

Lesson 1:
Competition Brief



Last week, we had the introduction to this half-term's competition.

What can you remember?



Today, we'll look at the competition brief in greater depth and start getting into our teams.



How can we use lenses and/or robotics to help people see...



...things that are small



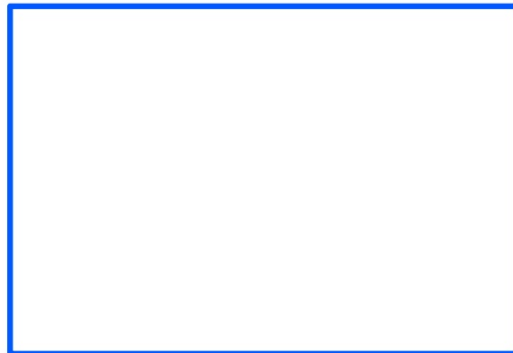
...things that are far away



...in a dark twisting maze



...if they have a visual impairment



Entries should include:

- A poster showing the design of your product



Let's look at how the competition is going to be judged...





Relevance to Brief

Does the entry link specifically to the brief – would this entry improve a school environment? The better the link to the brief, the higher the entry should score. It could link to one of the 4 prescribed areas of research or could be based on a different area that the group has chosen to research. The entry must focus on an environmental issue and make efforts to improve this.



Innovation

Has the entry presented an original idea - something that does not already exist or a new interpretation of an existing idea or concept and shown ingenuity in its design and development? Where you consider a design to be innovative, this should score higher – but please bear in mind that the teams have been encouraged to use and adapt existing industry ideas, technologies and techniques to improve their school environment.



Creativity

Does the entry show resourcefulness and a creative flair? We expect entries to be supported by additional resources which may include posters, video clips, adverts, or additional presentation resources such as a PowerPoint. Teams may produce a prototype model of their ideas, and there may be a demonstration of resourcefulness in the selection of materials used for this.



Presentation Skills

Some of the activities that the students have worked on aim to teach them some tips and tricks to improve their presentation skills, such as trying to understand that their nerves are the same feelings as excitement, and to waddle like a penguin before they start to relax their body. Have all of the team members contributed to the presentation, and have you noticed any demonstration of these techniques.



Research/Evidence

4 of the in-school activities that the students were given were research based and designed to assist in the development of ideas linked to the project, so competition entries should be backed up by some of this evidence, and their own research. Entries that demonstrate research and evidence for the decisions that they made in their own design should score the highest.



