TOYOTA

You are challenged to design a solar powered car that meets the specifications outlined by Toyota. The solar powered car must be as fast as possible; marks will be awarded for consistent speed. Part of the competition involves the submission of a Project folder which you must complete before we start in January.

Research existing similar products –

- Solar cars (actual solar cars, makers, performance etc)
- Environmentally friendly cars (examples)
- Recycled materials
- High speed vehicles (F1, Porsche etc)
- Aerodynamics
- Wheels- diameter, width, weight and materials

- Write a paragraph on each and include pictures (one A4 sheet on each). Do not copy and paste as you will be disqualified. Write in your own words and reference any websites you use.

- Conclusions – from your research draw conclusions on the following:
  1) Which materials are most suitable for your design and why (weight, recycled, environmentally friendly)
  2) How efficient and useful are real solar cars?
  3) Aerodynamics - how you could use this to speed up your car
  4) Importance of environmentally friendly cars to future societies
  5) Importance of using recycled materials

- Design and draw a vehicle or use Google SketchUp to draw a 3D model.

- Make a prototype out of paper, card, plastic etc.

- Any other research into other areas will be awarded with extra marks.

See the website

http://www.rapidonline.com/toyota/default.html

Click on hints and tips

Rapid