Desert Survivors – Stage 3

| Term | 1 | 2 | 3 | 4 | Weeks | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
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Living World Strand

| Outcome | Lesson Sequence – Overview | Resources | Word Wall |
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| ST3-4LW-S examines how the environment affects the growth, survival and adaptation of living things explain their existing ideas about desert environments that early explorers might have visited identify challenges for survival in desert environments and pose questions to clarify their understanding. ST3-1WS-S plans and conducts scientific investigations to answer testable questions, and collects and summarises data to communicate conclusions contribute to class discussions about possible adaptations of plants and animals to desert environments | Lesson 1 <u>Deadly deserts - Lesson focus p13</u> To capture students' interest and find out what they think they know about how living things have structural features and adaptations that help them to survive in their environment. To elicit students' questions about how living things survive in desert environments. <u>Students:</u> discuss Burke and Wills' exploration of Australia identify features of desert environments explain what structural features they think help living things survive in a desert. Worker and Wills' exploration of Australia identify features of desert environments Explain what structural features they think help living things survive in a desert. Worker and Wills' | For the class class science journal word wall TWLH chart 1 enlarged copy of 'Australia's red heart' (Resource sheet 1) multimedia resources (see 'Preparation') optional: cards or paper strips for word wall labels For each student science journal optional: waterproof marking pen | acacia adaptations animals arid avoiders Australia behaviour camel camouflage climate condensation desert desiccation drying |

| contribute to the datas With It chart and word wall. clesson 2 contribute to the environment affects the provide students with hands-on, shared experiences of how having smaller leaves can help plants avoid desiccation. Str34.UV-S examines how the environment affects the growth, survival wall. control wall. <licon li="" wall.<=""> cont</licon> | a contribute to the | | | 1 |
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| scientific investigations to answer testable questions, and collects and summarises data to communicate conclusionsFor the classleaves• class science journal • word wall • TWLH chart • team skills chart• bservation plants | | | | journal |
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| understand the purpose and features of a table follow a procedural text to complete an investigation use oral, written and visual language to record and discuss investigation results understand the purpose and features of a graph engage in discussion to compare claims. | 1 enlarged copy of 'Comparing plants and animals' (Resource sheet 2) 1 enlarged copy of 'Surface drying investigation planner' (Resource sheet 3) water at least 1 pair of digital scales (see 'Preparation') 1 timing device (eg, a class clock) <i>optional:</i> leaves from different species (see 'Preparation') For each team role wristbands or badges for Director, Manager and Speaker each team member's science journal each team's sample plastic bags from Session 1 1 copy of 'Surface drying investigation planner' (Resource sheet 3) 2 absorbent cloths (eg, 36 cm x 36 cm) 2 paper clips <i>optional:</i> 1 waterproof marking pen Session 3 For the class class science journal word wall TWLH chart | predator prediction prey rain science semi—arid spinifex storing strategies structures surface area survivors variables water |
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| | | team skills chart team roles chart 1 enlarged copy of 'Surface drying investigation planner' (Resource sheet 3) from Session 2 1 enlarged piece of graph paper For each team |
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| | RIVERINA ELE Mawang Yalbilit | role wristbands or badges for Director, Manager and Speaker each team member's science journal copy of 'Surface drying investigation planner' (Resource sheet 3) from Session 2 cloths from Session 2 piece of graph paper |
| ST3-4LW-S examines how the environment affects the growth, survival and adaptation of living things plan and conduct an investigation of the effect of surface area on heat loss make predictions about which pool of water will lose heat fastest observe, record and interpret the results of their investigation | Lesson 3 <u>Way too warm – Lesson focus p38</u> To provide students with hands-on, shared experiences of how having a larger surface area can help animals to cool down. <u>Students:</u> work in teams to investigate whether increasing surface area increases heat loss discuss and compare their results from the investigation. | For the class class science journal word wall TWLH chart team skills chart team roles chart 1 enlarged copy of 'Comparing plants and animals' (Resource sheet 2) from Lesson 2, Session 2 1 enlarged copy of 'Surface cooling investigation planner' (Resource sheet 4) hot water (<50°C) |

| Line to the second | investigation results record data in a table and represent it in a graph to interpret findings engage in discussion to compare claims demonstrate understanding of how to identify adaptations using science journal entries. | | 500 mL hot water 1 x 250 mL measure | |
|--|--|--|--|--|
| | ST3-4LW-S examines how the | | Session 1 For the class | |
| environment affects the Colourful Creatures- Lesson focus p48 | | he Colourful creatures- Lesson focus p48 | | |
| growth, survival and adaptation of living • To provide students with hands-on, shared experiences of how living things adapt to other • class science journal | | | - | |
| things living things through the use of colour. • word wall | things | | | |
| plan and conduct an TWLH chart | | | TWLH chart | |
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| effect of camouflage on predation • team roles chart | CC 1 C | | | |

