

Waves

In this activity, you are going to create a concept map to answer the question:

What are sound and light waves, how are they used, and can they be dangerous?

Stage 1

What are the big ideas, key words, and facts?

Go through your notes and the textbook to identify the facts, key words, and ideas that might help you to answer this question. For example: what is a wave? Make a list of these items, and write each one on a sticky note (or small piece of paper). Keep each item short. Don't worry about which ideas are more important, yet.

Stage 2

Organising your ideas

Spread out your notes on the desk, so that they can all be read easily. Work together to try to group the ideas. Try and sort each member of a group into the order of importance. You might find you want to add more ideas here. Some ideas might belong to more than one group. That will be important later.

Stage 3

Creating the map

On a large sheet of paper, try to lay out your ideas in the way you think best shows your ideas and how the groups might be linked. Make sure the most important idea is always at the centre of each group. Within each group, make sure the most closely related ideas are together.

Stage 4

Linking the ideas

Use lines with arrows to show the relationships between the ideas. Write a word or two or a sentence to explain the relationship. Some ideas might have many arrows.

Stage 5

Finishing the map

Now, turn your map into a permanent one that others could look at and discuss. Think carefully about how you present your final map. Use colours, highlighters, and borders to help present your ideas.

Things to think about

Accuracy and thoroughness

Are the concepts and relationships correct? Have you included all important concepts? Have you answered the question?

Organisation

Is your concept map laid out in a way that's easy to follow?



4 Part 2 Checkpoint Revision (Route A)

Activate
for AQA

Appearance

Have you shown attention to detail?

Creativity

Have you included any unusual, interesting elements that aren't distracting?

And finally ...

Is it clear from your map:

- what sound and light waves are
- how sound and light waves are used
- whether sound and light waves are ever dangerous?