Wessex Primary School
Key Learning and vocabulary
Science

YEAR 1					
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Forces and space: seasonal changes	**Materials: Everyday Materials**	**Animals: Sensitive Bodies**	**Animals: Comparing Animals**	**Plants: Introduction to plants**	**Investigating science through stories**
Key Learning	**Key Learning**	**Key Learning**	**Key Learning**	**Key Learning**	**Key Learning**
To identify how the weather changes across the four seasons.	Knowledge: To identify everyday materials. Working scientifically: To sort objects into groups based on the materials they are made from.	To identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense Knowledge: To name parts of the human body. Working scientifically: To sort body parts into groups.	To identify and group animals.	Knowledge: To identify plants in the school grounds. Working scientifically: To plan an investigation	Knowledge: To observe changes across the seasons. Working scientifically: To spot patterns in data.
To identify events and activities that take place in different seasons.	Knowledge: To recognise the difference between objects and materials.	Knowledge: To name the body parts used for each sense. Working scientifically: To spot patterns in data.	To describe a variety of animals.	Knowledge: To identify parts of a flowering plant. Working scientifically: To draw and label a diagram.	Knowledge: To describe and compare the features of animals. Working scientifically: To carry out research to find specific information.

Wessex Primary School
Key Learning and vocabulary
Science

To recognise how trees change across the four seasons.	Knowledge: To describe the properties of materials	Knowledge: To identify the body parts used for the sense of taste and touch. Working scientifically: To use the senses to make observations.	To compare the features of animals.	Knowledge: To identify and name wild and garden plants. Working scientifically: To sort flowers into groups.	Knowledge: To identify differences in animal features. Working scientifically: To use a ruler to measure.
Knowledge: To recognise that daylight hours change across the four seasons. Working scientifically: To record data in a pictogram.	Knowledge: To group materials based on their properties (absorbency). Working scientifically: To make observations and record data.	Knowledge: To identify the body parts used for the sense of smell and sight. Science in action: To recognise that scientists are always making new discoveries.	Knowledge: To identify animals that are carnivores, herbivores and omnivores. Working scientifically: To research using non-fiction texts.	Knowledge: To identify and name wild and garden plants. Working scientifically: To sort flowers into groups.	Knowledge: To describe the properties of everyday materials. Working scientifically: To plan how to carry out a test.
Knowledge: To observe changes across the four seasons. Working scientifically: To gather and record data about how seasons change over time.	Knowledge: To group materials based on their properties (waterproofness). Working scientifically: To plan a test and suggest what might happen	Knowledge: To identify the body part used for the sense of hearing. Working scientifically: To investigate how sound changes as you move further away.	Knowledge: To recognise animals that make suitable pets. Working scientifically: To gather and record data to help in answering questions	Knowledge: To recognise that new plants come from seeds and bulbs. Working scientifically: To recognise that observations do not always match predictions.	To identify animals that are carnivores, herbivores and omnivores.
To plan and carry out a weather report.	Knowledge: To group materials based on their properties (toughness). Working scientifically:	To recognise how the senses are used in everyday life. Science in action: To recognise the importance of the	Knowledge: To describe and compare the structure of animals. Science in action: To know about famous scientists throughout	Science in action: To recognise the importance of a scientist's role. Working scientifically: To use observations to find answers to	

Wessex Primary School
Key Learning and vocabulary
Science

	To answer questions based on results.	senses in certain jobs.	history.	questions.	
Vocabulary	**Vocabulary**	**Vocabulary**	**Vocabulary**	**Vocabulary**	**Vocabulary**
data deciduous tree evergreen tree pictogram predict conclusion symbol temperature thermometer	absorbent fabric material metal object plastic tough waterproof	bitter blind body compare data distance feeling hearing investigation senses	carnivore herbivore omnivore amphibian mammal reptile bird fish	bulb flower fruit plants growth leaf roots seed stem trunk	compare data diet difference material object measure observe predict conclusion

