Australian Curriculum Links for years Prep to 6

General Capabilities relevant to Eat Breathe Move

Critical and Creating Thinking	Personal and Social Capability
Inquiring – *comparing* and *evaluating* health and nutrition information from a variety of sources Generating ideas and actions for personal health and wellbeing Analysing – drawing conclusions about the reliability of health information Reflecting – thinking about the thought processes that lead to healthy versus unhealthy behaviours	Personal awareness – identifying healthy and unhealthy habits and devising strategies to make healthier choices more often Goal setting – adapt goals to consume more healthy foods more often, discretionary foods less often and participate in regular physical activity Reflective practice – describe how their body feels after i) consuming different kinds of foods ii) engaging in different kinds of physical activity and iii) engaging in different breathing patterns
Literacy	**Numeracy**
Reading and viewing – understanding nutrition information panel	Number sense and algebra – converting the grams of sugar provided on nutrition labels into the number of teaspoons of sugar

Cross curriculum priorities

Sustainability
Understanding that plants convert carbon dioxide and water into food and oxygen for humans and all other life on Earth provides a clear rationale for practicing sustainable environmental practices. Knowing that plants require fresh water, healthy soil, sunshine and specific weather patterns helps students appreciate the need to protect the Earth's precious resources and climate. Understanding why natural materials such as cellulose, wool and wood are biodegradable while made materials such as plastic are not helps students to make informed decisions in their personal lives.

Science: Prep to Year 1

Science	Knowledge and understanding	Science as a human endeavour and Science inquiry	Eat Breathe Move content
Prep	Chemical sciences (AC9SFU03) Recognise objects can be composed of different materials, describe properties	Use and influence of science (AC9SFH01) Explore the ways people make and use observations and questions to learn about the natural world Planning and conducting (AC9SFI02) Engage in investigations safely and make observations using their senses Processing, modelling and analysing (AC9SFI03) Represent observations in provided templates and identify patterns with guidance Communicating (AC9SFI05) Share questions, predictions, observations and ideas with others	**Food under the microscope** • Students learn to operate a handheld 100x microscope • Students apply their new skills to observe sand, sugar, salt and other substances with their microscopes • Students draw pictures to *represent* what they saw with the microscope **Everything is made of atoms (Concept 1)** Food, water, air, plants, animals and people are all made of atoms. Our bodies are made of the atoms we eat.
Year 1	Biological sciences (AC9S1U01) Identify the basic needs of plants and animals, including air, water, food or shelter, and describe how the places they live meet those needs	Planning and conducting (AC9S1I03) Make and record observations, including informal measurements, using digital tools as appropriate Processing, modelling and analysing (AC9S1I04) sort and order data and information and represent patterns, including with provided tables and visual or physical models Communicating (AC9S1I06) Write and create texts to communicate observations, findings and ideas, using everyday and scientific vocabulary	**Food under the microscope** • Students learn to operate a handheld 100x microscope • Students apply their new skills to observe sand, sugar, salt and other substances with their microscopes • Students draw pictures to *represent* what they saw with the microscope **<u>Basic needs (AC9S1U01)</u>** **Everything is made of atoms (Concept 1)** • Food, water, air, plants, animals and people are all made of atoms • Plants are made of the carbon atoms they “inhale” from the air Animals and humans are made of the carbon atoms in the plants they eat

Science: Year 2

Science	Knowledge and understanding	Science as a human endeavour and Science inquiry	Eat Breathe Move Content
Year 2	Chemical sciences (AC9S2U03) Recognise that materials can be changed physically without changing their material composition and explore the effect of different actions on materials including bending, twisting, stretching and breaking into smaller pieces	Planning and conducting (AC9S2I03) Make and record observations, including informal measurements, using digital tools as appropriate Processing, modelling and analysing (AC9S2I04) sort and order data and information and represent patterns, including with provided tables and visual or physical models Communicating (AC9S2I06) Write and create texts to communicate observations, findings and ideas, using everyday and scientific vocabulary	**<u>Food under the microscope (AC9S2U03)</u>** **Concept 1: Everything is made of atoms** • Students learn to operate a handheld 100x microscope • Students apply their new skills to observe sand, sugar, salt and other substances with their microscopes • Students *explain* that white sugar, caster sugar and icing sugar look are all made of the same substance with different particle size. • Students *comprehend* that while sugar, salt and the quartz crystals in sand look very similar, they are in fact all very different substances • Students *explain* that sugar, salt and quartz crystals are made of difference kinds of atoms • Students recognise that some combinations of atoms, like sugar and salt, are food while other combinations, like quartz crystals and sea shells are not food

