

## TOPIC

Microbes

## SDGS



## LEARNING OUTCOMES

- 5.3.1 I can understand that microbes or microorganisms are living things that can be seen with a microscope, most of which are useful or beneficial, although some can cause illnesses and disease.
- 5.3.2 I can provide different examples of how microbes can be useful.
- 5.3.3 I can explain how some microbes/germs cause disease and relate to everyday life including washing hands before touching food, taking necessary precautions when sneezing, coughing

## ADDITIONAL OUTCOMES

- I can appreciate the work of a local STEM professional: A Biomedical Scientist
- I can identify different apparatus found in a laboratory

## MATERIALS NEEDED





<https://www.csm.edu.mt/stemmersion/>

- PowerPoint: stemmersion\_y5\_s1.pptx
- VR expedition: Microbes: Microscopic Marvels | STEMMERSION on ExpeditionsPro App
- Laptop or OTPC tablet for research & Padlet / group
- Padlet link
- Video: Biomedical Scientist Interview
- VR Headsets

## KEY WORDS

microbes, bacteria, viruses, useful/beneficial, fermentation, probiotics, illness/disease, germs hygiene, spread, various laboratory apparatus

## SESSION ACTIVITIES

-  PowerPoint about beneficial and harmful microbes
-  Maltese STEM Professional Video: Maltese Biomedical scientist
-  VR expedition: Microbes: Microscopic Marvels | STEMMERSION on ExpeditionsPro which can be seen through a VR headset.
-  Student-led research about microbes
  - Students work in small groups using the OTPC tablet
  - Students research good practices to prevent the spread of microbes and bad practices which result in the spread of microbes
  - Students list these practices in a padlet link provided by the teacher (in preparation for session 3)

## CONCLUSION

Students can revise lab apparatus by playing these games

- <https://learningapps.org/display?v=p680ghz9323>
- [https://quizizz.com/admin/quiz/65ab81c9041e067dc779fb17?source=quiz\\_share](https://quizizz.com/admin/quiz/65ab81c9041e067dc779fb17?source=quiz_share)