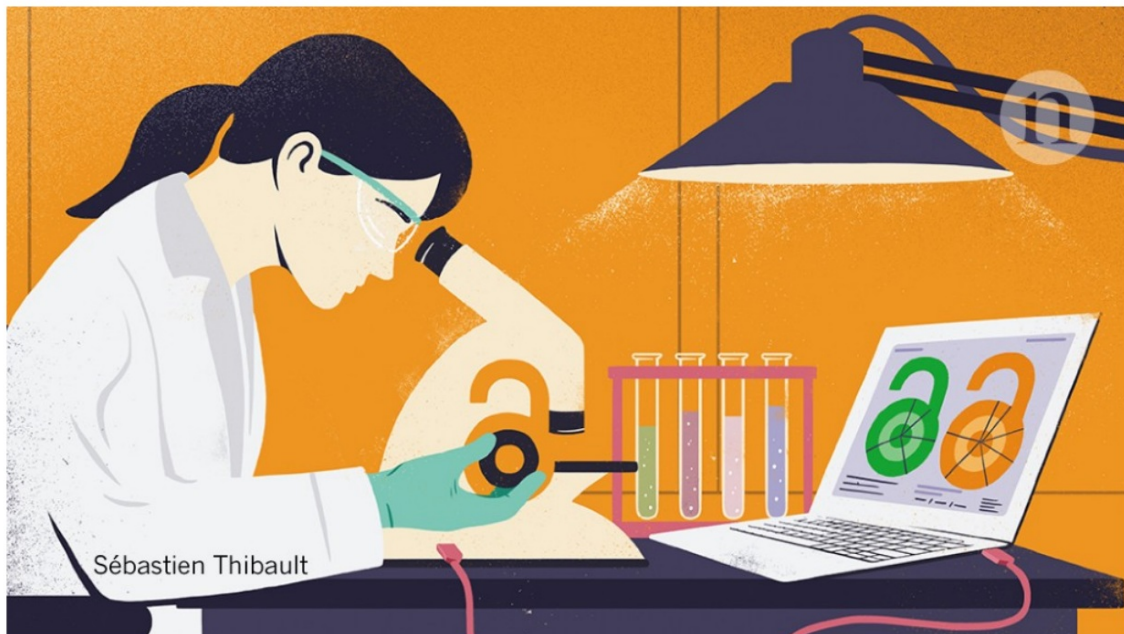
Teamwork

Has the team demonstrated a collaborative effort to achieve a common goal? Can you tell that they want to win? The team may demonstrate this with evidence of their cooperation and ability to compromise their own ideas so that the groups combined efforts put them in the best position to succeed. Has every member of the team taken part, and this should be evident in their presentation and each team members understanding of their ideas?

Let's think about how we're going to split into teams of 4-6....

Lesson 2:

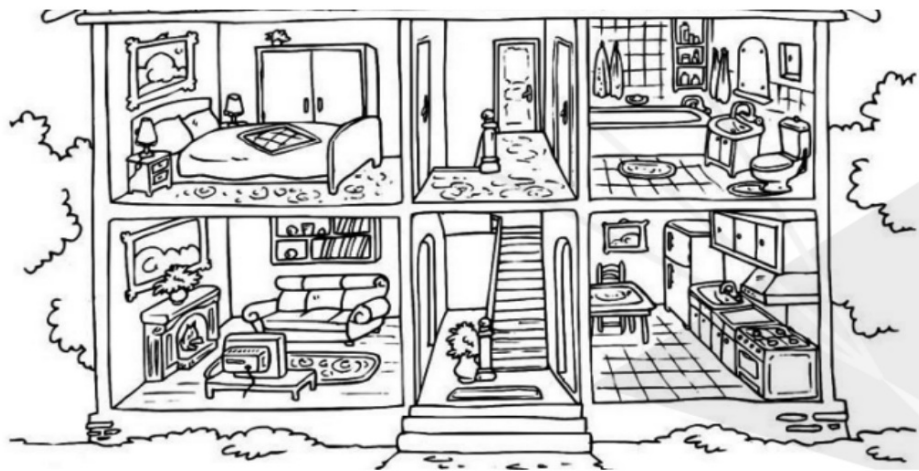
Teams and Research





Last lesson, we considered our challenge in more detail and divided ourselves into teams.

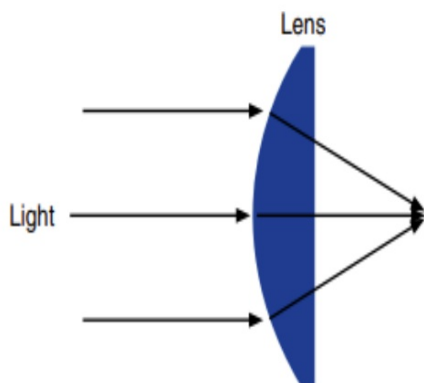
Today, we're going to get started!



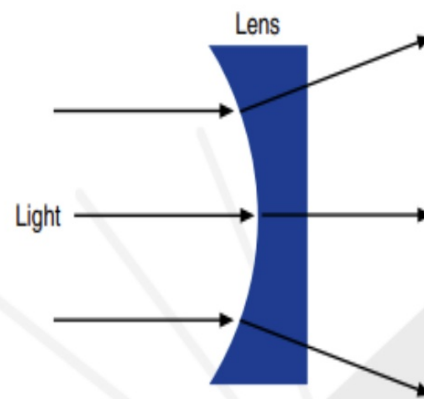
First of all, look at your image of the inside of a house.

Colour any sections that may be problematic for a person with visual disability.

There are two main types of lens. Can you fill in the gaps?



A convex lens bends light
to a point. An example of
an item that uses a convex lens is a



A concave lens bends light
An example of an item that uses
a concave lens is a

inwards torch away single magnifying glass

What items use lenses or mirrors?

