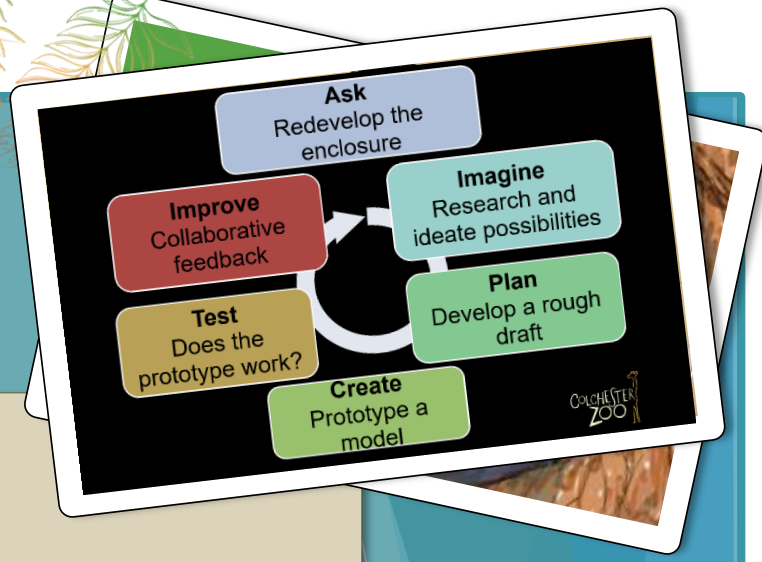
education session

STEM @ the Zoo

Science, tech, engineering and maths in the real world



Year 7-9

Learning Outcomes:

At the end of the session:

- ✓ **All students** will be aware of some real-world applications of STEM within zoos
- ✓ **Most students** will understand how the STEM design process can improve on early prototype by planning, testing, and improving
- ✓ **Some students** will be aware of potential career pathways into the zookeeping industry

Session Outline:

The session covers the secret science of zookeeping, discussing job paths and the role in detail, including nutrition, health care, and monitoring environmental parameters. Students will engage in an interactive activity assessing an early enclosure prototype and suggesting improvements, demonstrating how zoos use the STEM design process. The session concludes with examples of how zoos apply STEM to save endangered species, focusing on genetics, DNA analysis, and Conservation Technology for use in the wild.

Curriculum Links

Careers

Science – working scientifically; genetics & evolution; interactions & interdependencies

Design & Tech: evaluate; iterative process

Geography: human & physical geography

Citizenship

COLCHESTER ZOOLOGICAL SOCIETY

Please note, no live animals are used in this session.