Science: Year 3

Science	Knowledge and understanding	Science as a human endeavour and Science inquiry	Eat Breathe Move Content
Year 3	Earth and space sciences (AC9S3U02) Compare the observable properties of soils, rocks and minerals and investigate why they are important Earth resources Chemical sciences (AC9S3U04) Investigate the observable properties of solids and liquids and how adding or removing heat energy leads to a change of state	Use and influence of science (AC9S3H02) Consider how people use scientific explanations to meet a need or solve a problem Processing, modelling and analysing (AC9S3I04) Construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information, show simple relationships and identify patterns Communicating (AC9S3I06) Write and create texts to communicate findings and ideas for identified purposes and audiences, using scientific vocabulary and digital tools as appropriate	**<u>Rocks under the microscope (AC9S3U02:</u>** **Everything is made of atoms (Concept 1)** • Students use a 100x handheld microscope to observe samples of sand and soil • Students *explain* that the particles in soil, rocks and minerals are made of different kinds of atoms • Students *explain* that some minerals are very precious because they contain atoms that are in limited supply on the Earth, and we cannot make more • For example, lithium, cobalt and gold are precious elements because they are very rare **<u>Solids, liquids, gases (AC9S3U04)</u>** **Everything is made of atoms (Concept 1)** • Students use molecular models, called Sticky Atoms, to *explain* that a water molecule is made of two hydrogen atoms and one oxygen atom • Students use the molecular models to demonstrate and demonstrate that the addition of heat causes a water molecule to move faster • Students use the molecular models to demonstrate and demonstrate that the removal of heat causes a water molecule to move slower

Science: Year 4

Science	Knowledge and understanding	Science as a human endeavour and Science inquiry	Eat Breathe Move
Year 4	Biological sciences (AC9S4U01) Explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships Earth and space sciences (AC9S4U02) Identify sources of water and describe key processes in the water cycle, including movement of water through the sky, landscape and ocean; precipitation; evaporation; and condensation Chemical sciences (AC9S4U04) Examine the properties of natural and made materials including fibres, metals, glass and plastics and consider how these properties influence their use	Use and influence of science (AC9S4H02) consider how people use scientific explanations to meet a need or solve a problem Processing, modelling and analysing (AC9S4I04) Construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information, show simple relationships and identify patterns Communicating (AC9S4I06) Write and create texts to communicate findings and ideas for identified purposes and audiences, using scientific vocabulary and digital tools as appropriate	**<u>Water cycle (AC9S4U02)</u>** **Everything is made of atoms (Concept 1)** • Students use molecular models to *explain* the movement of water molecules and changes of state during the water cycle **<u>Food chains (AC9S4U01)</u>** **Plants turn CO_2 and H_2O into food and wood (Concept 2). Animals and decomposers turn food and wood back into CO2 (Concept 3)** • Students use molecular models to *describe* how plants convert CO_2 and H_2O into food and oxygen using energy from the sun • Students *explain* that humans, animals and are consumers because they consume the food and oxygen plants make • Students *understand* that fungi and microorganisms decompose dead plants and animals and return nutrients to the soil for new plants to grow **<u>Natural and made materials (AC9S4U04)</u>** **Plants convert carbon dioxide and water into cellulose fibres (Concept 2)** • Students *understand* that plants convert CO_2 and H_2O into glucose • Students *explain* that glucose molecules can be connected for form long chains, called cellulose, which are the building block of paper, cardboard and cotton • Students *recognise* that cellulose is biodegradable because it can be converted back to CO_2 and H_2O by fungi and microorganisms • Students *recognised* that plastics are not biodegradable because they are made of chains of molecules that fungi and microorganisms cannot convert to CO_2 and H_2O

Science: Year 5

Science	Knowledge and understanding	Science as a human endeavour and Science inquiry	Eat Breathe Move
Year 5	Chemical sciences (AC9S5U04) Explain observable properties of solids, liquids and gases by modelling the motion and arrangement of particles	Science as a human endeavour (AC9S5H01) Examine why advances in science are often the result of collaboration or build on the work of others Processing, modelling and analysing (AC9S5I04) Construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data and information and describe patterns, trends and relationships Communicating (AC9S5I06) Write and create texts to communicate ideas and findings for specific purposes and audiences, including selection of language features, using digital tools as appropriate	**<u>Matter is made of particles, called atoms (AC9S5U04)</u>** **Everything is made of atoms (Concept 1)** • Students use molecular models to *describe* the motion of particles in solids, liquids and gases • Students draw pictures to represent the motion of particles in solids, liquids and gases **Plants use the energy in sunlight to convert carbon dioxide and water into food, oxygen and fibre (Concept 2)** • Students use molecular models to *explain* how plants convert an invisible gas called carbon dioxide and a transparent liquid called water into sweet, water-soluble crystalline carbohydrates called glucose, fructose, sucrose and others. **Animals and humans convert food and oxygen back into carbon dioxide and water (Concept 3)** • Students use molecular models to *explain* how plants convert an invisible gas called carbon dioxide and a transparent liquid called water into sweet, water-soluble crystalline carbohydrates called glucose, fructose, sucrose and others.