How do they help us see?

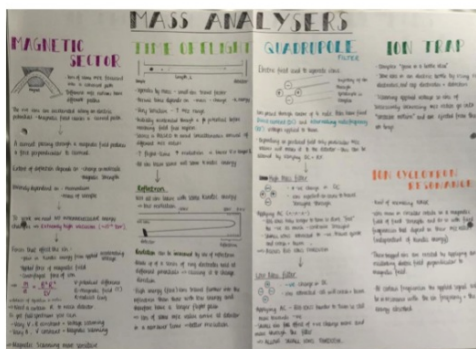
Your first is to research items that already use lenses and mirrors.

Why is this an important step?

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For the final part of the lesson, start to research and record your product ideas on your A3 piece of paper.

At this stage, your notes can be in any form you like.



To prepare for next lesson, discuss which idea everyone likes best.

You must settle on ONE.



Lesson 3: Focused research and planning



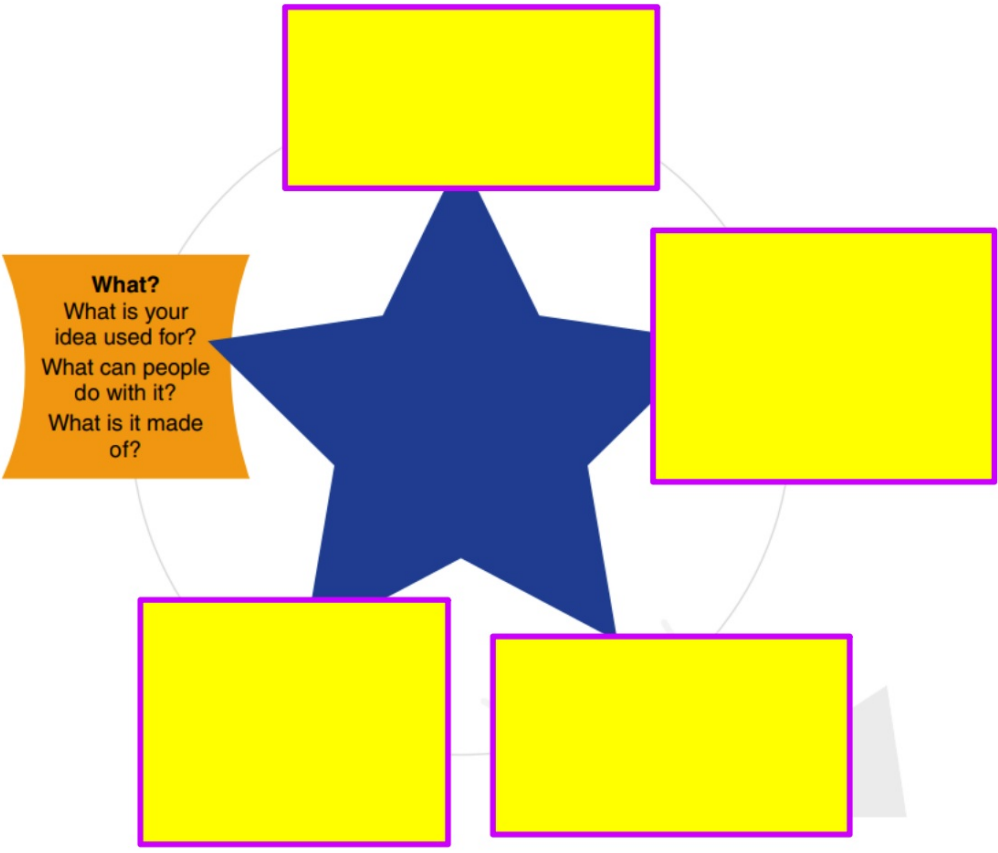
Today, we're going to focus our ideas and start to prepare for our presentations.

As teams, you're going to discuss and research 5 important questions.

Strong responses to these questions will help to engage your audience.

