Teacher Notes for 'Growth' Presentation

Key stages 1 & 2

The Big Picture

For 2022, British Science Week has focused on the topic of 'Growth'. ABPI has developed a presentation for primary schools which introduces the topic of growth, links it to every day examples, and encourages children to investigate growth for themselves. The presentation then introduces growth of micro-organisms and finishes by linking to vaccines.

Objectives

- Increase knowledge and understanding of growth and micro-organisms
- Explore the relationship between plant growth and environment
- Understanding the relationship between micro-organisms and vaccines

Engagement

There are slides where there are opportunities for a 'hands up' approach to answering introductory questions, or by using mini-whiteboards, or other similar aids. The presentation is also designed to encourage pupils to be inquisitive about science and gives an opportunity to encourage pupils to investigate plants in their local area or in their homes – looking for places that encourage plant growth, how the seasons affect growth, and how living things change as they grow.

Differentiation

Consider providing pupils with writing frames, or list of key words to support any of the key learning activities.

Stretch & Challenge

- Get pupils to design a simple experiment to investigate growth in plants or animals.
- Get pupils to research and present the history of vaccines, or specifically Edward Jenner – for example: Edward Jenner and vaccination (abpischools.org.uk)

Key Words

Growth, explore, investigate, micro-organisms, vaccines.

AfL

Through discussion.

Learning Activities

Pupils could:

- Draw a picture that shows what plants need in order to grow
- Make a collage of 'things' that grow, putting them into groups of their choosing
- Write some questions to ask about micro-organisms

- Make a poster summarising the types of micro-organisms
- Produce an information leaflet or video on vaccines

Skills development

- Asking relevant questions
- Reporting on findings from enquiries
- Identifying differences, similarities or changes related to simple scientific ideas
- Using straightforward scientific evidence to answer questions

Summary of presentation

The presentation introduces the word ‘growth’ and provides an opportunity for class feedback, followed by clear and everyday examples. A key point is that it is not just living ‘things’ that can grow, so do populations, ideas and more.

There is encouragement for pupils to explore and investigate growth.

After looking at plants, the presentation introduces the fact things grow that humans cannot necessarily easily see – introducing the example of looking for life and growth on Mars. This applies equally on planet Earth, such as microbes.

The term ‘micro-organism’ is introduced using familiar terms and links to growth of micro-organism populations.

The presentation then covers the 3 types of micro-organisms and provides an opportunity to discuss good micro-organisms which help make foods, and not so good micro-organisms that make humans and other animals ill.

The presentation then introduces covid-19 with sensitivity that children will have had different experiences since the covid pandemic began. There is an opportunity for children to discuss measures taken to stop the spread of viruses, including what scientists have been doing to limit virus spread.

Appreciating that people have different views on vaccinations, the presentation finishes by providing some facts about vaccines, and links to further content about vaccines covering a wide range of diseases.

About

The ABPI exists to make the UK the best place in the world to research, develop and use new medicines and vaccines. We represent companies of all sizes who invest in discovering the medicines of the future.

Our members supply cutting edge treatments that improve and save the lives of millions of people. We work in partnership with Government and the NHS so patients can get new treatments faster and the NHS can plan how much it spends on medicines.

Every day, we partner with organisations in the life sciences community and beyond to transform lives across the UK.

For more free STEM resources, visit the ABPI dedicated schools website:
https://www.abpischools.org.uk/