

SCIENCE CURRICULUM SCOTLAND

GRADE EARLY K-1



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Module Name	Grade	Standard	Description
Sound	Early K-1	ERL.FEW.3a	Through play, I have explored a variety of ways of making sounds. SCN 0-11a
Patterns in Space	Early K-1	ERL.PE.4a	I have experienced the wonder of looking at the vastness of the sky, and can recognise the sun, moon and stars and link them to daily patterns of life. SCN 0-06a
Plant Survival	Early K-1	ERL.PE.1b	I have helped to grow plants and can name their basic parts. I can talk about how they grow and what I need to do to look after them. SCN 0-03a
Foundational Pushes and Pulls	Early K-1	ERL.FEW.1a	Through everyday experiences and play with a variety of toys and other objects, I can recognise simple types of forces and describe their effects. SCN 0-07a
Five Senses	Early K-1	ERL.FEW.3a	Through play, I have explored a variety of ways of making sounds. SCN 0-11a
Parts of Plants	Early K-1	ERL.PE.1b	I have helped to grow plants and can name their basic parts. I can talk about how they grow and what I need to do to look after them. SCN 0-03a
Habitats	Early K-1	ERL.PE.1a	I have observed living things in the environment over time and am becoming aware of how they depend on each other. SCN 0-01a
Uses of Energy	Early K-1	ERL.FEW.2a	I know how to stay safe when using electricity. I have helped to make a display to show the importance of electricity in our daily lives. SCN 0-09a
Properties of Water	Early K-1	ERL.PE.3a	By investigating how water can change from one form to another, I can relate my findings to everyday experiences. SCN 0-05a
Speed and Direction	Early K-1	ERL.PE.2a	I have experienced, used and described a wide range of toys and common appliances. I can say what makes it go and say what they do when they work. SCN 0-04a

Module Name	Grade	Standard	Description
Food Chains	First 2-4	FRS.PE.1b	I can explore examples of food chains and show an appreciation of how animals and plants depend on each other for food. SCN 1-02a
Living and Nonliving Things	First 2-4	FRS.PE.1a	I can distinguish between living and non-living things. I can sort living things into groups and explain my decisions. SCN 1-01a
Human Health and Hygiene	First 2-4	FRS.BIO.1c	I know the symptoms of some common diseases caused by germs. I can explain how they are spread and discuss how some methods of preventing and treating disease benefit society. SCN 1-13a
Force and Motion	First 2-4	FRS.FEW.1a	By investigating forces on toys and other objects, I can predict the effect on the shape or motion of objects. SCN 1-07a
Forms of Energy	First 2-4	FRS.PE.2a	I am aware of different types of energy around me and can show their importance to everyday life and my survival. SCN 1-04a
Classifying Matter	First 2-4	FRS.MAT.1a	Through exploring properties and sources of materials, I can choose appropriate materials to solve practical challenges. SCN 1-15a
		FRS.MAT.1b	I can make and test predictions about solids dissolving in water and can relate my findings to the world around me. SCN 1-16a
		FRS.PE.3a	By investigating how water can change from one form to another, I can relate my findings to everyday experiences. SCN 1-05a
Distinguishing Body Parts	First 2-4	FRS.BIO.1a	By researching, I can describe the position and function of the skeleton and major organs of the human body and discuss what I need to do to keep them healthy. SCN 1-12a
Electric and Magnetic Forces	First 2-4	FRS.FEW.1b	By exploring the forces exerted by magnets on other magnets and magnetic materials, I can contribute to the design of a game. SCN 1-08a
		FRS.FEW.2a	I can describe an electrical circuit as a continuous loop of conducting materials. I can combine simple components in a series circuit to make a game or model. SCN 1-09a
Sound and Vibration	First 2-4	FRS.FEW.3a	By collaborating in experiments on different ways of producing sound from vibrations, I can demonstrate how to change the pitch of the sound. SCN 1-11a
		FRS.BIO.1b	I have explored my senses and can discuss their reliability and limitations in responding to the environment. SCN 1-12b

