

ECOSYSTEMS and ADAPTATIONS

In this section we invite students to assess the features of the Badia environment and to observe the adaptations that have taken place. Students are therefore expected to have prior knowledge and understanding of the terms organisms, habitats, ecosystems, adaptations and food chains. The preceding sections have already assessed the nature of the climate and the landscape. All plants and animals have adaptations that help them to survive in the desert ecosystem. Understanding this will help us apply this knowledge to other areas of the curriculum and other subjects. What, now, is the nature of the wildlife living here and how does it survive?

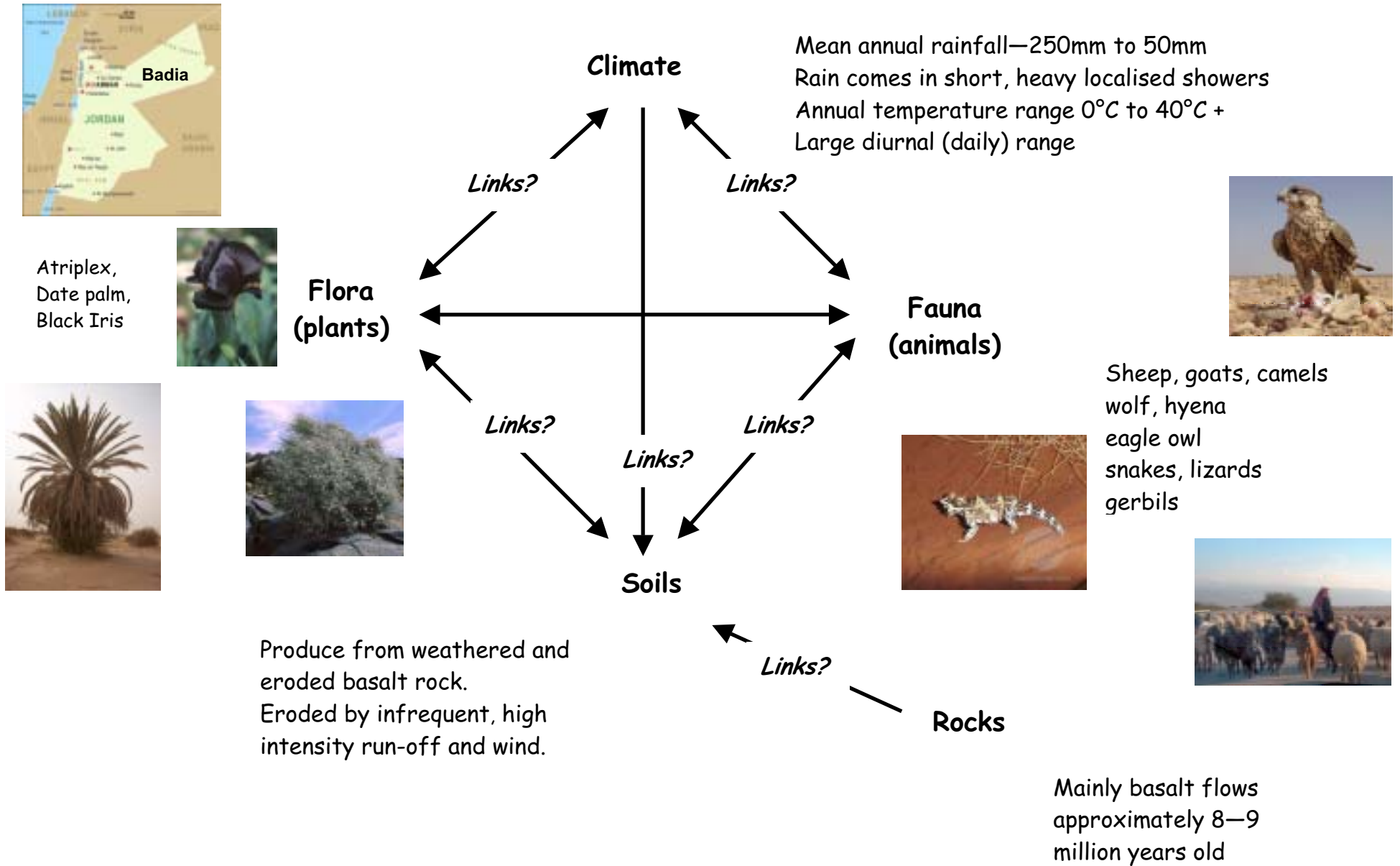
TASK A11: The Badia - case study of a hot desert ecosystem:

This is a 'collective memory' exercise designed to help students to internalise the information from the case study, it also helps them to decode visual information and promotes visual literacy. Not only that but it is also highly engaging. It could be used at the beginning of a session on hot desert ecosystems and it could be used at the end as a measure of understanding.

In terms of the 5 thinking skills, it is very good for developing Information Processing but will also help the development of Reasoning and Enquiry.

- 1: Divide the students into groups of 3 or 4.
- 2: The teacher holds a copy of Fig.A32 (perhaps enlarged to A3).
- 3: Each team sends one member up to the teacher to view the image for 10 seconds after which they return to their group.
- 4: The student reproduces as much of the diagram as he or she can remember as accurately as possible.
- 5: After a short period of time the next team member looks at the image for 10 seconds.
- 6: After each turn the team reflects on their strategy and plans the next visit. After a few turns, students compare their versions with the original.
- 7: Each group should then review their work by applying the metacognitive plenary questions set out in Appendix XX.

Fig.A32: The Badia — example of a hot desert ecosystem



APPENDIX 4

CLASS PRESENTATION ASSESSMENT

- 1: How well did they set about their preparation?
- 2: How convincing were their arguments?
- 3: Did they make good use of the information?
- 7: How did they decide which pieces of evidence were relevant?
- 4: How relevant were their arguments?
- 5: Did they work well as a group?
- 6: How did they react to disagreements?
- 5: What skills did they use (or not use)?
- 6: To what other topics does this exercise link?
- 7: Are there any links to work in other subjects?
- 8: Is there any relevance to topics outside of school?

METACOGNITIVE PLENARY SESSIONS

A key part of the learning strategy is the metacognitive plenary. Some exemplar questions are:

- €# How did you do the task?
- €# How did you work together?
- €# Did your original plan work or did you have to change it?
- €# Where else might this help you to learn?
- €# Where else might this be useful in other subjects and outside school?

For more information about collective memory and other thinking skills strategies go to:
http://www.standards.dfes.gov.uk/secondary/keystage3/all/respub/ws_lil_ts