NEC Kits and the Australian Science Curriculum

Year	Unit Title	Unit Sequence Title	Learning Intentions	Kit Titles	Comments
R	It's a Feature	• Animals and their external features • You belong with_ • My own creation	• Recognise external features of animals. (Pages 17 and 18) • Understand how we can use our knowledge of external features to group animals. Page 22 • Apply their understanding of external features to design a unique animal. Page 29	• Animal Coverings, Kits 1 and 2 • Camouflage • Insects, Kits 1 to 4 • Jewels of the Sea (Puppets) • Mini Beasts, Kits 1 to 4 • Reptiles 1 and Reptiles 2 • Skeletons • Skulls, Kits 1 and 2 • Spiders and other Mini Beasts	Page 2 – play based learning. Page 4 Science Understanding notes has elaborations. Page 17 – links with Resource 9 – Creatures and their Features: use animal specimens instead of posters. Page 21 – the Simon Says activity. Page 22: Animal Charades Page 23: Form a Group activities Page 26: Memory Game of animal features Page 29: My own Creation Page 30: Checking this out – students can sort out real animal specimens
		Plants and other external features	• Recognise that plants have a variety of external features.	• Weather Kit – Folder 1	

NEC Kits and the Australian Science Curriculum

Year	Unit Title	Unit Sequence Title	Learning Intentions	Kit Titles	Comments
1	Who needs that?	• What do I need? • Staying alive • The basic needs of animals. • Domestic versus wild animals. • Getting creative	• Page 9 • Understand the basic needs of animals and identify these as the same as basic needs of humans. Page 11 • Identify and compare the basic needs of domestic animals and animals in wild environments. Page 14 • Understand the basic needs of plants. Page 17	• Arid Lands • Animal Homes • Beach Combing Kits 1,2 3,6 • Birds and Nests • Bush Treasures • Bush Treasures Activity • Camouflage • Coral Reef • Jewels of the Sea • Rainforest • Reef and Rockpool • Rivers • Sharks and Rays • Wetlands • Whale kit and Baleen	Page 4: Identify the basic needs of plants and animals including air, water, food or shelter: Looking after animals in the classroom, e.g. Stick insects, lizards, etc. Page 11: Slides 4 – Animal needs and Resource 4 – This animal needs: can use real animals or preserved animals. Page 13: Animal Shelters Page 16: Resource 6 – Keeping our pet healthy. Page 27: resource 13 – Living things.
	Daily and Seasonal Changes	• What do we know about weather? • Elements of weather	• Students use their senses to make observations about the weather. Page 9	• Weather	Page 9: Use your Sense – Cloud Observations The Kit has a range of posters and activities, including Indigenous Weather Knowledge

Year	Unit Title	Unit Sequence Title	Learning Intentions	Kit Titles	Comments
2	Our Place in space	• Day and night, patterns of phenomena in the sky. • Changing position of the Moon and stars. • The Solar System.	• Students will explore and understand how Aboriginal Peoples and Torres Strait Islander Peoples explain the cycles of the Sun and its appearance during the day. Page 22 • Moon and stars in the sky. Page 25 • Students will recognise and understand Earth is one of 8 planets in the solar system and know the 8 planets orbit around the Sun. Page 30	• Weather – the Blue folder • Space Kit – folders on Aboriginal Astronomy, Ngadjuri Skies, Kaurna Night Skies	•

NEC Kits and the Australian Science Curriculum

Year	Unit Title	Unit Sequence Title	Learning Intentions	Kit Titles	Comments
3	Is it alive?	• What do living things need? • Move along. • Growing, Growing, Grown. • Investigating seed growth	• Students will review and clarify their understanding that living things have basic needs, including nutrients and air to breathe. Page 11 • Students will know and understand that living things move. Page 13 • Students will understand that all living things grow and reproduce. Page 17	• Animal Coverings, Kits 1 and 2 • Animal homes • Eggs • Feathers • Feet and Tracks • Insects, Kits 1 to 4 • Jewels of the Sea (Puppets) • Mini Beasts, Kits 1 to 4 • Reptiles 1 and Reptiles 2 • Sharks and Rays • Skeletons • Skulls, Kits 1 and 2 • Spiders and other Mini Beasts • Life Cycles • Silkworms	Page 11 – Use an animal in addition to Slides 2 – Rex needs…" Page 14: Resource 3 -How do animals move? Page 18: Plants produce seeds and animals produce live young or lay eggs – examples.
	Day and night, night and day	• Summing up	• Students will demonstrate their knowledge and understanding of the features of the Sun and Earth, the cause of day and night, and the formation of shadows. Page 23	• Weather Folder 4 in this kit is devoted to Indigenous Weather Knowledge	The kit mentioned covers several areas.