Wessex Primary School
Key Learning and vocabulary
Science

Year 2					
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Habitats	**Microhabitats**	**Materials**	**Life cycles and health**	**Plant growth**	**Making connections**
Key Learning	**Key Learning**	**Key Learning**	**Key Learning**	**Key Learning**	**Key Learning**
Life processes To identify some of the characteristics of living things.	Lesson 1: Identifying and classifying minibeasts Working scientifically: To classify a variety of minibeasts.	Objects and materials To recognise that objects are made from materials that suit their uses. To recognise that objects can be grouped.	The human life cycle To identify different stages of the human life cycle.	What so seeds need to grow? Knowledge To recognise that seeds need certain conditions for growth. Working scientifically To plan comparative tests.	Reduce, reuse, recycle To describe how materials can be reused. To understand how the 3Rs contribute to sustainable products.
It feels good to be alive To recognise the difference between things that are alive, were once alive or have never been alive. Working scientifically: To classify objects into groups.	Lesson 2: Introduction to scientific enquiry To recognise that living things live in habitats to which they are suited. Working scientifically: To gather and record data to answer a question.	Which material is suitable? To recognise that objects are made from materials to suit their uses.	Life cycles To know which offspring come from which parent animal.	Seeds and bulbs Knowledge To recognise that seeds and bulbs contain what they need to grow into a plant. Working scientifically To measure with a ruler.	From plants to products To identify human-made and natural materials. To group based on characteristics.
Introduction to habitats	Lesson 3: Minibeast hunt	Stretch it, twist it, bend it, squash it!	Growth To observe and	Germination Knowledge To	Testing suitability To identify suitable

Wessex Primary School
Key Learning and vocabulary
Science

To identify plants and animals in different habitats.	To recognise that living things live in habitats to which they are suited To gather and record data to answer a question	To recognise that the shape of some solid objects can be changed. To record data in a table.	measure growth in humans.	describe what seeds need to germinate. Working scientifically To record data in a table.	materials based on their properties. To perform a test and gather data.
Woodland habitats To identify how a habitat provides animals and plants with what they need to survive. Working scientifically: To carry out research to find answers to questions.	Lesson 4 and 5: Spider investigation To ask questions and plan how to carry out an experiment. To carry out an experiment and	Testing stretchiness To compare the suitability of materials for particular uses. To gather data and use it to answer questions.	Survival To identify and list the basic needs for survival for humans and animals.	Light and plant growth Knowledge To describe the effect of light on plant growth. Working scientifically To observe using a magnifying glass.	Testing plant pots To identify a material to help plant growth. To use observations to answer a simple question.
Rainforest and ocean habitats To recognise how animals and plants depend on each other.	Lesson 6 To identify a variety of flowering plants. Science in action: To understand the role of a botanist.	Testing strength To recognise that the strength of some materials can be changed. To record data in a block graph.	Exercise and hygiene To recognise the importance of exercise and personal hygiene. Working scientifically to make observations over time.	Plant life cycle Knowledge To identify stages of a plant's life cycle. Working scientifically To draw and label diagrams.	Choosing materials To choose materials to create a suitable plant pot. To identify and classify living things
Food chains To recall how animals get their food from plants and other animals.		Eco-friendly materials To compare the suitability of materials for particular uses. To recognise that some materials are	Balanced diet To identify how to have a balanced diet. Working scientifically to interpret collected	Plant care Knowledge To recognise what plants need for healthy growth. Science in action To recognise	

Wessex Primary School
Key Learning and vocabulary
Science

		harmful to the environment.	results.	that humans have a responsibility to care for plants.	
Vocabulary	**Vocabulary**	**Vocabulary**	**Vocabulary**	**Vocabulary**	**Vocabulary**
camouflage, carnivore, classify, coastal, dead, depend, diet, energy, excretion, food chain, growth, habitat, science skill, observation.	botanist, camouflage, characteristics, classification key, classify, comparative/fair test, conclusion, criteria, data, food chain, identify, invertebrate method, microhabitat, comparison.	elastic, fabric, flexible, glass, material, metal, object, plastic, property, rock, suitable, wood, prediction, fair test.	basic needs, egg, health, hygiene, life cycle, live young, pupa, spawn, survive, teenager, toddler, tadpole.	bulb, diagram, energy, flower, germinate, leaf, life cycle, nutrient, observe, seed, shoot stem.	alive, dead, fabric, flexible, germinate, growth, invention, life processes, material, plastic, property, results, seed, suitable, test, waterproof, wood
Key vocabulary for each term has been highlighted					

