

Unit 15 The mountain environment

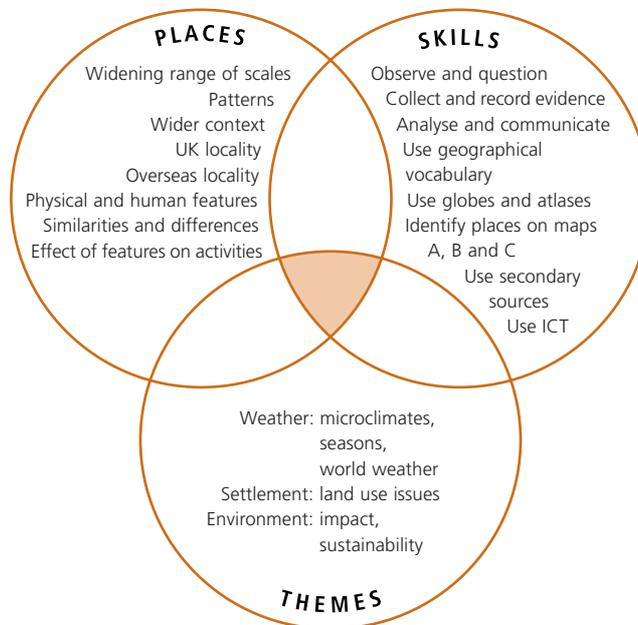
ABOUT THE UNIT

This is a 'long' unit that encourages children to investigate, through research, other places in the UK, Europe and further afield that share a similar physical environment. It builds on earlier work, *eg studying a contrasting locality*. It is a challenging unit suitable for older children and easily extended for more able children who can study the complex relationships between the elements.

Children, working in groups or individually, will need to use a range of resources, which could include textbooks and pictures as well as CD-ROMs and the internet. The unit offers opportunities for children to follow up much of the research in their own time.

The unit may be shortened to a 'medium' unit by leaving out the final sections.

The unit offers links with literacy, mathematics, IT, speaking and listening, and environmental education.



VOCABULARY

In this unit, children are likely to use:

- environment, mountain, landscape, weather data, season, blizzard, avalanche, snowstorm, snowdrift, tourism, litter, erosion

They may also use:

- safety procedures, whistle

RESOURCES

- globe
- atlas
- pictures of different environments
- a range of library resources on three mountain environments
- primary geography texts
- CD-ROMs
- internet weather services
- METFAX (faxed weather information from the Meteorological Office)
- information leaflets about safety in the mountains

PRIOR LEARNING

It is helpful if the children have:

- studied contrasting places, as in Units 10 and 13, for example
- some experience of using secondary sources to find out a range of information

EXPECTATIONS

at the end of this unit

most children will:

describe varying weather conditions in the world and understand how these influence the way in which the area is developed;
use a wide range of resources to find out information

some children will not have made so much progress and will:

relate the questions posed to one mountain environment, *eg the Lake District*;
show more limited understanding of the impact of the global scale;
access information using ICT with teacher support

some children will have progressed further and will also:

find a range of source materials and plot detailed, sophisticated weather information;
show a better developed understanding of the links between cause and effect

FUTURE LEARNING

This unit provides a foundation for further studies of landforms, climate and environments in geography at key stage 3.

