

Can disease be prevented?

A Cambridge Global Perspectives® Challenge

Skill focus: Research	Stage: 9	Age: 13–14	Topic: Disease and health
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Learning objectives	Success criteria
Research	
Construct a range of relevant research questions and identify the most appropriate one to follow up	Learners develop questions to consider for research
Identify and accurately reference a wide range of print and multimedia sources and use them to locate relevant information and answer research questions	Learners identify where they could go to find answers to the research questions Learners use and reference a range of resources to answer their research question
Evaluation	
Evaluate a range of sources, considering the author and purpose and how well they are supported by other sources, explaining why some may be biased	Learners consider the reliability of a number of different resources as they plan their group research task
Reflection	
Explain personal contribution to teamwork and relate to own strengths and areas for improvement	Learners accurately assess their own contribution to the research team

Challenge summary

By the end of this Challenge, learners will have developed their critical research skills including identifying the most appropriate sources of information for their group research task. Learners will have the opportunity to work as part of a research team. They will assess the success of the team and identify targets for improvement, and create a Top Tips for Teamwork poster.

Challenge resources

- Teaching resources available from the Online Learning Area
- Resources for research, including internet access
- Creative materials / software tools for presentations
- Software tools for digital poster



Activities (sequence)

What does organism/microorganism mean?



Discuss 'micro-' meaning very small (and 'macro-' the opposite). Identify what learners already know about microorganisms and disease from their study of science. Use an age-appropriate video clip to introduce microorganisms (such as <https://www.youtube.com/watch?v=dWAdY57SQHs>) as a stimulus to start this Challenge and introduce the idea that disease can be spread by microorganisms.

What human conditions are caused by microorganisms?



Learners, in pairs, discuss what diseases are caused by microorganisms, then provide feedback to the class. See Teacher Resource – Can disease be prevented T9.1 for websites to consolidate responses.

Encourage learners to develop questions to consider for research. Prompt learners to identify questions that include consideration of other causes of ill-health and disease such as diet and lifestyle. Learners who require more challenge can consider diseases that are prevalent only in some parts of the world (such as malaria, Zika virus) and find out why this might be. Record a list of questions centrally for reference.

Lead a group discussion to identify where learners could go to find answers to these questions. What are the advantages and disadvantages of each of these sources? Are they reliable and how do they know? To conclude the discussion, share guidelines for finding reliable sources (Teacher Resource – Can disease be prevented T9.2).

Research on the prevention of disease



Learners work in groups of four for this activity. Introduce the research project and help learners identify a question to research and the audience who would be interested in the outcomes (for example, research into the effect of diet choices on health would be of interest to a health authority and public health organisation).

Help groups discuss and review alternative presentation methods and reasons for making a choice such as availability of resources, preferences of group, formality of presentation, audience, or time.

Agree time available for the research, and preparation of the findings. Groups work together to an action plan and identify roles to achieve this task in the time available (Learner Resource – Can disease be prevented L9.3).



Allow time to assess progress during the research phase. Encourage learners to critically appraise their own contribution to the group task, and that of the group dynamics (Learner Resource – Can disease be prevented L9.4). Learners share targets within their groups and agree how these can be incorporated into the rest of the research time.

Learners save their presentations to the Online Learning Area. Allow some time to share their outcomes, for example as class presentations or learners viewing each other's work digitally, as appropriate, and as time allows.

Allow time for a short feedback discussion based on the presentations focusing on the effectiveness of different presentation styles.

Can we create a 'Top Tips for Teamwork' poster to publish in the Online Learning Area and post in school?



Learners review their targets set during the research task and discuss in their groups which targets were realistic, achievable and helpful to the team and conversely which did not work and why.

Facilitate class discussion to agree which targets are generic and could be a part of a transferable Top Tips for Teamwork poster. Allow time for each group to produce a digital poster which could be printed and shared within the school, and shared to the Online Learning Area.

Resources – available from the Online Learning Area

Teacher Resource – Can disease be prevented T9.1
Teacher Resource – Can disease be prevented T9.2

Learner Resource – Can disease be prevented L9.3
Learner Resource – Can disease be prevented L9.4



Personal



Local



Global

This Global Perspectives Challenge has been designed to be flexible and should be adapted to school requirements and the needs of your learners. Further guidance and support for planning is given in the Teacher Guide.

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