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| use confetti to make | | 1 enlarged copy of |
| predictions about Ses | ssion 1 Perspicacious predators | 'Camouflage investigation |
| now canoullage can | | planner' (Resource sheet 5) |
| affect the visibility of S | Students: | |
| an object | work in teams to investigate whether being camouflaged helps living things survive in | For each team |
| | deserts | |
| interpret the results | | role wristbands or badges for |
| of their investigation make evidence- | discuss and compare their results to make evidence-based claims. | Director, Manager and |
| | Session 2 Ravishing or ridiculous? | Speaker |
| whether being | C C | each team member's science |
| camouflaged can S | Students: | journal |
| help animals survive | discuss claims explaining why some animals are not camouflaged. | 1 copy of 'Camouflage |
| in the desert | | investigation planner' |
| identify that there | | (Resource sheet 5) |
| are different selective pressures | | 1 A3 piece of white paper |
| which can influence | | 1 A3 piece of newspaper |
| the appearance of | | • piece of newspaper to make |
| an animal, including | | confetti |
| choice of mate. | | piece of white paper to make |
| | | confetti |
| ST3-1WS-S | Mawang Yalbilii | • 1 hole punch |
| plans and conducts | | 1 timing device (eg, a |
| scientific investigations to answer testable | | stopwatch or a watch with a |
| questions, and collects | | second hand) |
| and summarises data to | | · |
| communicate | | Session 2 |
| conclusions | | For the class |
| use oral, written and | | |
| visual language to | | class science journal |
| record and discuss | | word wall |
| investigation results | | TWLH chart |
| record data in a table and represent it in a | | 1 enlarged copy of 'Peacock tales' (Resource sheet 6) |
| graph to interpret | | • 5 x A4 sheets of paper (see |
| findings | | 'Preparation') |
| engage in discussion | | optional: photos of animals |
| to compare claims | | (see 'Preparation') |
| and develop | | Ferrare trans |
| understanding about | | For each team |

| how different factors | | science journal | |
|--|--|--|--|
| can influence the | | | |
| structural features of | | | |
| an animal | | | |
| demonstrate | | | |
| understanding of | | | |
| how to identify | | | |
| adaptations using | | | |
| science journal entries. | | | |
| ST3-4LW-S | | For the class | |
| examines how the | Lesson 5 | | |
| environment affects the | Ships of the desert – Lesson focus p64 | class science journal | |
| growth, survival and | | word wall | |
| adaptation of living | To support students to represent and explain their understanding of how structural | TWLH chart | |
| things | features and adaptations help living things to survive in their environment. | team roles chart | |
| review their | To introduce current scientific views about physical and behavioural adaptations. | team skills chart | |
| understanding of | | • 1 enlarged copy of 'Our ideas' | |
| how plants and | Students: | (Resource sheet 7) | |
| animals survive in | identify why camels were used for explorations of Central Australia | 1 enlarged copy of 'Camel | |
| desert environments | | features' (Resource sheet 8) | |
| identify structural | • make claims about which structural features help camels to survive in desert environments | leadures (Resource sheet o) | |
| features and | discuss behavioural and structural adaptations. | For each team | |
| adaptations that | Mawang Yalbili | I V LI | |
| help camels to | | role wristballus of badges for | |
| survive in a desert | | Director, Manager and | |
| environment | | Speaker | |
| identify the | | each team member's science | |
| difference between | | journal | |
| physical and behavioural | | 1 copy of 'Our ideas' | |
| adaptations. | | (Resource sheet 7) | |
| ST3-1WS-S | | 1 copy of 'Camel features' | |
| plans and conducts | | (Resource sheet 8) | |
| scientific investigations to answer testable | | | |
| questions, and collects | | | |
| and summarises data to | | | |
| communicate | | | |
| conclusions | | | |
| use written and oral | | | |
| language to | | | |
| demonstrate their | | | |
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| understanding of adaptations use scientific language to describe different types of adaptations contribute to class discussions about structural features and adaptations that help camels to survive in a desert environment. ST3-4LW-S examines how the environment affects the growth, survival and adaptation of living things research information about a particular desert species interpret evidence to identify if certain structural features can be considered adaptations identify and describe key adaptations of a desert species. ST3-1WS-S plans and conducts scientific investigations to answer testable questions, and collects and summarises data to communicate | Lesson 6 Species specialist - Lesson focus p72 • To support students to research information about the structural features and adaptations of a particular desert animal or plant. Students: • work in teams to plan and conduct research into a particular desert species • consider how to make evidence-based claims about desert adaptations. | For the class class science journal word wall TWLH chart team skills chart team roles chart 1 enlarged copy of 'Camel features' (Resource sheet 8) from Lesson 5 1 hat or box (see 'Preparation') For each team role wristbands or badges for Director, Manager and Speaker each team member's science journal resources to do research on structural features of different species in deserts of Australia | |
| to answer testable questions, and collects | | journal resources to do research on structural features of different | |

