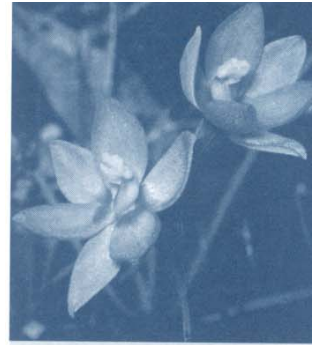


Parks Victoria

Education Resource Kit

Section 5:

CSF links



www.parkweb.vic.gov.au/education

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Section 5: CSF links

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Overview of SOSE and Science sections

The information and activities within the Parks Victoria Education Resource Kit can be used to assist students achieve the following learning outcomes specified in the Victorian Department of Education document *Curriculum and Standards Framework II (CSF II)*.

Section 1: Parks and SOSE

Curriculum linked Learning Outcomes

Primary level

| | |
|---|------------------------------|
| Where are National Parks located in Victoria? | [SOSE Geography 4.1] |
| Why have National Parks increased in number? | [SOSE Geography 4.2] |
| Views about the use and care of natural environments | [SOSE Geography 4.3] |
| How did Victoria's diverse Aboriginal communities use natural environments? | [SOSE History 4.1] |
| How did early settlers use natural environments and parks? | [SOSE History 4.2] |
| Changing technology and community values affect our use of parks. | [SOSE Economy & society 4.1] |
| Park staff need particular skills to do their jobs. | [SOSE Economy & society 4.3] |

Secondary level

| | |
|---|---------------------|
| Natural processes and people change parks | [SOSE Geography L5] |
| Park management issues and solutions | [SOSE Geography L6] |

Section 2: Parks and Science

Curriculum linked Learning Outcomes

Primary level

| | |
|--|------------------|
| Relationships, habitat and natural communities | [Science BS 4.1] |
| Plant and animal adaptations | [Science BS 4.2] |

Secondary level

| | |
|---|------------------|
| Plant and animal classification | [Science BS 5.1] |
| Interactions in ecosystems | [Science BS 5.2] |
| Energy flow and cycling of matter in a park's ecosystem | [Science BS 6.1] |

SCIENCE

Level 3

| Level 3: Biological science | Activities and information in Parks Victoria Education Resource Kit |
|--|---|
| <p>Living together: past, present and future</p> <p>3.1 Describe environmental factors that affect the survival of living things.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • state conditions in the environment necessary for survival of living things • distinguish between living (biotic) and non-living (abiotic) factors which affect the survival of living things • relate the need to reproduce to the survival of kinds of living things • describe how human intervention can affect survival of living things. | <p>Parks and Science section Activities: 24, 25, 26, 27, 28, 32,33, 34, 35</p> <p>Dandenong Ranges National Park section Activities: 1, 4, 7, 8</p> <p>Grampians National Park section Activities: 5, 6, 7</p> <p>Kinglake National Park section Activities: 2, 3, 4, 5, 9</p> <p>Port Campbell National Park section Activities: 2, 3, 7, 8, 9, 15, 16, 17, 18</p> |
| Level 3: Earth and space sciences | Activities and information in Parks Victoria Education Resource Kit |
| <p>The changing Earth</p> <p>3.1 Describe how features of the landscape are altered by the processes of weathering and erosion.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • distinguish between the terms weathering and erosion • state the kinds of visible changes in the environment caused by the processes of weathering and erosion • identify landscapes in the environment that have been affected by weathering and erosion • suggest ways to reduce or avoid the effects of weathering and erosion. | <p>Parks and Science section Activities: 29, 30 ,31</p> <p>Dandenong Ranges National Park section Activities: 2</p> <p>Grampians National Park section Activities: 1, 2, 3, 4, 5</p> <p>Kinglake National Park section Activities: 3</p> <p>Port Campbell National Park section Activities: 2, 4, 5, 6, 7, 15</p> |