NEC Kits and the Australian Science Curriculum

Year	Unit Title	Unit Sequence Title	Learning Intentions	Kit Titles	Comments
4	Follow that food!	• Consumers – carnivores, herbivores, omnivores • Food chains • Predator or prey • First Nations peoples use of native foods • Invasive species	• Students will understand that consumers can be categorised as herbivores, carnivores, or omnivores. Page 16 • Students will understand that feeding relationships between living things can be represented using food chains. Page 19 • Students will understand the relationship between predator and prey. Page 22 • Students will investigate how native foods are used by First Nations peoples. Page 24 • Students will know and understand what an invasive species is. Page 31, 32	• Wetlands Kit, used in conjunction with live animals can look at the feeding relationships between the animal and its food sources. • Aboriginal Kit 1 – Top End, and Aboriginal Kit 3 Southern have native seeds and other foods. • Birds of Prey, Kits 1 and 2 • Feral Animals • Endangered Species • Mini Beasts, kits 1 – 4 • Spiders and other Mini Beasts	Resource 12 – Invasive species profile, page 32
	What on Earth…?	• Do rocks stay the same? • Sediment and soil. • Fire on the landscape.	• Students will understand that the weathering of rocks involves the breakdown of rocks in situ, leading to a change in the Earth's surface. Page 9 • Students will understand the relationship between sediment size and deposition. Page 26 • Students will understand how Aboriginal people use fire to change and maintain the landscape. Page 28	• Weather Kit, Folder 1	

NEC Kits and the Australian Science Curriculum

Year	Unit Title	Unit Sequence Title	Learning Intentions	Kit Titles	Comments
5	Adaptations to survive. Units 5 and 6	• Adaptations • What makes me a fish or a bird? • Structural adaptations • Aboriginal People's knowledge of adaptations. • Extreme environments. • Adaptations for Australian environments. • Adaptation and climate change.	• Students will establish an understanding of the function of adaptations, both plant and animals. Page 7 • Students will identify the body parts of fish and birds and understand how these structural features help the animals survive in its environment. Page 8 • Students will identify and understand how different structural adaptations help animals survive in their environment. Page 10 • Students will investigate Aboriginal People's knowledge of the adaptations of certain species and how those adaptations can be exploited for other purposes. Page 13 • Students will explore and understand that adaptations help animals survive in extreme environments. Page 16 • Students will investigate and understand various adaptations of species surviving in Australian environments. Page 18	• Animal Coverings • Animal Coverings Kit 2 • Birds activity 1 • Birds Activity 2 • Birds and Beaks • Birds – Grasslands and Open Forests • Birds – Parrots • Birds of Prey 1 • Birds of Prey 2 • Bites and Stings • Camouflage • Feathers • Flight • Habitat • Mammals – Australian • Mini Beasts, Kits 1 to 4 • Polar/Antarctic and petrel skeleton • Spiders and other Mini Beasts	Page 8: Activity on Birds with different beaks and Fish – different swimming styles. Build-A-Fish activity – reef fish

NEC Kits and the Australian Science Curriculum

Year	Unit Title	Unit Sequence Title	Learning Intentions	Kit Titles	Comments
6	Life's needy	Let's explore! Ferals	• Students will conduct an environmental survey of a local area and understand how the features of the environment support plant and animal growth. Page 6 • Students will explore and understand the impact that introduced species have on Australian native species. Page 14	• Ferals • Endangered Species	•
	Don't Panic	Tell me about earthquakes. Are we related?	• Students understand earthquakes are caused by sudden geological changes in the Earth's surface and can describe the similarities and differences between various scales used to measure earthquake strength. Page 12 • Students will investigate and understand the cause of volcanic eruptions and tsunamis. Page 15	• Volcanoes, Earthquakes and Moving Continents	•

