

ROCKET PROJECT



DESIGN DIARY

TEAM NAME	GROUP MEMBERS

The Challenge

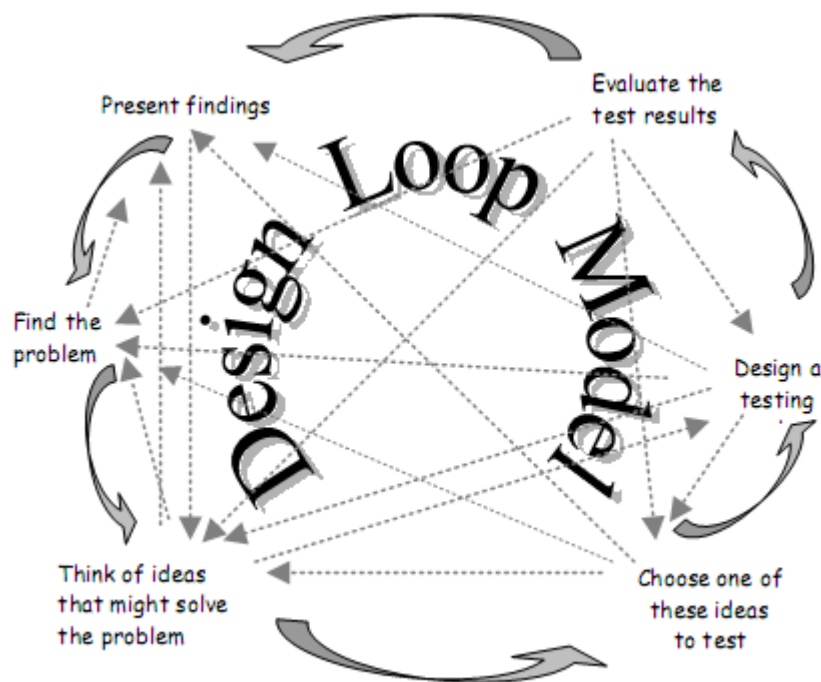
Design a rocket, that is propelled by water, that will fly the furthest distance and have the greatest accuracy.

The Limitations

- All work must be completed in the class time given.
- Each team must complete their Design Diary in a neat manner.
- Each team must create an action plan prior to gathering materials.
- Each team must create a technical diagram drawn to scale and labeled before each new rocket build.
- Each team must test their rocket and record the data.
- No metal, glass, sharp or harmful objects may be used to make your rocket.

The Rules

- Each team will be judged on the furthest distance their rocket flies (3 attempts given).
- Each team will be judged on how close they are able to land their rocket to a preset target (3 attempts given).
- Each team will be judged on the neatness of their Design Diaries.
- Each team will complete a reflection on the design cycle.
- Each team will be judged by their classmates on their design and decorations.



SCORING

	<i>5</i>	<i>4</i>	<i>3</i>	<i>2</i>	<i>1</i>
Diary	Diary provides a complete record of planning, construction, testing, modifications, reasons for modifications, and some reflection about the strategies used and the results.	Diary provides a complete record of planning, construction, testing, modifications, and reasons for modifications.	Diary provides quite a bit of detail about planning, construction, testing, modifications, and reasons for modifications.	Diary provides little detail about several aspects of the planning, construction, and testing process. Diary is messy.	Diary provides very little detail about several aspects of the planning, construction, and testing process. Diary is very messy.
Diagrams	Clear, accurate diagrams are included and make the rocket easier to build. Diagrams are labeled neatly and accurately, and drawn to scale.	Diagrams are included and are labeled neatly and accurately, and to scale.	Diagrams are included and are neatly labeled.	Diagrams are included but are not neatly labeled. Diagram is messy.	Needed diagrams are missing OR are missing important labels. Diagram is very messy.
Distance – rank based on farthest distance.	Teams with rank 1-3.	Teams with rank 4-6.	Teams with rank 7-9.	Teams with rank 10-12.	Teams with rank 13-15
Accuracy – within:	1 meter	2 meters	3 meters	4 meters	5 meters

People's Choice Awards

1st Place - +3 points

2nd Place - +2 points

3rd Place - +1 point

INVESTIGATION

What information do you need to research to design your rocket?

Information you have found (make sure to include WHERE you found the information. Include page numbers or specific websites)

What materials will you use to create your rocket?

DESIGN

- Draw a scale diagram of your design.
- Make sure to include labels and lengths.
- Include both a top/bottom view, AND a side view.

Initial Design

Before you create your rocket check your design with the teacher.

Approval Signature: _____

TESTING

<i>Angle of Launch</i>	<i>Pressure</i>	<i>Distance</i>	<i>Other Comments</i>

EVALUATION

What went well?

What were the problems? Or what could be improved?

What new information have you found?

What will you change? Why?

DESIGN

- Draw a scale diagram of your design.
- Make sure to include labels and lengths.
- Include both a top/bottom view, AND a side view.

Design # -

Before you create your rocket check your design with the teacher.

Approval Signature: _____