Earth's Rotation	First 2-4	FRS.PE.4a	By safely observing and recording the sun and moon at various times, I can describe their patterns of movement and changes over time. I can relate these to the length of a day, a month and a year. SCN 1-06a
Inheritance and Variation of Traits	First 2-4	FRS.BIO.2a	By comparing generations of families of humans, plants and animals, I can begin to understand how characteristics are inherited. SCN 1-14a
Sensory Receptors	First 2-4	FRS.BIO.1b	I have explored my senses and can discuss their reliability and limitations in responding to the environment. SCN 1-12b
What Plants Need	First 2-4	FRS.PE.1c	I can help to design experiments to find out what plants need in order to grow and develop. I can observe and record my findings and from what I have learned I can grow healthy plants in school. SCN 1-03a
		FRS.TOP.1a	I have contributed to discussions of current scientific news items to help develop my awareness of science. SCN 1-20a

Module Name	Grade	Standard	Description
Mixtures	Second 5-7	SCD.MAT.1a	By contributing to investigations into familiar changes in substances to produce other substances, I can describe how their characteristics have changed. SCN 2-15a
		SCD.MAT.1b	I have participated in practical activities to separate simple mixtures of substances and can relate my findings to my everyday experience. SCN 2-16a
		SCD.MAT.1c	By investigating common conditions that increase the amount of substance that will dissolve or the speed of dissolving, I can relate my findings to the world around me. SCN 2-16b
Renewable and Non-Renewable Resources	Second 5-7	SCD.PE.2b	Through exploring non-renewable energy sources, I can describe how they are used in Scotland today and express an informed view on the implications for their future use. SCN 2-04b
		SCD.MAT.2a	Having explored the substances that make up Earth's surface, I can compare some of their characteristics and uses. SCN 2-17a
Diversity of Living Things	Second 5-7	SCD.PE.1a	I can identify and classify examples of living things, past and present, to help me appreciate their diversity. I can relate physical and behavioural characteristics to their survival or extinction. SCN 2-01a
		SCD.BIO.1c	I have contributed to investigations into the role of microorganisms in producing and breaking down some materials. SCN 2-13a
Properties and States of Matter	Second 5-7	SCD.MAT.1a	By contributing to investigations into familiar changes in substances to produce other substances, I can describe how their characteristics have changed. SCN 2-15a
The Water Cycle	Second 5-7	SCD.PE.3a	I can apply my knowledge of how water changes state to help me understand the processes involved in the water cycle in nature over time. SCN 2-05a
Water Safety	Second 5-7	SCD.MAT.3a	I have investigated different water samples from the environment and explored methods that can be used to clean and conserve water and I am aware of the properties and uses of water. SCN 2-18a
Animal and Plant Dependence	Second 5-7	SCD.PE.1b	I can use my knowledge of the interactions and energy flow between plants and animals in ecosystems, food chains and webs. I have contributed to the design or conservation of a wildlife area. SCN 2-02a

		SCD.PE.1c	Through carrying out practical activities and investigations, I can show how plants have benefited society. SCN 2-02b
		SCD.PE.1d	I have collaborated in the design of an investigation into the effects of fertilisers on the growth of plants. I can express an informed view of the risks and benefits of their use. SCN 2-03a
Plant Structures and Functions	Second 5-7	SCD.BIO.2a	By investigating the lifecycles of plants and animals, I can recognise the different stages of their development. SCN 2-14a
Properties of Soil	Second 5-7	SCD.PE.1d	I have collaborated in the design of an investigation into the effects of fertilisers on the growth of plants. I can express an informed view of the risks and benefits of their use. SCN 2-03a
		SCD.PE.1c	Through carrying out practical activities and investigations, I can show how plants have benefited society. SCN 2-02b
		SCD.MAT.2a	Having explored the substances that make up Earth's surface, I can compare some of their characteristics and uses. SCN 2-17a
Friction	Second 5-7	SCD.FEW.1a	By investigating how friction, including air resistance, affects motion, I can suggest ways to improve efficiency in moving objects. SCN 2-07a
Batteries and Circuits	Second 5-7	SCD.FEW.2a	I have used a range of electrical components to help to make a variety of circuits for differing purposes. I can represent my circuit using symbols and describe the transfer of energy around the circuit. SCN 2-09a
		SCD.FEW.2b	I have used a range of electrical components to help to make a variety of circuits for differing purposes. I can represent my circuit using symbols and describe the transfer of energy around the circuit. SCN 2-09a
		SCD.FEW.2c	To begin to understand how batteries work, I can help to build simple chemical cells using readily-available materials which can be used to make an appliance work. SCN 2-10a
Behavior, Traits and Adaptations	Second 5-7	SCD.BIO.2b	By exploring the characteristics offspring inherit when living things reproduce, I can distinguish between inherited and non-inherited characteristics. SCN 2-14b
Life Cycles	Second 5-7	SCD.BIO.2a	By investigating the lifecycles of plants and animals, I can recognise the different stages of their development. SCN 2-14a
Experimenting with Forces	Second 5-7	SCD.FEW.1b	I have collaborated in investigations to compare magnetic, electrostatic and gravitational forces and have explored their practical applications. SCN 2-08a

