

OPERATION Design Challenge

At a Glance



Fashion
through science

Overview

There are four main stages in the final design challenge.

Stage	Engineering Design Process Stage	Objective	Handout	Time spent on each area (recommended)
In advance		Create teams with well-balanced skills. Have each team choose a name.	Creating Teams Handout	15 min. to fill out & 15 min. to create groups (done in advance)
1	What is the problem?	Read the Design Challenge one last time – clarify what they are supposed to do.	Design Challenge Handout	1 hour
2	What are some ideas to fix the problem?	Team brainstorm session - generate lots of sketches on possible designs.	Brainstorming Handout	30 minutes
	Choose an Idea	Converge on one design - redraw the final look.	n/a	30 minutes
3	Get organized and create a garment design	Assign roles.	Team Jobs Handout	3 – 4 hours
		Introduce the Fashion Show.	Fashion Show Script Handout	
		Planning (e.g. what needs to happen first, what can happen at the same time, who does what?).	n/a	
		Create the design.	n/a	
	Test your design	Test the prototype and refine the design.	Testing Checklist Handout	
	Correct and improve the design	Revise and rework garment into a final prototype.	n/a	
4	Share the solution	Prepare for the fashion show and presentations.	n/a	1 hour (40 minutes for prep & 20 minutes for show)
	Share the solution	Fashion Show and presentations – hand out Certificates of Completion (optional).	Fashion Show Script Certificates of Completion	

