PRODUCT DESIGN BRIEF

Your innovative design company has been commissioned to design a mini portable solar cooker specifically for melting marshmallows.

There are many solar cookers that are on the market but this client wants nothing with solar panels or wires. He wants to be able to fold it up and fit it inside his brief case, or in the case of his wife, in her hand bag, which is large (because she has to fit everything but the kitchen sink in it!)

His office has an outdoor balcony and large windows so he has access to the sun. He would hope to eat the melted marshmallow (spread on Salada Biscuits) within ½ hour of starting the melting process. This could vary depending on the intensity of the rays and how well you harness them. Some guidelines on the cooking time, after the testing phase, could be included with the instructions.

You have a shoestring budget so you will need to think of cheap, everyday materials, easily available.

You have a time frame of .................................... or he will be fired because even though he has a heart as soft as a marshmallow, staff have had enough! He continues to melt his marshmallows in the sandwich maker and staff are sick of marshmallow remains on their Toastie!

Some Background Facts.

The sun is 150 000 000km from Earth, and light from the sun takes 8 minutes and 20 seconds to reach Earth. The sun’s energy travels through space as short, wavelength radiation, part of which is reflected from the Earth’s surface as heat energy.

DISCUSS DESIGN

MATERIALS

DRAW LABELLED DIAGRAM

PRODUCT NAME

CONSTRUCT

TEST

MODIFY

EVALUATION:

Was your design successful according to the Brief? Reasons?

Were there any difficulties?

How did/could you solve the problem?

Other

Take a photo of your design.