SCIENCE

Level 4

| Science Level 4: Biological science | Activities and information in Parks Victoria Education Resource Kit |
|--|--|
| <p>Living together: past, present and future 4.1 Identify relationships between living things which help them survive in their habitat.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> draw simple food chains relate feeding relationships, for example, predator/prey and producer/consumer, to survival relate survival of animals and plants to their dependence on each other in a variety of ways identify interdependent relationships within a group of animals. | <p>Parks and Science section Activities: 23, 24, 25, 26, 27, 28, 32,33, 34, 35</p> <p>Dandenong Ranges National Park section Activities: 4, 7, 8, 9</p> <p>Grampians National Park section Activities: 6, 7</p> <p>Kinglake National Park section Activities: 4, 5, 9</p> <p>Port Campbell National Park section Activities: 8, 9, 16, 17</p> |
| <p>Structure and function 4.2 Describe how selected systems of plants and animals function.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> describe the features of the main parts of plant systems, that help them carry out their functions explain how particular systems of plants and animals carry out their function describe the features of the main parts of animal systems, that help them carry out their functions. | <p>Parks and Science section Activities: 24, 25, 32, 33, 34</p> <p>Dandenong Ranges National Park section Activities: 7, 8</p> <p>Grampians National Park section Activities: 6, 7</p> <p>Kinglake National Park section Activities: 4, 5, 9</p> <p>Port Campbell National Park section Activities: 8, 9, 16, 17, 19, 20</p> |
| Level 4: Earth and space sciences | Activities and information in Parks Victoria Education Resource Kit |
| <p>The changing Earth 4.1 Relate the occurrence of natural events to atmospheric changes and movements of the Earth's crust and mantle.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> identify layers within the Earth and the atmosphere describe natural events and their association with atmospheric changes describe natural events and their association with movements of the Earth's crust and mantle. | <p>Dandenong Ranges National Park section Activities: 2</p> <p>Grampians National Park section Activities: 1, 3, 4</p> <p>Kinglake National Park section Activities: 3</p> <p>Port Campbell National Park section Activities: 2, 15, 18</p> |

SCIENCE

Level 5

| Level 5 Biological science | Activities and information in Parks Victoria Education Resource Kit |
|---|---|
| <p>Living together: past, present and future</p> <p>5.1. Explain the biological basis of classification of organisms into major groups.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • identify patterns of similarities and differences between a range of living things • define the major characteristics used in the 5-Kingdom system of classification • explain why particular sets of features, for example, color, movement and structural features, are useful or not useful, to sort organisms using dichotomous keys | <p>Parks and Science section Activities: 23, 32</p> <p>Dandenong Ranges National Park section Activities: 4, 7, 8</p> <p>Grampians National Park section Activities: 6, 7</p> <p>Kinglake National Park section Activities: 4, 5, 9</p> <p>Port Campbell National Park section Activities: 8, 9, 16, 17</p> |
| <p>5.2 Describe interactions between living things and between living things and their non-living surroundings.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • describe different interactions in an ecosystem, including competition, predation, collaboration, parasitism, pollination, reproduction and parenting • construct a food web of organisms in an ecosystem • show graphically relationships between members of food chains, including a parasite-host relationship and producer-consumer relationships • describe the effect of changes in the environment on interactions in an ecosystem. | <p>Parks and Science section Activities: 24, 25, 26, 27, 28, 32,33, 34, 35</p> <p>Dandenong Ranges National Park section Activities: 4, 7, 8, 9, 10, 11</p> <p>Grampians National Park section Activities: 6, 7</p> <p>Kinglake National Park section Activities: 4, 5, 9</p> <p>Port Campbell National Park section Activities: 8, 9, 16, 17, 19, 20</p> |

Level 6

| Level 6 Biological science | Activities and information in Parks Victoria Education Resource Kit |
|--|---|
| <p>6.1 Explain how ecosystems are maintained in terms of energy and matter.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • describe the flow of energy through an ecosystem • explain why there is a limit to the number of links in food chains within an ecosystem • describe how matter is cycled in an ecosystem. | <p>Parks and Science section Activities: 26</p> <p>Dandenong Ranges National Park section Activities: 4, 9</p> <p>Kinglake National Park section Activities: 4, 5</p> |

SCIENCE

Level 5

| Level 5: Earth and space sciences | Activities and information in Parks Victoria Education Resource Kit |
|---|--|
| <p>The changing Earth 5.1 Describe the formation, composition and cycling of rocks.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • identify the lithosphere as the region of the Earth where rocks are formed • distinguish between sedimentary, igneous and metamorphic rocks on the basis of their formation and composition • describe ways to estimate the age of rocks • explain the rock cycle. | <p>Grampians National Park section Activities: 1, 3, 4</p> <p>Kinglake National Park section Activities: 3</p> <p>Port Campbell National Park section Activities: 2, 15, 18</p> |
| <p>5.2 Relate the properties of rocks to the ways in which they are used.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • describe properties of igneous, sedimentary and metamorphic rocks in terms of composition, grain size, color and texture • describe the relationship between rocks, ores and minerals • explain why igneous, sedimentary and metamorphic rocks are used for particular purposes. | <p>Grampians National Park section Activities: 1, 4, 8</p> <p>Port Campbell National Park section Activities: 2, 15</p> |