		SCD.FEW.1c	By investigating floating and sinking of objects in water, I can apply my understanding of buoyancy to solve a practical challenge. SCN 2-08b
		SCD.TOP.1a	Through research and discussion, I have an appreciation of the contribution that individuals are making to scientific discovery and invention and the impact this has made on society. SCN 2-20a
Properties of Visible Light	Second 5-7	SCD.FEW.3b	By exploring reflections, the formation of shadows and the mixing of coloured lights, I can use my knowledge of the properties of light to show how it can be used in a creative way. SCN 2-11b
Human Body and Health	Second 5-7	SCD.BIO.1b	I have explored the structure and function of sensory organs to develop my understanding of body actions in response to outside conditions. SCN 2-12b
		SCD.BIO.1a	By investigating some body systems and potential problems which they may develop, I can make informed decisions to help me to maintain my health and wellbeing. SCN 2-12a
Energy Transformations	Second 5-7	SCD.PE.2a	By considering examples where energy is conserved, I can identify the energy source, how it is transferred and ways of reducing wasted energy. SCN 2-04a
Chemical Properties and Interactions	Second 5-7	SCD.MAT.3b	I have collaborated in activities which safely demonstrate simple chemical reactions using everyday chemicals. I can show an appreciation of a chemical reaction as being a change in which different materials are made. SCN 2-19a
Modeling Waves through Various Mediums	Second 5-7	SCD.FEW.3a	Through research on how animals communicate, I can explain how sound vibrations are carried by waves through air, water and other media. SCN 2-11a
		SCD.FEW.3b	By exploring reflections, the formation of shadows and the mixing of coloured lights, I can use my knowledge of the properties of light to show how it can be used in a creative way. SCN 2-11b
The Universe	Second 5-7	SCD.PE.4a	By observing and researching features of our Solar System, I can use simple models to communicate my understanding of size, scale, time and relative motion within it. SCN 2-06a

