

> Lesson Plan 4

STEM Challenge! From Classroom to Career



Duration: 90 – 120 minutes

Aims:

- Give students a taste of what it's like to work in a STEM-related job.
- Develop their employability skills.

Skills:

- Understanding Aims and Objectives
- Planning
- Research Skills
- Organisation / Time Management
- Decision Making
- Problem Solving
- Innovation
- Team Work
- Communication

Resources:

- Lesson Plan
- Challenge Brief
- Pupil Worksheet
- STEM Card
- Laptops or PCs
- Plain Paper

Preparation:

- Download and print Challenge Brief, Student Worksheet and STEM Card



Activity:

1. Put students into groups of 4.

2. Read out the Challenge Brief and give each team a copy.

3. Give them a few minutes to select team roles from the following:

Research & Development Project Manager (PM):

Overall decision maker on the project when decisions need to be made which impact product design. For example, if choices need to be made on ingredients and there is no consensus, the project manager has the overall say. For this activity, the PM is in charge of finances and the retail price of the product. The PM considers the cost of ingredients added to product.

Research & Development Market Researcher:

Finds out what products are already on the market, considers who will buy the product and who it is aimed at. Feeds the information back to scientists and team.

Research & Development Scientist:

Investigates what ingredients are used in toothpaste and any new ingredients which could be used. What ingredients could be used to provide a benefit for the target consumer?

Commercial Marketing Manager:

Decides how to market the new product.

- What is the name?
- Do you need slogans?
- How will you get customers to buy your product?



4. Set the teams a time limit for teams to research and come up with their product.

5. Ensure they know how long they have to pitch.

6. Each team will then pitch their idea to the rest of the class.

7. After each pitch ask 1 or 2 questions and provide feedback.



The pitch should include



Labelled drawing of the product



What the product is / its name?



Price



The ingredients in the product, if time is short you can talk about the important ingredients. What are their functions in the product?



Packaging

- How will it be packaged?
- What materials will be used?



Who is the consumer?



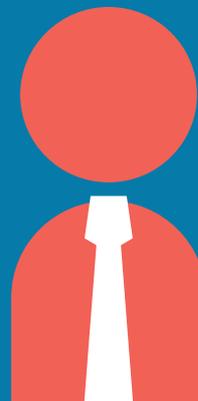
How would it be advertised?



Any information for Health Care professionals which may endorse product?



Any other information they feel is important



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