Level 6

| Level 6: Earth and space sciences | Activities and information in Parks Victoria Education Resource Kit |
|---|---|
| <p>The changing Earth 5.1 Explain implications of crustal movements of the Earth.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • describe the causes of movements of the Earth's crust • justify the theory of plate tectonics • relate crustal movements to the formation of different kinds of folds and faults • make connections between folding and faulting and formation of mineral and fossil fuel resources. | <p>Dandenong Ranges National Park section Activities: 3</p> <p>Grampians National Park section Activities: 1, 3, 4</p> <p>Kinglake National Park section Activities: 3</p> |

SOSE**Level 3**

| Level 3: SOSE | Activities and information in Parks Victoria Education Resource Kit |
|--|--|
| <p>3.3 Compare how people use environments in Australia.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • identify ways in which people use a variety of natural and built environments in Australia • draw and describe appropriate outline maps, using geographical conventions, to represent land use • compare the ways people use and affect different environments. | <p>Parks and SOSE section Activities: 1, 2, 3, 4, 5, 6, 7, 8, 13, 16, 18, 19</p> <p>Dandenong Ranges National Park section Activities: 3, 5</p> <p>Grampians National Park section Activities: 4, 19, 10.6</p> <p>Kinglake National Park section Activities: 3, 7</p> <p>Port Campbell National Park section Activities: 1, 11, 12</p> |
| <p>3.4 Compare different types of work and enterprise in the local community.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • categorise the work undertaken and skills needed in a range of jobs and enterprises • explain similarities in, and differences between, a range of jobs and enterprises • identify the impact of technological changes in different types of work over time. | <p>Parks and SOSE section Activities: 14</p> |

SOSE

Level 4

| SOSE Level 4 Economy | Activities and information in Parks Victoria Education Resource Kit |
|---|--|
| <p>4.2 Explain how and why local rules and laws are made and changed.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • identify the need for rules and laws and the values which underpin rule and law making • identify the difference between legal and non-legal rules, and ways of making and changing rules in the home, school and community • suggest reasons why rules and laws may need to be changed. | <p>Parks and SOSE section Activities: 9, 13</p> <p>Dandenong Ranges National Park section Activities: 11</p> <p>Planning fieldwork section Information: 4</p> |
| <p>4.3 Analyse factors that make work at home, school and in the community satisfying, safe and effective.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • compare the nature and meaning of work in the contexts of home, school and the community • identify factors that make work satisfying, safe and effective in a range of workplaces • identify particular skills in a range of jobs and examine how they are acquired. | <p>Parks and SOSE section Activities: 14</p> |
| SOSE Level 4 Geography | Activities and information in Parks Victoria Education Resource Kit |
| <p>4.1 Locate and explain the distribution of significant natural and built features both in regions of Australia and globally, using maps and other geographical techniques.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • locate significant natural and built features in regions of Australia and the world • explain the reasons for the location of natural and built features in regions of Australia • describe the spatial patterns of significant natural and built features in regions of Australia and the world, including major cities and physical regions • transfer and represent data on appropriate outline maps at a range of scales, using geographical conventions | <p>Parks and SOSE section Activities: 1, 2, 3, 5, 10, 16</p> <p>Dandenong Ranges National Park section Activities: 1, 2</p> <p>Grampians National Park section Activities: 1, 2, 3, 4</p> <p>Kinglake National Park section Activities: 1, 2, 3</p> <p>Port Campbell National Park section Activities: 1, 15</p> |

SOSE

Level 4

| | |
|---|--|
| <p>4.2 Describe the distribution of population in Australia and explain changing patterns of land use.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> locate the major population centres and areas of settlement in Australia describe the location of major land uses in Australia identify factors which have contributed to the use of areas for settlement and industry in Australia explain the changing nature of the use of areas for settlement and industry in Australia. | <p>Parks and SOSE section Activities: 5, 6</p> <p>Dandenong Ranges National Park section Activities: 3</p> <p>Grampians National Park section Activities: 8, 9</p> <p>Kinglake National Park section Activities: 1</p> <p>Port Campbell National Park section Activities: 10, 11</p> |
| <p>4.3 Analyse different views about the use and care of Australian places.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> describe Australian places and how they are used by people describe how people's use of places affects the environment suggest how Australian places can be used sustainably suggest why different groups, including Aboriginal and Torres Strait Islander communities, have different views about the use and care of places. | <p>Parks and SOSE section Activities: 4, 5, 6, 7, 8, 9, 11, 12, 18</p> <p>Dandenong Ranges National Park section Activities: 6, 10, 11</p> <p>Grampians National Park section Activities: 8</p> <p>Kinglake National Park section Activities: 6, 7</p> <p>Port Campbell National Park section Activities: 11, 12</p> |