Module Name	Grade	Standard	Description
Types of Waves	Third 8-9	FRT.FEW.3a	By recording and analysing sound signals, I can describe how they can be manipulated and used in sound engineering. SCN 4-11a
Chemical Reactions	Third 8-9	THR.MAT.3c	I have helped to design and carry out practical activities to develop my understanding of chemical reactions involving the Earth's materials. I can explain how we apply knowledge of these reactions in practical ways. SCN 3-19b
		FRT.MAT.3c	Having carried out a range of experiments using different chemicals, I can place metals in an order of reactivity, and relate my findings to their everyday uses. SCN 4-19b
		FRT.MAT.3b	I can collect and analyse experimental data on chemical reactions that result in an obvious change in energy. I can apply my findings to explain the significance of the energy changes associated with chemical reactions. SCN 4-19a
Formation of Fossil Fuels	Third 8-9	THR.MAT.2b	I can participate in practical activities to extract useful substances from natural resources. SCN 3-17b
		FRT.MAT.2a	I have explored how different materials can be derived from crude oil and their uses. I can explain the importance of carbon compounds in our lives. SCN 4-17a
Alternative Energy	Third 8-9	THR.PE.2b	By investigating renewable energy sources and taking part in practical activities to harness them, I can discuss their benefits and potential problems. SCN 3-04b
		FRT.TOP.1a	I have researched new developments in science and can explain how their current or future applications might impact on modern life. SCN 4-20a
Density	Third 8-9	FRT.FEW.1d	Through experimentation, I can explain floating and sinking in terms of the relative densities of different materials. SCN 4-08b
Electric Circuits	Third 8-9	THR.FEW.2a	Having measured the current and voltage in series and parallel circuits, I can design a circuit to show the advantages of parallel circuits in an everyday application. SCN 3-09a
		THR.FEW.2b	I can help to design simple chemical cells and use them to investigate the factors which affect the voltage produced. SCN 3-10a
		FRT.FEW.2b	By contributing to investigations into the properties of a range of electronic components, I can select and use them as input and output devices in practical electronic circuits. SCN 4-09b

Systems of the Human Body	Third 8-9	THR.BIO.1a	I have explored the structure and function of organs and organ systems and can relate this to the basic biological processes required to sustain life. SCN 3-12a
		THR.BIO.1b	I have explored the role of technology in monitoring health and improving the quality of life. SCN 3-12b
		THR.BIO.1d	I have contributed to investigations into the different types of microorganisms and can explain how their growth can be controlled. SCN 3-13b
Electromagnetic Spectrum	Third 8-9	THR.FEW.3b	By exploring radiations beyond the visible, I can describe a selected application, discussing the advantages and limitations. SCN 3-11b
Origins of the Universe	Third 8-9	FRT.TOP.1b	Having selected scientific themes of topical interest, I can critically analyse the issues, and use relevant information to develop an informed argument. SCN 4-20b
		FRT.PE.4a	By researching developments used to observe or explore space, I can illustrate how our knowledge of the universe has evolved over time. SCN 4-06a
Carbon and Nitrogen Cycles	Third 8-9	FRT.PE.1d	Through investigating the nitrogen cycle and evaluating results from practical experiments, I can suggest a design for a fertiliser, taking account of its environmental impact. SCN 4-03a
		THR.PE.3b	I can explain some of the processes which contribute to climate change and discuss the possible impact of atmospheric change on the survival of living things. SCN 3-05b
		FRT.PE.1c	I can contribute to the design of an investigation to show the effects of different factors on the rate of aerobic respiration and explain my findings. SCN 4-02b
		FRT.PE.3b	Through exploring the carbon cycle, I can describe the processes involved in maintaining the balance of gases in the air, considering causes and implications of changes in the balance. SCN 4-05b
Factors that Affect Solubility	Third 8-9	THR.MAT.1c	I can differentiate between pure substances and mixtures in common use and can select appropriate physical methods for separating mixtures into their components. SCN 3-16a
		THR.MAT.1d	I have taken part in practical investigations into solubility using different solvents and can apply what I have learned to solve everyday practical problems. SCN 3-16b
Life in Our Universe	Third 8-9	THR.TOP.1a	I have collaborated with others to find and present information on how scientists from Scotland and beyond have contributed to innovative research and development. SCN 3-20a