Wessex Primary School
Key Learning and vocabulary
Science

Year 3					
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Light and Shadows	**Forces and magnets**	**Rocks and soil**	**Movement and nutrition**	**Plant reproduction**	**Investigation - Making Connections: Does the hand Span affect the grip?**
Key Learning	**Key Learning**	**Key Learning**	**Key Learning**	**Key Learning**	**Key Learning**
Knowledge: To explain the role of light sources. Working scientifically: To plan and draw a results table.	Knowledge: To describe the effects of contact forces. Working scientifically: To label a diagram using arrows and scientific vocabulary.	Knowledge: To group rocks using their appearance. Working scientifically: To observe the appearance of rocks closely, using a magnifying glass.	Knowledge: To explain the role of a skeleton. Working scientifically: To group animals based on their physical properties.	Knowledge: To identify the growth and survival needs of plants. Working scientifically: To pose relevant questions.	Knowledge: To revise the units Movement and nutrition and Rocks and soil. Working scientifically: To plan a pattern seeking enquiry.
Knowledge: To compare light reflecting on different surfaces.	Knowledge: To recognise the effects and uses of forces. Working scientifically: To write a scientific conclusion identifying cause and effect.	Knowledge: To group rocks using their physical properties. Working scientifically To make predictions, suggest improvements and explain observations over time.	Knowledge: To recognise the main bones in the body. Working scientifically: To measure and sort data.	Knowledge: To describe the relationship between structure and function in plants. Working scientifically To design simple results tables.	Knowledge: To revise the units Movement and nutrition and Plant reproduction. Working scientifically To gather and record data.

Wessex Primary School
Key Learning and vocabulary
Science

Knowledge To recognise which materials cast a shadow. Working scientifically To ask testable questions and plan how to answer them.	Knowledge: To interpret how and why things move differently on different surfaces. Working scientifically To plan an investigation using variables.	Knowledge To describe the process of fossil formation. Working scientifically To present research on fossil formation.	Knowledge: To explain how muscles are used for movement. Science in action: To explore scientific advances.	Knowledge To investigate how water is transported in plants. Working scientifically To plan a simple enquiry.	Knowledge To revise the unit Forces and magnets. Working scientifically To conclude and evaluate the investigation.
Knowledge To summarise how shadows change throughout the day. Working scientifically To evaluate a method.	Knowledge To describe the effects of magnets. Working scientifically To write a method.	Knowledge To identify fossils and group rocks accordingly. Working scientifically To use the fossil record to answer questions about the past.	To explain how food is an essential energy source for animals. Working scientifically: To gather and compare data to answer questions.	Knowledge To explore the role of flowers in the life cycle of a plant. Working scientifically To complete, read and interpret data in a bar chart.	Knowledge To revise the unit Uses of materials. Working scientifically To use sets of data to inform design.
Knowledge: To investigate how the distance of the light source affects the size of its shadow. Working scientifically: To find patterns in data and form conclusions.	To compare the properties of different types of magnets. Working scientifically: To display data using a bar chart.	Knowledge To compare soils and how they were formed. Working scientifically To record the drainage rate for different soils in a bar chart.	To identify the main nutrient groups and their simple functions. Working scientifically: To record information using secondary sources.	Knowledge To apply knowledge of plant life and growth. Working scientifically To identify and suggest changes to an enquiry.	Knowledge To revise the units Light and shadows and Movement and nutrition. Working scientifically To report on my findings using a shadow puppet display.