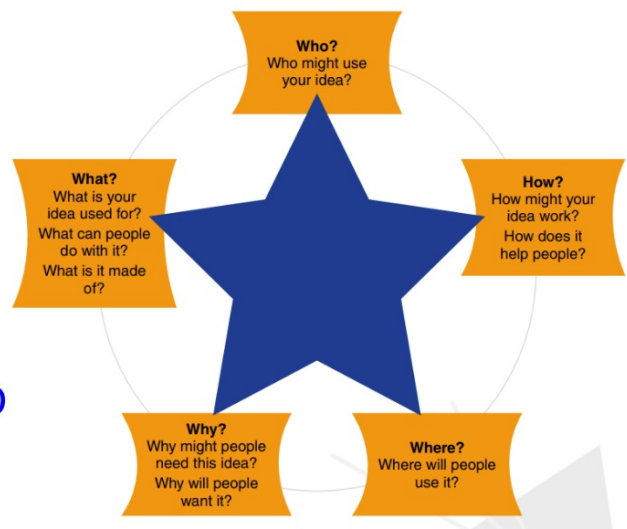
Let's review each of the questions and discuss the possibilities.





As a team, prepare responses to each of the key questions.

How you divide and record your work is up to you.



Lesson 4:

Idea summary and writing to engage



Over the next two weeks, everyone in your group will be writing an overview of the ideas your team has gathered so far.

These overviews may be used as part of your final presentation, so they need to be as engaging as possible.



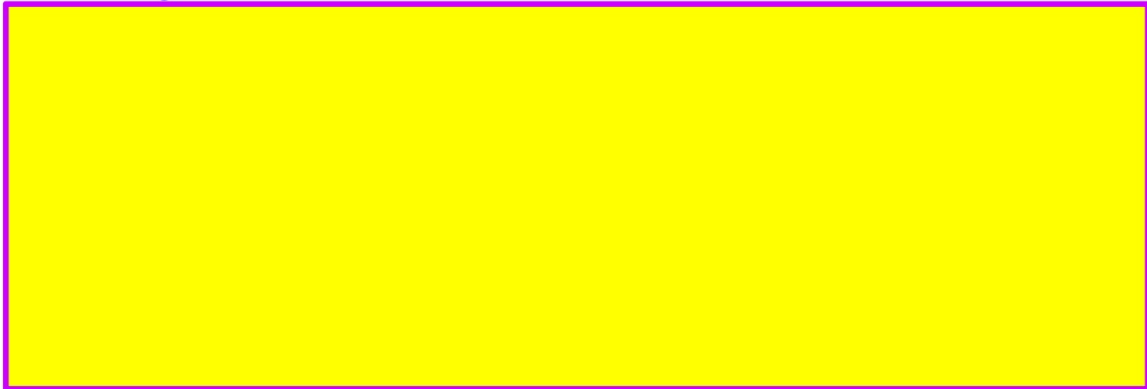
You will be writing a paragraph focused on each question you researched last lesson.

As well as providing information, we want our overviews to be as engaging as possible.

Let's look at some techniques to help us achieve this goal.

Attention grabbing questions

Have you ever....?



How could these questions apply to your product?

Use data

For example:

75% of people find it difficult to.....

If you do include factual data, it must be accurate.

If you can't find the data you're looking for, you might need to set up your own experiment.

Include a story

Include a story to demonstrate how your product could improve someone's quality of life.