Science: Year 6

Science	Knowledge and understanding	Science as a human endeavour and Science inquiry	Eat Breathe Move
Year 6	Chemical sciences (AC9S6U04) Compare reversible changes, including dissolving and changes of state, and irreversible changes, including cooking and rusting that produce new substances	Science as a human endeavour (AC9S6H01) Examine why advances in science are often the result of collaboration or build on the work of other Processing, modelling and analysing (AC9S6I04) Construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data and information and describe patterns, trends and relationships Communicating (AC9S6I06) Write and create texts to communicate ideas and findings for specific purposes and audiences, including selection of language features, using digital tools as appropriate	**<u>Reversible and irreversible change (AC9S6U04)</u>** **Plants use the energy in sunlight to turn carbon dioxide and water into food, fibre, wood and oxygen gas (Concept 2)** 1. Cotton, cardboard and paper are made of cellulose. Cellulose is made of many glucose atoms bonded together in long chains. 2. Animals cannot break the bonds between the glucose molecules in cellulose. 3. Plastics are made from oil which is made of fossilised organic matter. **Animals and humans convert food and oxygen back into carbon dioxide and water (Concept 3)** 1. All of the energy in an ecosystem was once sunlight. 2. Almost all (more than 95%) of the organic matter in an ecosystem was carbon dioxide and water.

Health and Physical Education: Prep to Year 2

	Personal, social and community health – Making healthy and safe choices	**Movement and physical activity – Making active choices**
Prep	Identify health symbols, messages and strategies in their community that support their health and safety (AC9HPFP06) ▪ Some foods are sold in brightly coloured packets with cartoons or photos that make some people want to buy them	Participate in a range of activities in natural and outdoor settings and explore the benefits of being physically active (AC9HPFM03) ▪ We get our energy by eating food and turning it into the carbon dioxide we exhale. ▪ When we move more, we breathe more, because we are using more energy.
Year 1–2	Investigate a range of health messages and practices in their community and discuss their purposes (AC9HP2P06) ▪ Some foods are sold in brightly coloured packets with cartoons or photos that make some people want to buy them ▪ The nutrition panel on packaged foods tell us exactly what the food is made of.	Participate in a range of physical activities in natural and outdoor settings, and investigate factors and settings that make physical activity enjoyable (AC9HP2M03) ▪ We get our energy by eating food and turning it into the carbon dioxide we exhale. ▪ When we move more, we breathe more, because we are using more energy.

Year 3 – 4: Health and Physical Education

	Personal, social and community health – Making healthy and safe choices	**Movement and physical activity – Making active choices**
Year 3 – 4	Interpret the nature and intention of health information and messages, and reflect on how they influence personal decisions and behaviours (AC9HP4P09) Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing (AC9HP4P10) ▪ Some foods are sold in brightly coloured packages with eye-catching pictures that make some people want to by them. ▪ The nutrition labels on food packaging tell us how much protein, fat, carbohydrates and sugar there is in the food. ▪ Some foods are delicious and make us want to eat more of them than we need to for our daily needs.	Participate in physical activities to explore how their body feels and describe how regular physical activity helps the body stay healthy and well (AC9HP4M04) Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation (AC9HP4M05) Explore recommendations about physical activity and sedentary behaviours, and discuss strategies to achieve the recommendations (AC9HP4M06) ▪ We obtain the energy to move, think and grow by turning the food we eat into the carbon dioxide we exhale. ▪ When we move more, we breathe more, because we are using more energy.

Year 5 – 6: Health and Physical Education

	Personal, social and community health: Making healthy and safe choices	**Movement and physical activity: Making active choices**
Year 5 – 6	Investigate different sources and types of health information and how these apply to their own and others' health choices (AC9HP6P09) Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities (AC9HP6P10) ▪ Some social media influencers are paid to promote certain foods or supplements as being healthy ▪ The National Health and Medical Research Foundation (NH&MRC) sets the recommended daily intake of vitamins and minerals ▪ The nutrition labels on food packaging tell us how much protein, fat, carbohydrates and sugar there is in the food ▪ The number of teaspoons of sugar in food can be calculated by dividing the mass of sugar by four (teaspoons of sugar = mass of sugar ÷ 4) ▪ Some food packaging has photos of sports stars or fit looking people participating in sports to give the impression that they will improve our fitness and performance ▪ Some unhealthy foods are delicious and make us want to eat more of them than we need to in order to meet our daily requirements, or to consume a lesser quantity of healthy foods	Participate in physical activities to explore how their body feels and describe how regular physical activity helps the body stay healthy and well (AC9HP4M04) Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation (AC9HP4M05) Explore recommendations about physical activity and sedentary behaviours, and discuss strategies to achieve the recommendations (AC9HP4M06) ▪ Humans and all animals obtain the energy to move, think and grow by turning food into the carbon dioxide and water, plus a small amount of urea and sulfate which are excreted as urine. ▪ When we move more, we breathe more, because our muscles are using more energy. ▪ Breathing more than we need to is called hyperventilation ▪ Stress and anxiety can cause people to take shallower breaths more often which can upset the chemistry of our blood – taking slow deep breaths can sometimes calm an anxious or upset person down