LEARNING OBJECTIVES	POSSIBLE TEACHING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE
CHILDREN SHOULD LEARN		CHILDREN	
What is a mountain environment? Where are mountain environments found?			
<ul style="list-style-type: none"> about different types of environments and specifically a mountain one about the world distribution of major mountain areas to use globes and atlases 	<ul style="list-style-type: none"> Ask the children to look at pictures of different kinds of environments and identify the varying features of each type of environment. Discuss with the children the difference between a hill and a mountain. Ask the children to name and locate the main world mountain areas. 	<ul style="list-style-type: none"> identify some important characteristics of a mountain environment know the global distribution of major mountain areas 	
What are these places like?			
<ul style="list-style-type: none"> to investigate how mountain environments are similar and different in nature across a range of places and scales to use secondary sources to use ICT to access information 	<ul style="list-style-type: none"> Divide the class into small groups and ask each group to investigate a mountain environment, <i>eg the Lake District (Grasmere), the Austrian Alps (Goetzens), the Himalayas (Katmandu)</i>. They should think about what the place is like, where it is, what the landscape is like and what people do in the area, using sources like pictures, maps, artefacts, CD-ROMs and the internet. They should make a presentation of their findings to the rest of the class. 	<ul style="list-style-type: none"> make a clear presentation of their findings in an appropriate way, using ICT where appropriate use a range of material to provide evidence of their findings know about the individual character of three contrasting mountain environments 	<p>Literacy: children can revise their research skills through this activity, <i>eg by evaluating the usefulness of a variety of resources, including texts, newspapers, CD-ROMs and the internet.</i></p> <p>Speaking and listening: when making their presentations, children can think about how to use salient detail or striking examples.</p> <p>IT: use of CD-ROMs or the internet to gather information.</p>
How does the weather compare in each of these places?			
<ul style="list-style-type: none"> about weather patterns in different parts of the world to use secondary sources to use ICT to access information 	<ul style="list-style-type: none"> Ask each group to produce a set of weather data for their location, plotting the data on a graph and analysing the results. If possible, ask the children to find out the weather data for each environment on the day of the lesson from the weather services on the internet or the Meteorological Office's METFAX service. Discuss with the children the similarities and differences between the weather in each of the environments. Discuss with the children what the weather would be like in a different season and consider what specific weather conditions are associated with these places, <i>eg blizzards, snowdrifts, avalanches, floods</i>, and the effects they have on human activity. 	<ul style="list-style-type: none"> find relevant data and present it in suitable ways understand the effects of varying weather conditions on different types of human activity 	<p>Literacy: children can develop their library research skills through these activities by using an index, resource lists and inventories. They should be encouraged to reflect on the usefulness of different ways of recording the information collected.</p> <p>Mathematics: when children plot and analyse weather data on graphs, there are links to collecting, representing and interpreting data.</p> <p>IT: use of the internet or METFAX to gather information on weather.</p>
What effect does the weather have on tourism?			
<ul style="list-style-type: none"> that varying weather conditions can have a significant impact on life in an area to use secondary sources 	<ul style="list-style-type: none"> Ask the children to use a range of brochures advertising holidays in these areas to identify how weather conditions can enhance or detract from tourism in the area. 	<ul style="list-style-type: none"> obtain information from printed material 	<p>Literacy: this activity can be used to revise ways of examining texts to find out information, <i>eg establishing what is already known about a topic, identifying questions to guide research.</i></p>
What effect will tourism have on the chosen areas?			
<ul style="list-style-type: none"> that the effect of tourism can be significant in a given area and can be both good and bad to use secondary sources 	<ul style="list-style-type: none"> Using a variety of resources <i>eg pictures, videos</i>, ask the children to list how tourism affects the areas. Ask them to consider questions like: <i>what are the good effects, eg creates jobs, opens up the area, encourages local crafts</i>, and what are the bad effects, <i>eg higher prices, litter, traffic problems, erosion</i>. 	<ul style="list-style-type: none"> understand the effects of tourism on an area 	
What would I need to do to plan a camping holiday in this area?			
<ul style="list-style-type: none"> how the environment affects the nature of human activity 	<ul style="list-style-type: none"> Ask the children to plan a camping holiday to one of the areas. Ask them to consider questions like: <i>How would we travel there? What sort of equipment would we need? What would we have to watch out for? What safety precautions would we need to take? How could we find out about local weather conditions?</i> Ask the children to draw a poster to warn people of the dangers they might face in the area. 	<ul style="list-style-type: none"> use the knowledge they have gained about weather conditions and the local environment to plan a camping holiday to the area 	<p>Environmental education: safety in upland areas.</p>
<p>Where teachers want to shorten the unit, the sections under the questions in the more lightly shaded bands are those that may be omitted.</p>			