Wessex Primary School
Key Learning and vocabulary
Science

Knowledge: To tell a story using shadow puppets. Science in action: To recall how different people work with light and shadows.	To explain the uses of magnets. Working scientifically: To research the uses of magnets.	Knowledge: To describe a soil sample using sedimentation. Working scientifically: To draw and label a diagram.	To explain what makes a balanced diet. Science in action: To explore how knowledge has progressed over time and different jobs use this information.	Knowledge To explore seed dispersal methods. Working scientifically To use results to draw conclusions.	
Vocabulary	**Vocabulary**	**Vocabulary**	**Vocabulary**	**Vocabulary**	**Vocabulary**
Shadow, light source, reflect, opaque, translucent, transparent	Attract, force, friction, magnet, north pole, repel, south pole	Fossil, igneous rock, metamorphic rock, molten rock, permeable, sedimentary	Bone, joint, endoskeleton Exoskeleton, 5 food groups, invertebrate Vertebrate	reproduction, germination, pollination, seed formation, seed dispersal	Conclusion, evaluate, friction, grip strength, nutrition, shadow, variable

Wessex Primary School
Key Learning and vocabulary
Science

Year 4					
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Digestion and teeth	**Electricity**	**States of matter**	**Sound and vibrations**	**Classification and changing habitats**	**Making connections: How does the flow of liquids compare?**
Key Learning	**Key Learning**	**Key Learning**	**Key Learning**	**Key Learning**	**Key Learning**
To describe the function of the human digestive system. Working scientifically: To evaluate a model.	To recognise how electrical appliances are powered. Working scientifically: To record and classify qualitative data.	Knowledge to identify solids using their properties. Working scientifically to ask relevant questions about the properties of solids.	Knowledge: To describe how sounds are made. Working scientifically: To observe closely how different instruments create a sound.	Knowledge To group animals in various ways. Working scientifically To record data in different ways.	Knowledge To revise the units States of matter and Classification and changing habitats. Working scientifically To plan a comparative test.
To recognise the different types of human teeth and their roles in eating. Science in action: To describe real observation methods and evidence collected.	To construct an electrical circuit. Working scientifically: To draw a scientific diagram.	Knowledge to identify liquids and gases using their properties. Working scientifically to use results to draw simple conclusions about the properties of liquids.	Knowledge: To describe how sounds are heard through different mediums. Working scientifically: to research how whales and dolphins communicate underwater.	Knowledge To group plants in various ways. Working scientifically To apply and create classification keys.	Knowledge To revise the unit Electricity and circuits. Working scientifically To gather and record data.
To explain how to care for our teeth. Working scientifically: To plan an enquiry by considering which variables should be changed, measured and	To explain the use of switches in a circuit.	Knowledge to describe melting and freezing. Working scientifically to use thermometers to take accurate measurements before and after melting.	Knowledge: To describe the relationship between vibration strength and volume. Working scientifically: to present results using a bar chart.	Working scientifically To make careful observations. To make and use classification keys.	Knowledge To revise the units States of matter and Sound and vibrations Working scientifically To conclude and evaluate the investigation

