of things!



Solar powered garden lights



POWER PONDER!

People like things with catchy names. If you invented a machine called the Machine for Making Bubbles Appear in the Bath, that would be pretty boring. It would be more fun to call it a Solar Bubble Blower! Be sure to create a fun name for your invention.



Solar powered warning sign



Solar powered parking meter



Solar powered calculator



HOME ACTIVITY: The Climate Challenge

SOLAR POWER IS JUST ONE OF THE RENEWABLE TYPES OF ENERGY WE NEED TO USE MORE OF. WHY? BECAUSE BURNING TOO MANY FOSSIL FUELS LIKE COAL AND OIL IS POLLUTING THE EARTH'S ATMOSPHERE – AND THAT IS CAUSING OUR CLIMATE TO CHANGE.



POWER PONDER!

Take the **Climate Challenge** and investigate how our environment is changing because of using fossil fuels. Write down in each box three interesting facts you discover about acid rain, the greenhouse effect and climate change.

ACID RAIN

What is acid rain and what causes it?



THE GREENHOUSE EFFECT

What is the greenhouse effect? What gases are causing it?





CLIMATE CHANGE

How is the climate changing around the world because of the greenhouse effect? Give some examples of different countries where the weather and the land are changing (Hint! it might be hotter, or it might be wetter, or it might be drier, or the ice might be melting... It depends what country you're in.)



POWER PONDER!

Put your solar-powered thinking cap on, and come up with one thing you and your family could do to reduce damage to the environment from fossil fuels.

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To find out more go to: www.baxi.co.uk/renewables