		THR.PE.4a	By using my knowledge of our solar system and the basic needs of living things, I can produce a reasoned argument on the likelihood of life existing elsewhere in the universe. SCN 3-06a
		FRT.PE.4a	By researching developments used to observe or explore space, I can illustrate how our knowledge of the universe has evolved over time. SCN 4-06a
Novel Materials	Third 8-9	FRT.MAT.1b	I have carried out research into novel materials and can begin to explain the scientific basis of their properties and discuss the possible impacts they may have on society. SCN 4-16a
Classifying Rocks	Third 8-9	THR.MAT.2a	Through evaluation of a range of data, I can describe the formation, characteristics and uses of soils, minerals and basic types of rocks. SCN 3-17a
Environmental Changes and Effects	Third 8-9	THR.PE.1c	Through investigations and based on experimental evidence, I can explain the use of different types of chemicals in agriculture and their alternatives and can evaluate their potential impact on the world's food production. SCN 3-03a
Acids and Bases	Third 8-9	THR.MAT.3a	Having taken part in practical activities to compare the properties of acids and bases, I have demonstrated ways of measuring and adjusting pH and can describe the significance of pH in everyday life. SCN 3-18a
Conservation of Matter	Third 8-9	FRT.MAT.1c	Through evaluation of experimental results, I can demonstrate my understanding of conservation of mass. SCN 4-16b
Electrical Circuits	Third 8-9	THR.FEW.2a	Having measured the current and voltage in series and parallel circuits, I can design a circuit to show the advantages of parallel circuits in an everyday application. SCN 3-09a
		THR.FEW.2b	I can help to design simple chemical cells and use them to investigate the factors which affect the voltage produced. SCN 3-10a
		FRT.FEW.2d	Using experimental evidence, I can place metals in an electrochemical series and can use this information to make predictions about their use in chemical cells. SCN 4-10a
		FRT.FEW.2c	Using my knowledge of electronic components and switching devices, I can help to engineer an electronic system to provide a practical solution to a real-life situation. SCN 4-09c
		FRT.FEW.2a	Through investigation, I understand the relationship between current, voltage and resistance. I can apply this knowledge to solve practical problems. SCN 4-09a

		FRT.FEW.1c	I can help to design and carry out investigations into the strength of magnets and electromagnets. From investigations, I can compare the properties, uses and commercial applications of electromagnets and super magnets. SCN 4-08a
Electromagnetic Forces and Fields	Third 8-9	FRT.FEW.1c	I can help to design and carry out investigations into the strength of magnets and electromagnets. From investigations, I can compare the properties, uses and commercial applications of electromagnets and super magnets. SCN 4-08a
Forces and Motion of Objects	Third 8-9	THR.FEW.1a	By contributing to investigations of energy loss due to friction, I can suggest ways of improving the efficiency of moving systems. SCN 3-07a
Measuring Energy Transfer	Third 8-9	THR.PE.2a	I can use my knowledge of the different ways in which heat is transferred between hot and cold objects and the thermal conductivity of materials to improve energy efficiency in buildings or other systems. SCN 3-04a
Pure Substances and Mixtures	Third 8-9	THR.MAT.1c	I can differentiate between pure substances and mixtures in common use and can select appropriate physical methods for separating mixtures into their components. SCN 3-16a
		THR.MAT.1d	I have taken part in practical investigations into solubility using different solvents and can apply what I have learned to solve everyday practical problems. SCN 3-16b
Reaction Rates	Third 8-9	THR.MAT.3b	Through experimentation, I can identify indicators of chemical reactions having occurred. I can describe ways of controlling the rate of reactions and can relate my findings to the world around me. SCN 3-19a
Speed, Velocity, and Acceleration	Third 8-9	FRT.FEW.1a	I can use appropriate methods to measure, calculate and display graphically the speed of an object, and show how these methods can be used in a selected application. SCN 4-07a
		FRT.FEW.1b	By making accurate measurements of speed and acceleration, I can relate the motion of an object to the forces acting on it and apply this knowledge to transport safety. SCN 4-07b
Motion in the Solar System	Third 8-9	THR.FEW.1b	I have collaborated in investigations into the effects of gravity on objects and I can predict what might happen to their weight in different situations on Earth and in space. SCN 3-08a
Rising Carbon Dioxide Concentrations	Third 8-9	THR.PE.1c	Through investigations and based on experimental evidence, I can explain the use of different types of chemicals in agriculture and their alternatives and can evaluate their potential impact on the world's food production. SCN 3-03a