Wessex Primary School
Key Learning and vocabulary
Science

controlled. Science in action: To determine why scientists need to work collaboratively and evaluate experiments.					
To recognise that differences in teeth relate to an animal's diet. Working scientifically: To classify animals based on their diet.	To explain the use of materials as electrical conductors or insulators. Working scientifically: To write a method.	Knowledge to describe condensing and evaporating. Working scientifically to make predictions for new values about evaporation rates.	Knowledge: To describe the relationship between volume and distance. Working scientifically: To suggest which variables to measure and for how long.	Knowledge To recognise and describe different habitats and their inhabitants. Working scientifically To gather, record, classify and present data.	Knowledge To revise the unit Digestion and food. Working scientifically To observe carefully and apply these observations to problem solve.
To recognise producers, predators and prey in food chains. Working scientifically: To analyse trends in line graphs and form conclusions using scientific knowledge.	To investigate what affects bulb brightness. Working scientifically: To pose questions and plan ways to test them.	Knowledge: To describe the different stages of the water cycle. Working scientifically: To record the stages of the water cycle using a labelled diagram.	Knowledge: To describe pitch and how to change it. Working scientifically: To design simple results tables.	Knowledge To recognise the impact humans can have on habitats. Working scientifically To research using an information sheet.	Knowledge To revise the unit States of matter. Working scientifically To report on my findings.
To recognise that animal poo can give us clues about digestion, teeth and diet. Working scientifically: To construct a results table for recording observations.	To explain how to be safe around electricity. Science in action: To explore how scientific advances inform safety advice.	Knowledge to describe how temperature affects evaporation rates and the water cycle. Working scientifically to research climate change and the water cycle.	Knowledge: To explain how insulating materials can be used to muffle sound. Working scientifically: To identify when results or observations do not match predictions.	Knowledge To recognise the impact of natural disasters on habitats.	
Vocabulary	**Vocabulary**	**Vocabulary**	**Vocabulary**	**Vocabulary**	**Vocabulary**
Absorb, canine, carnivore, digest, faeces, food chain,	Ammeter, appliance, battery, bulb, buzzer, cell, circuit,	Boiling, conclusion, condensing, diagram, evaporating,	Air, bar chart, eardrum, insulator, observe, pitch, plan,	amphibian (Y1), bird (Y1) classification key, classify conservation,	bar chart, condensing cell/battery, conclusion evaluate, evaporating,

Wessex Primary School
Key Learning and vocabulary
Science

herbivore, incisor, large intestine, molar, mouth, oesophagus, omnivore, predator, premolar, prey, producer, saliva, small intestine, stomach	component, electrical conductor, electrical insulator, electricity, hazard, mains, material, motor, power source, precaution, property, safety, series circuit, switch, wire	evaporation rate, freezing, gas, liquid, measure, melting, precipitation, predict, rate, research, solid, steam, stopwatch, temperature, thermometer, the water cycle	predict, proof, record, research, results table, sound, trustworthy, vibration, volume	deforestation, endangered, fish (Y1), flowering plants (Y3), group, habitat (Y2), insect, invertebrate (Y3), mammal (Y1), nature reserve, non-flowering plants, observe (Y1) pollution, reptile (Y1) research (Y2, slug, snail, spider, vertebrate (Y3), worm	gas, pharmacologist, precipitation, predict solid, switch, temperature, the water cycle, insect, liquid, medicine, motor, pharmacology, trustworthy, variable, viscosity, water vapour
Key vocabulary for each term has been highlighted					

Wessex Primary School
Key Learning and vocabulary
Science

Year 5					
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Mixtures and seperation	**Properties and changes**	**Life cycles and reproduction**	**Forces and space: Imbalanced forces**	**Earth and space**	**Animals: Human timeline / Making connections**
Key Learning	**Key Learning**	**Key Learning**	**Key Learning**	**Key Learning**	**Key Learning**
Knowledge To describe mixtures. Working scientifically To research using a range of secondary resources.	Knowledge To determine the hardness of materials and link this to their uses. Working scientifically To evaluate the hardness test to determine the degree of trust in the results.	Knowledge To describe the life cycle of a plant, including the reproductive stage. Working scientifically To observe and compare equivalent parts in different flowers.	Knowledge To describe gravity and its effects. Working scientifically To analyse data to write a conclusion.	Knowledge To compare the contributions of Ptolemy, Alhazen and Copernicus to models of the Solar System. Working scientifically To pose testable questions about the Solar System.	Knowledge To describe how humans change from babies through to old age. Working scientifically To use a line graph to identify patterns in height and predict values.
Knowledge To explain the process of sieving. Working scientifically To draw and annotate a diagram to explain a concept.	Knowledge To determine the transparency of different materials and link this to their uses. Working scientifically To plan and draw a table of results.	Knowledge To describe the life cycle of a mammal. Working scientifically To research the life cycles of different mammals.	Knowledge To describe air resistance and its effects. Working scientifically To plan a fair test to investigate air resistance.	Knowledge To describe the movement and shapes of the celestial bodies in our Solar System. Working scientifically To develop a model to represent the Solar System.	Knowledge To identify changes in males and females as a result of puberty.