Demonstrates value and shows a clear before and after

Emotions

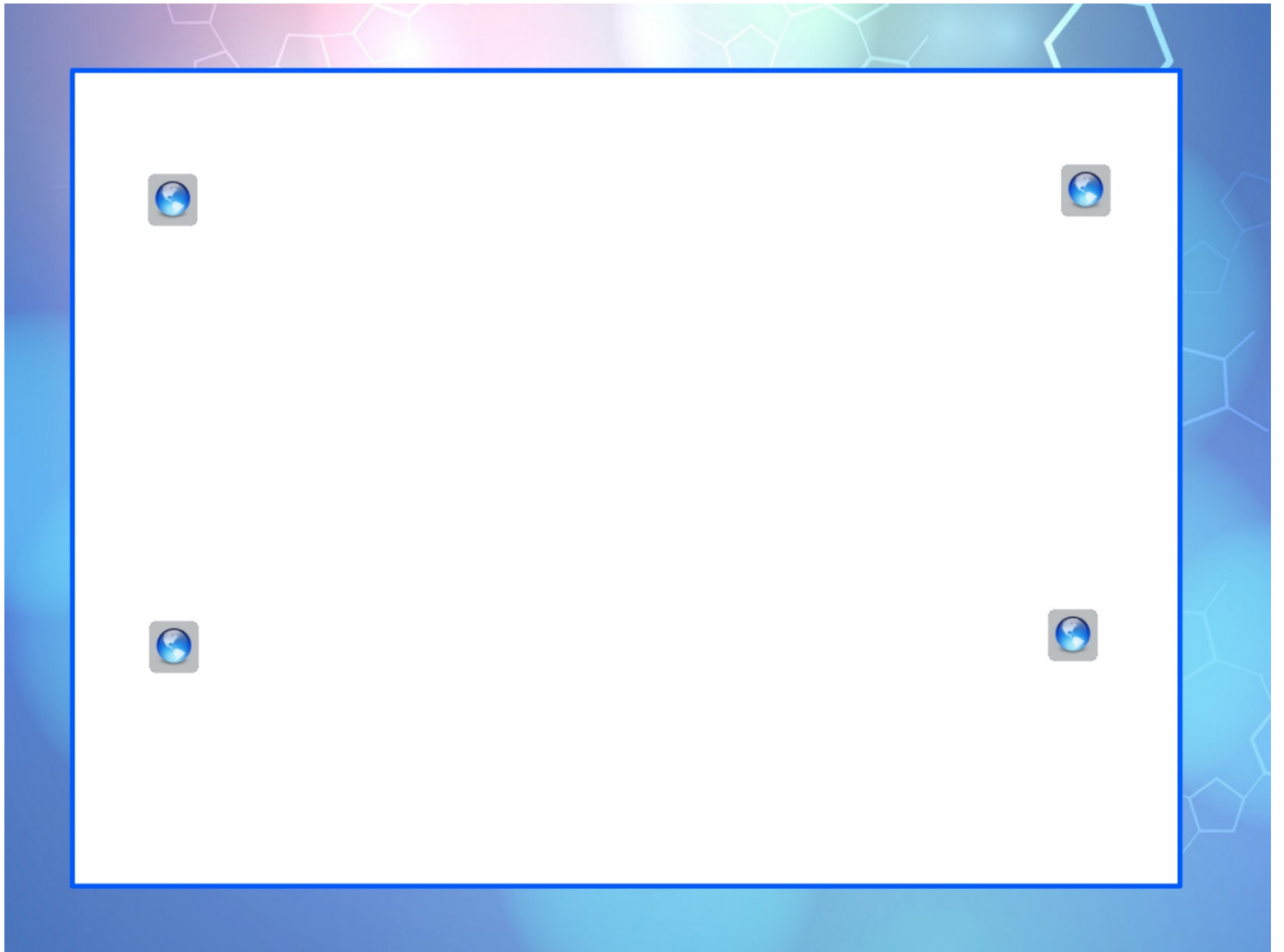
Consider how you can introduce emotions to your overview.

Perhaps, how sad life was before using your product and how much better it is after.

Let's watch some technology overviews and adverts that will help us to achieve the right tone.

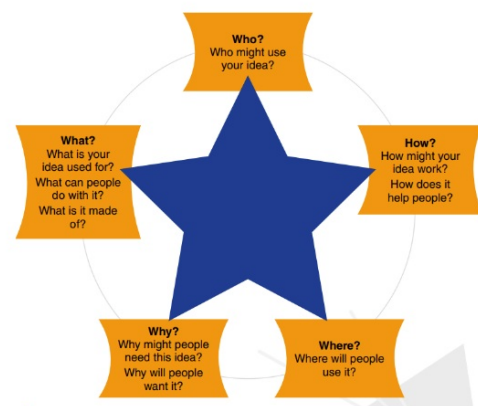
Think about how the techniques we have discussed are used in each of the adverts.





Your task

Write a product overview that answers each of the questions on your sheet.



Make your overview as engaging as possible using the techniques we have discussed.

1. Questions 2. Data 3. Story 4. Emotions