| summarise their | | | |
|---|---|---|--|
| findings and relate | | | |
| them to the context | | | |
| of desert adaptations | | | |
| engage in discussion to compare ideas | | | |
| and provide relevant | | | |
| arguments to | | | |
| support their | | | |
| conclusions. | | | |
| ST3-4LW-S | Lesson 8 | For the class | |
| examines how the | | | |
| environment affects the | Powerful presentations – Lesson focus p83 | class science journal | |
| growth, survival and | To support students to present their evidence-based claims about different structural | word wall | |
| adaptation of living things | features and adaptations for surviving in a desert environment, and to reflect on their | TWLH chart | |
| interpret data to | learning during the unit. | team skills chart | |
| make claims about | | team roles chart | |
| key adaptations of | Students: | | |
| desert species | present evidence-based claims about adaptation to desert environments | For each team | |
| provide evidence to | • compare and discuss results to draw conclusions about patterns of adaptation. | | |
| support their | | | |
| identification of | Mawang Yalbili | role wristbands or badges for | |
| adaptations | | | |
| identify | | Speaker | |
| adaptations of different | | each team member's science | |
| species living in desert environments. | | journal | |
| ST3-1WS-S | | 1 copy of 'Adaptation | |
| plans and conducts | | investigation planner | |
| scientific investigations | | (Resource sheet 9) | |
| to answer testable | | equipment for an open | |
| questions, and collects | | investigation (see | |
| and summarises data to | | 'Preparation') | |
| communicate | | equipment to make and | |
| conclusions | | present visual aids for an oral | |
| understand the purpose and | | presentation. | |
| features of an oral | | | |
| presentation | | | |
| use talk and an | | | |
| annotated diagram | | | |

| to communicate their findings contribute to a class discussion to compare adaptations of different species to Australian deserts. | | | |
|--|--|--|--|
| ST3-4LW-S examines how the environment affects the growth, survival and adaptation of living things identify adaptations of different desert species explain their ideas about which structural features of animals might help them survive in a desert environment discuss and compare their ideas. ST3-1WS-S plans and conducts scientific investigations to answer testable questions, and collects and summarises data to communicate conclusions use oral, written and visual forms to present their understanding of adaptations reflect on their learning in a science journal entry. | Lesson 9 Plausible possibilities - Lesson focus p87 To provide opportunities for students to represent what they know about how living things have structural features and adaptations that help them to survive in their environment, and to reflect on their learning during the unit. Students: describe the hypothetical adaptation of a new animal to a desert environment participate in a class discussion to reflect on their learning during the unit. | For the class class science journal word wall TWLH chart 1 enlarged copy of 'Many monkeys' (Resource sheet 10) 4 A4 pieces of paper (see 'Preparation') For each team Science journal 1 copy of 'Many monkeys' (Resource sheet 10) 1 copy of 'Choosing monkeys' (Resource sheet 11) 1 copy of 'Choosing monkeys' (Resource sheet 11) | |

