

Overview

Learners will use the PowerPoint slides of Madagascan flora and fauna as a context for the suggested learning opportunities. The slides can be printed for use by groups or individuals.

With a focus on the effect of climate change and biodiversity, learners will consider the flora and fauna described in the slides. Learners can compare and contrast these with the plants and animals in Scotland. Learners will develop an awareness of species that are endemic to Madagascar and may wish to consider the reasons for this. Learners will be asked to prioritise the species and decide which ones could be taken to another land. Learners will be encouraged to negotiate their own Success Criteria and use this to evaluate the final debate.

These learning experiences offer opportunities for links with social studies as learners will consider the impact of space travel. It also allows for numeracy in the analysis of surveys.



Sciences experiences and outcomes explored

I can identify and classify examples of living things, past and present, to help me appreciate their diversity. I can relate physical and behavioural characteristics to their survival or extinction.

SCN 2-01a

Other curriculum areas explored:

Social studies

I can discuss the environmental impact of human activity and suggest ways in which we can live in a more environmentally responsible way.

SOC 2-08a

Responsibility of all:

To help me develop an informed view, I can identify and explain the difference between fact and opinion, recognise when I am being influenced and I have assessed how useful and believable my sources are.

LIT 2-18a

Themes across learning:

Global citizenship
Sustainable development

Overview of learning

Possible prior experiences

Learners could:

Compile a glossary of possible French vocabulary related to plants, animals and the environment of Madagascar.

Investigate the reproductive cycle of plants and the role of pollination.

Learners could create a *food web* for species from Madagascar and compare it to a similar web for Scotland and consider the effects on changes within the food web.

Discuss the evidence for global warming.

Learners could consider how their community might respond to an [emergency](#).

Madagascar is home to more endemic species than anywhere else on Earth. Learners could consider the reasons for this.

Consider the farming practices of vanilla and the possible impact on biodiversity. This study could be compared to agricultural practices in Scotland.

Challenges

This activity has been adapted from work of SSERC.

Learners participate and contribute to a discussion entitled “Decisions”:

Practitioners could introduce the discussion using the PowerPoint presentations.

Learners could work in groups and, using the slides as a stimulus, consider some native flora and fauna of Madagascar. Learners could work together to discuss which of the species are more important and should be taken to a new island or planet. Learners could be given the first slide of each PowerPoint and asked to make a decision based on the pictures only. The second slides could then be provided to challenge learners’ initial thinking. Similarly, the third and then the fourth slides could be issued to encourage the learners to reconsider their initial decisions. When all slides have been read and discussed, learners could be encouraged to decide which species should go with them and which should be left behind on Madagascar. Learners may wish to include a species of their choosing that has not been described by the slides.

Areas for consideration may include:

- Living conditions required to sustain the plant or animal
- The conservation ratings
- Usefulness
- Implications of leaving without this species
- Likelihood of this animal adapting to a new place

Each group could allocate various tasks, including a member of the group to collect and share ideas with the other groups and a member of the group to present the views of that group.

Having made their decision, learners could then describe the views of their group in a variety of ways, such as a vodcasts or presentation. Learners could be asked to explain the reasons for their decision. Success criteria could be negotiated for this activity.

Possible evidence

Observation notes

Pupil research notes

A written account of response to a local, national or international emergency

Success Criteria checklist

Planning sheets

Photographs of the process

Video of presentation and discussions

Peer assessment sheets/discussion

Presentation depicting learner’s ‘Decisions’