Solar Powered Toy Design Competition

# The Brief

The winner will design a toy that fulfils the following criteria:

1. It is a moving toy
2. It is powered by a solar panel with an electric circuit
3. It is designed for children aged between 5 and 7
4. It is made from junk modelling material

# Prizes

The winners will be invited to compete in a solar car making competition. Details to be confirmed.

# How to enter

Please draw a coloured picture of your toy design and include a brief description of your toy ensuring that you have paid attention to the brief and the design questions. Once you have completed your design hand it to your teacher who will scan and email it to Tracy at Solar Power Education. (You may wish to include a photograph of your toy) -+Only one entry per pupil. Closing date end of Spring Term 2017.

# Design Questions to think about

* What different mechanisms can a solar panel power?
* How will the electrical circuit work? How do you turn it on and off?
* How will it move? Do you need a motor? A bulb? A buzzer? A magnet and coil?
* How will the moving pieces be attached to each other?
* In what way will it move? Spinning? Lifting? Vibrating? Wobbling?
* What materials will it be made of?
* What will make your toy fun to play with?

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ School:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**My Final Solar Powered Toy Design**

**Draw and label your final design**

**Describe your toy in words**