NEC Kits and the Australian Science Curriculum

Year	Unit Title	Unit Sequence Title	Learning Intentions	Kit Titles
7	Classification of living things	• Introduction to classification. • Classification of organisms using Aboriginal knowledges • Making meaning of scientific language. • Creating dichotomous keys. • Using dichotomous keys. • Classification of animal phylum vertebrates. • Classification of animal phyla invertebrates.	• Students learn how to sort, organise, and order to form patterns of living things. Page 8 • Students learn how Aboriginal Peoples classify living things based on context and usage. Page 12 • Students learn the pattern of science vocabulary and to support naming species using binomial nomenclature. Page 14 • Students learn the conventions for constructing a dichotomous key and modifying when a new organism is discovered. Page 16 • Students interpret a dichotomous key to draw an organism Page 18 • Students learn how to classify vertebrates on a field trip…. And design an enclosure for an animal. Page 19 • Students learn to classify invertebrates. Page 20	• Animal Phyla/Evolution • Classification Kit 1 • Classification 2 • Classification 3 • Classification Kits 4 and 5 – includes invertebrates. • Birds Activities Kit 1 – uses birds names. • Bird Kit 1 – variety of birds with their names • Habitat – preserved items • Insect Kits 1, 2, 3 and 4 • Mini Beasts Kits 1, 2, and 4 • Mini Beasts 3 – uses phyla and order classifications. • Shells Kit 1 – very detailed • Southern Australian Shells
	Food chains and food webs	• Introduction to relationships between living things • Food chains and food webs show feeding relationships. • Flow of energy and matter. • Food webs show the interconnectedness between living things in a habitat. • Invasive species and biological control.	• Students are able to identify living things and propose relationships within a local habitat. Page 9 • Students explore food chains and food webs to represent feeding relationships in a food web. Page 18 • Students explore food chains and food webs to show how energy and mass flow through an environment. Page 19 • Students explore interconnections between living things. Page 20 • Students will learn about invasive species and explore the use of biological controls. Pahe 23	• Habitats Any of the kits below can be used to show ecological relationships and the organism therein can be used to construct food webs and food chains. • Arid lands • Rainforest Kit • Reef and Rockpool Kit • Wetlands Kit • Mangroves Kit

NEC Kits and the Australian Science Curriculum

Year	Unit Title	Unit Sequence Title	Learning Intentions	Kit Titles	Comments
8	Multicellular organism - systems	• Exploring and explaining why cells specialise. • Plant cell growth • Investigating body systems	• Students learn how cells specialise to undertake different roles in the organism and the grouping of cells to form tissues, organs and systems. Page 7 • Students explore plant growth and plant systems. Page 10 • Students learn that cells, tissues, and organs make up the various human body systems. Page 14	• Human organs • We have prepared slides of plant tissue for viewing under microscopes.	
	Rocks	• Introduction to rock classification • Minerals and Mining • Earth's structure • Igneous rocks • Sedimentary rocks • Fossils • Metamorphic Rocks • Rock cycle	• Students explore grouping of rocks and start to consider how rock properties relate to their usage. Page 7 • What is the difference between a rock and a mineral? Why are minerals important resources? Page 10 • Students will be able to understand the Earth – molten layers. Page 13 • What is an igneous rock, how and where do they for? How are they classified? Page 15 • How are sedimentary rocks formed via weathering, erosion and deposition? How are they classified? Page 16 • What are fossils and how can they tell us about the past? Page 18 • What are metamorphic rocks and how do they form? Page 21 • Rocks are not new but are recycled. Page 22	• Living with Minerals – includes a mining activity • Mineral Identification • Living with Minerals • Rocking Fun • Rocks and Minerals, Kits 1 to 5 • Crystals, Cleavages and Classification • Introduction to Geology 1 and 2 • Rock Activities • Igneous Rock collections • Sedimentary Rock collections • Metamorphic rock collections • Fossils and Evolution 1 and 2 • Fossils and Evolution 3 and 4 • Evolution from fossils/Fossils through the ages • Fossils and Evolution 5 and 6 • Australian Dinosaurs	NEC Resources can be used with Resources 6, 13, 16 and 23 from this unit.