Design brief

DESIGN TAKES YOU ON A JOURNEY OF DISCOVERY

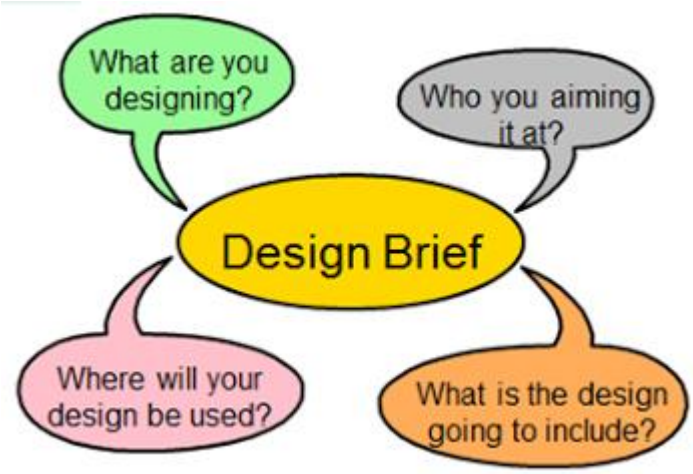
Why use a Design brief?

"The main purpose of a design brief is to get everyone working on the project started, with the same understanding of what is to be accomplished. It must give clear precise direction. The client must spell out their expectations. A well prepared brief is a critical starting point for any design process."
(Ref: http://www.tridentdesign.co.uk/the-importance-of-a-design-brief/)

Creating a Design Brief

Design briefs are used extensively by many types of businesses and industry. In the classroom a Brief is written early in the design stage. It provides the problem to be solved, what is needed and a measurable conclusion. Each project is different so a Brief needs to be tailored to make it useful and relevant.

This diagram shows the types of information that are required in a Design Brief.



Ref: http://veenamony2016.blogspot.com.au/

What are you designing? What problem should this design project solve? The answer needs to be specific and measurable.

Who are you aiming it at? Who is this product for? Who's going to use it, when and why? (i.e. Target audience)

What is the design going to include? What are the essential and desirable characteristics that the end product should have? There must not be limits on how the problem could or must be solved.

Where will your design be used? A product may need to be designed/made differently according to how or where it will be used and who will be using it.

Your Design Brief may also include:

- **Problem statement:** Statement that explains the problem that is to be solved. It must not imply or state a solution.
- **Budget:** The amount of money that can be spent to complete project.
- **Time**: The time allocated to the project.
- **Constraints** such as:

Colour scheme	Safety
Compacts for shipping	Selling price
Cost of manufacture	Shape
Durability	Size of product
Material for manufacture	Strength
Product appeal	Weight

REFERENCES:

- http://veenamony2016.blogspot.com.au
- http://www.tridentdesign.co.uk/the-importance-of-a-design-brief/
- http://zakmcleod.yolasite.com/design-cycle.php
- https://docs.google.com/document/d/1b8H68tUi6i4ZhreVpsX8gZwC5BWUPCMJ3053N0Ndb-o/edit

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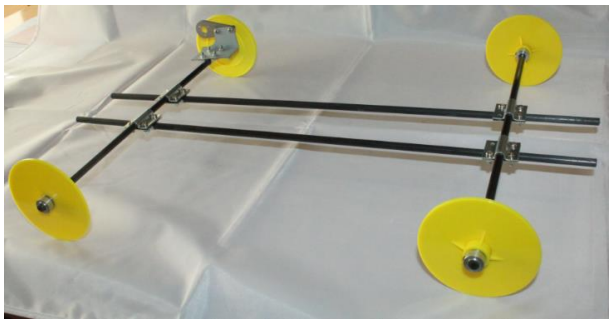
CHALLENGER (CAR) KIT

This new kit was developed as the basis for building a solar car for the Student Designed Car competition run by Model Solar**.**



By using this kit as the basis for a student designed solar car, students will have the necessary mechanical / structural and electronic components to make the chassis, to enable them to design, build and race solar powered model cars of their own design.

In this project students will

- Design and construct using the provided car competition regulations
- Work with subsystems e.g. driveline, axle bracket & frame, guide rollers, Solar Panel Power Controller (Low voltage)
- Discover that certain factors can be changed to increase speed and efficiency.
- Evaluate materials to improve efficiency.
- Investigate advantages or disadvantages of running electronics (Automax Maximum Power Point Tracker or the Solar Panel Power Controller).
- Calculate the possible side forces being exerted on the car during cornering.
- Research what is a space frame, where they are usually used and when the first one was used.

INTRODUCTORY PRICE $135.00

If you intend to participate in any of the state competitions, you will need to download and read the current regulations governing this competition before commencing construction.

Regulations are available from the web site
http://www.modelsolar.org.au/getting-involved/regulations

SEEING INFRARED

In our previous Newsletter (May 2017) we mentioned that you cannot see an IR LED working. Thanks to Stuart C. (Design & Technology Teacher, S.A.) for his hint:

"*Do you know how it can be done? Point a digital camera at it and look at the screen of the camera. When the LED is working, it "glows" white. It is a great way to check when batteries are really flat in remotes*. " Your mobile phone can be used in a similar way to see the infrared LED glow.

Scorpio Technology's 4 and 6 channel infra-reds have a small red Indicator LED on the transmitter PCB, and that also provides an indication of the batteries condition, as that won't work if the batteries are flat.

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www.scorpiotechnology.com.au
Also check out our previous newsletters.

Inspirational projects for teaching Design, Creativity & Technology

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