SOSE

Level 5

| SOSE | Activities and information in Parks Victoria Education Resource Kit |
|--|---|
| <p>5.1 Compare the characteristics of significant regions in Australia and the world.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • classify and locate major natural and human environments using a range of geographical sources • describe the physical characteristics of natural and human environments • analyse maps and statistics to identify similarities and differences between environments at local and regional scales • explain why natural and human environments exhibit certain characteristics. | <p>Parks and SOSE section Activities: 5, 16</p> <p>Dandenong Ranges National Park section Activities: 1, 2</p> <p>Grampians National Park section Activities: 1, 2, 3, 4, 8</p> <p>Kinglake National Park section Activities: 1, 2, 3</p> <p>Port Campbell National Park section Activities: 1, 5, 6</p> |
| <p>5.2 Explain how natural processes and human activities change environments.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • describe natural processes which change environments, using geographical media, such as photographs, maps, satellite images, bioinformatic web sites • describe human activities which change environments using geographical media • compare evidence of changes to the environment for a place within Australia and a region outside Australia, such as photographic and map evidence • assess the extent to which natural processes & human activities change environments. | <p>Parks and SOSE section Activities: 8, 9, 11, 12, 13, 15</p> <p>Dandenong Ranges National Park section Activities: 3, 5</p> <p>Grampians National Park section Activities: 3, 4, 8, 10.1 to 10.11</p> <p>Kinglake National Park section Activities: 1, 3</p> <p>Port Campbell National Park section Activities: 2, 4, 5, 6, 7, 15, 18</p> |
| <p>5.3 Explain how people's use of natural and human environments changes over time.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • classify people's uses of natural and human environments • describe people's changing perception of natural and human environments • use maps and geographical techniques to provide evidence to describe change over time • make informed predictions about how the use of environments may change in future | <p>Parks and SOSE section Activities: 5, 6, 11</p> <p>Dandenong Ranges National Park section Activities: 3, 5, 10, 11</p> <p>Grampians National Park section Activities: 8</p> <p>Kinglake National Park section Activities: 6, 7</p> <p>Port Campbell National Park section Activities: 11, 12, 13</p> |

SOSE

Level 5 (continued)

| | |
|---|---|
| <p>5.4 Develop a plan to address impacts of change. <i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> • describe how environmental change affects people • describe how environmental change affects places • analyse the extent to which human activities affect change caused by natural processes • evaluate ways of responding to the impact of change | <p>Parks and SOSE section Activities: 9, 12, 15</p> <p>Dandenong Ranges National Park section Activities: 6, 7, 8, 10, 11, 12</p> <p>Grampians National Park section Activities: 10, 10.1 to 10.11</p> <p>Kinglake National Park section Activities: 10</p> <p>Port Campbell National Park section Activities: 2, 4, 5, 6, 7, 13, 21</p> |
|---|---|

SOSE

Level 6

| SOSE | Activities and information in Parks Victoria Education Resource Kit |
|---|---|
| <p>6.1 Explain the processes and interactions between people and major natural systems.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> describe the location and distribution of major natural systems describe the processes which drive the major natural systems analyse the impact of human activities on natural systems suggest strategies to manage the effects of human activities on natural systems. | <p>Parks and SOSE section Activities: 5, 9, 12, 15</p> <p>Dandenong Ranges National Park section Activities: 2, 5, 6, 7, 8, 10, 11, 12</p> <p>Grampians National Park section Activities: 10, 10.1 to 10.11</p> <p>Kinglake National Park section Activities: 1, 2, 3, 6</p> <p>Port Campbell National Park section Activities: 1, 2, 7, 13</p> |
| <p>6.3 Predict the effects of resource development and use on a selected natural and human environment.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> outline the relationship between current use of the environment and future availability of resources describe the likely impact of resource development and use on a natural environment suggest ways of sustainably developing a natural and human environment. | <p>Parks and SOSE section Activities: 15, 17</p> <p>Dandenong Ranges National Park section Activities: 6, 10, 12</p> <p>Grampians National Park section Activities: 10, 10.1 to 10.11</p> <p>Kinglake National Park section Activities: 7, 9, 10</p> <p>Port Campbell National Park section Activities: 12, 13, 21</p> |
| <p>6.4 Develop a comprehensive strategy to resolve an issue related to the use and management of a natural or human environment.</p> <p><i>This is evident when the student is able to:</i></p> <ul style="list-style-type: none"> use a range of geographical media to describe the environment evaluate the factors contributing to the development of an issue relating to the use and management of an environment identify strategies formulated to address the issue justify a strategy to manage the environment. | <p>Parks and SOSE section Activities: 12, 15</p> <p>Dandenong Ranges National Park section Activities: 5, 6, 7, 8, 10, 11, 12</p> <p>Grampians National Park section Activities: 10, 10.1 to 10.11</p> <p>Kinglake National Park section Activities: 1, 6, 7, 9, 10</p> <p>Port Campbell National Park section Activities: 13, 19, 21</p> |