		FRT.MAT.3a	I can monitor the environment by collecting and analysing samples. I can interpret the results to inform others about levels of pollution and express a considered opinion on how science can help to protect our environment. SCN 4-18a
		FRT.PE.2a	By contributing to an investigation on different ways of meeting society's energy needs, I can express an informed view on the risks and benefits of different energy sources, including those produced from plants. SCN 4-04a
		FRT.PE.2b	Through investigation, I can explain the formation and use of fossil fuels and contribute to discussions on the responsible use and conservation of finite resources. SCN 4-04b
Anatomy of a Cell	Third 8-9	THR.BIO.1c	Using a microscope, I have developed my understanding of the structure and variety of cells and of their functions. SCN 3-13a
		THR.BIO.1e	I have explored how the body defends itself against disease and can describe how vaccines can provide protection. SCN 3-13c
Introduction to Photosynthesis	Third 8-9	THR.PE.1b	I have collaborated on investigations into the process of photosynthesis and I can demonstrate my understanding of why plants are vital to sustaining life on Earth. SCN 3-02a
		FRT.PE.1b	I have propagated and grown plants using a variety of different methods. I can compare these methods and develop my understanding of their commercial use. SCN 4-02a
		FRT.PE.1a	I understand how animal and plant species depend on each other and how living things are adapted for survival. I can predict the impact of population growth and natural hazards on biodiversity. SCN 4-01a
Light	Third 8-9	THR.FEW.3a	By exploring the refraction of light when passed through different materials, lenses and prisms, I can explain how light can be used in a variety of applications. SCN 3-11a
DNA Replication	Third 8-9	SCD.TOP.1b	I can report and comment on current scientific news items to develop my knowledge and understanding of topical science. SCN 2-20b
		THR.TOP.1b	Through research and discussion, I have contributed to evaluations of media items with regard to scientific content and ethical implications. SCN 3-20b
		THR.BIO.2b	I have extracted DNA and understand its function. I can express an informed view of the risks and benefits of DNA profiling. SCN 3-14b

		FRT.BIO.2c	I can use my understanding of how characteristics are inherited to solve simple genetic problems and relate this to my understanding of DNA, genes and chromosomes. SCN 4-14c
Mitosis	Third 8-9	FRT.BIO.2b	Through evaluation of a range of data, I can compare sexual and asexual reproduction and explain their importance for survival of species. SCN 4-14b
		FRT.BIO.1c	By researching cell division, I can explain its role in growth and repair and can discuss how some cells can be used therapeutically. SCN 4-13a
Cycles of Matter	Third 8-9	THR.PE.3a	By contributing to experiments and investigations, I can develop my understanding of models of matter and can apply this to changes of state and the energy involved as they occur in nature. SCN 3-05a
Enzymes	Third 8-9	FRT.BIO.1d	I have taken part in practical activities which involve the use of enzymes and microorganisms to develop my understanding of their properties and their use in industries. SCN 4-13b
Gas Laws	Third 8-9	FRT.PE.3a	I have developed my understanding of the kinetic model of a gas. I can describe the qualitative relationships between pressure, volume and temperature of gases. SCN 4-05a
Artificial Selection	Third 8-9	FRT.BIO.2b	Through evaluation of a range of data, I can compare sexual and asexual reproduction and explain their importance for survival of species. SCN 4-14b
		FRT.BIO.1e	I can debate the moral and ethical issues associated with some controversial biological procedures. SCN 4-13c
Human Dependence on Natural Resources	Third 8-9	THR.PE.1c	Through investigations and based on experimental evidence, I can explain the use of different types of chemicals in agriculture and their alternatives and can evaluate their potential impact on the world's food production. SCN 3-03a
		THR.MAT.2b	I can participate in practical activities to extract useful substances from natural resources. SCN 3-17b
		FRT.PE.2a	By contributing to an investigation on different ways of meeting society's energy needs, I can express an informed view on the risks and benefits of different energy sources, including those produced from plants. SCN 4-04a
		FRT.PE.2b	Through investigation, I can explain the formation and use of fossil fuels and contribute to discussions on the responsible use and conservation of finite resources. SCN 4-04b

Atomic Structure and Bonding	Third 8-9	FRT.MAT.1a	Through gaining an understanding of the structure of atoms and how they join, I can begin to connect the properties of substances with their possible structures. SCN 4-15a
Periodic Table and Trends	Third 8-9	THR.TOP.1a	I have collaborated with others to find and present information on how scientists from Scotland and beyond have contributed to innovative research and development. SCN 3-20a
		FRT.MAT.3c	Having carried out a range of experiments using different chemicals, I can place metals in an order of reactivity, and relate my findings to their everyday uses. SCN 4-19b
Animal Behavior	Third 8-9	FRT.BIO.1b	Through investigation, I can explain how changes in learned behaviour due to internal and external stimuli are of benefit to the survival of species. SCN 4-12b
Variation of Traits	Third 8-9	FRT.BIO.1a	I can explain how biological actions which take place in response to external and internal changes work to maintain stable body conditions. SCN 4-12a
Evidence of Common Ancestry	Third 8-9	THR.TOP.1a	I have collaborated with others to find and present information on how scientists from Scotland and beyond have contributed to innovative research and development. SCN 3-20a
		THR.PE.1a	I can sample and identify living things from different habitats to compare their biodiversity and can suggest reasons for their distribution. SCN 3-01a
		FRT.BIO.2a	Through investigation, I can compare and contrast how different organisms grow and develop. SCN 4-14a
Changes in Climate	Third 8-9	FRT.MAT.3a	I can monitor the environment by collecting and analysing samples. I can interpret the results to inform others about levels of pollution and express a considered opinion on how science can help to protect our environment. SCN 4-18a
		FRT.PE.2a	By contributing to an investigation on different ways of meeting society's energy needs, I can express an informed view on the risks and benefits of different energy sources, including those produced from plants. SCN 4-04a
		FRT.PE.2b	Through investigation, I can explain the formation and use of fossil fuels and contribute to discussions on the responsible use and conservation of finite resources. SCN 4-04b

Human Activities and Natural Systems	Third 8-9	THR.PE.1c	Through investigations and based on experimental evidence, I can explain the use of different types of chemicals in agriculture and their alternatives and can evaluate their potential impact on the world's food production. SCN 3-03a
		FRT.PE.2a	By contributing to an investigation on different ways of meeting society's energy needs, I can express an informed view on the risks and benefits of different energy sources, including those produced from plants. SCN 4-04a
		FRT.PE.2b	Through investigation, I can explain the formation and use of fossil fuels and contribute to discussions on the responsible use and conservation of finite resources. SCN 4-04b
Elements and Compounds	Third 8-9	THR.MAT.1a	I have developed my knowledge of the Periodic Table by considering the properties and uses of a variety of elements relative to their positions. SCN 3-15a
		THR.MAT.1b	Having contributed to a variety of practical activities to make and break down compounds, I can describe examples of how the properties of compounds are different from their constituent elements. SCN 3-15b
Forms and Uses of Energy	Third 8-9	THR.FEW.1a	By contributing to investigations of energy loss due to friction, I can suggest ways of improving the efficiency of moving systems. SCN 3-07a
		THR.FEW.1b	I have collaborated in investigations into the effects of gravity on objects and I can predict what might happen to their weight in different situations on Earth and in space. SCN 3-08a
		THR.FEW.2a	Having measured the current and voltage in series and parallel circuits, I can design a circuit to show the advantages of parallel circuits in an everyday application. SCN 3-09a
		THR.FEW.3a	By exploring the refraction of light when passed through different materials, lenses and prisms, I can explain how light can be used in a variety of applications. SCN 3-11a
Bodies and Systems	Third 8-9	THR.BIO.1e	I have explored how the body defends itself against disease and can describe how vaccines can provide protection. SCN 3-13c

Reproduction and Variation	Third 8-9	THR.BIO.2a	I understand the processes of fertilisation and embryonic development and can discuss possible risks to the embryo. SCN 3-14a
		THR.BIO.2b	I have extracted DNA and understand its function. I can express an informed view of the risks and benefits of DNA profiling. SCN 3-14b
		FRT.BIO.2b	Through evaluation of a range of data, I can compare sexual and asexual reproduction and explain their importance for survival of species. SCN 4-14b

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