Wessex Primary School
Key Learning and vocabulary
Science

Knowledge To explain the process of filtering. Working scientifically To identify testable questions and how to answer them.	Knowledge To determine the conductivity of different materials and link this to their uses. Working scientifically To write a detailed, organised method which is easy to follow.	Knowledge To describe the life cycle of a bird and compare it with that of a mammal. Working scientifically To pose questions to compare the life cycles of different birds	Knowledge To describe water resistance and its effects. Working scientifically To design a results table.	Knowledge To describe the movement of the Moon relative to the Earth. Working scientifically To design and draw a table.	Knowledge To explore the gestation periods of humans and other animals. Working scientifically To plot data on a scatter graph.
Knowledge To describe solutions and how they can be identified. Working scientifically To make observations about solutions.	Knowledge To demonstrate reversible changes. Working scientifically To write a prediction using prior knowledge of the states of matter.	Knowledge To describe the life cycle of an insect and compare it with that of an amphibian. Working scientifically To use data to describe a relationship and make predictions.	Knowledge To describe friction and its effects. Working scientifically To evaluate a method.	Knowledge To explain the causes of day and night and the seasons. Working scientifically To draw a diagram to explain day and night.	Knowledge To revise the units *Earth and space* and *Life cycles and reproduction*. Working scientifically To plan a comparative test.
Knowledge To identify which factors affect the time taken to dissolve. Working scientifically To plan a fair test with consideration of variables and measurements.	Knowledge To demonstrate irreversible changes. Working scientifically To analyse observations about rusting and use them to support a conclusion.	Knowledge To describe asexual reproduction in plants. Working scientifically To represent root growth over time on a line graph.	Knowledge To describe the effects of levers, pulleys and simple machines on movement. Working scientifically To draw and label a diagram.	Knowledge To devise a sundial to tell the time. Working scientifically To calibrate and use a sundial to measure time	Knowledge To revise the units *Unbalanced forces* and *Mixtures and separation*. Working scientifically To gather and record data.

Wessex Primary School
Key Learning and vocabulary
Science

Knowledge To describe the process of evaporation.	Knowledge To demonstrate irreversible changes. Working scientifically To measure the circumference of a balloon accurately.		Knowledge To describe the relationship between lever length and effort. Working scientifically To draw an accurate line graph.	To describe some uses of satellites and the problems posed by space junk. Working scientifically To use temperature data to make predictions about climate change.	Knowledge To revise the units *Separating mixtures* and *Unbalanced forces*. Working scientifically To conclude and evaluate the investigation.
Vocabulary	**Vocabulary**	**Vocabulary**	**Vocabulary**	**Vocabulary**	**Vocabulary**
Control variable, Crystallising, Dissolve, Evaporation, Evaporation method, Filtering, Insoluble, Mixture, Particle, Sieve, Sieving, Soluble, Solution, Variable.	Burning, Change of state, Circumference, Condensing, Conductor, Dissolve, Electrical conductivity, Evaporating, Freezing, Hard, Hardness, Insulator, Irreversible change, Light intensity, Light meter, Melting, Mixture, Opaque, Property, Reversible change, Rust, Rusting, Soft, States of matter, Thermal conductivity, Translucent, Transparency, Transparent	Adolescence, Amphibian, Asexual reproduction, Bird, Characteristic, Data, Estimate, Fertilisation, Germination, Gestation, Gills, Incubation, Insect, Life cycle, Line graph, Line of best fit, Lungs, Mammal, Mating, Metamorphosis, Offspring, Ovule, Pollen, Pollination, Reproduction, Sexual reproduction, Testable.	Air resistance, Anomaly, Balanced, Control variable, Data, Force, Friction, Gear, Gravity, Lever, Line graph, Line of best fit, Pivot, Pulley, Relationship, Surface area, Trustworthy, Unbalanced, Variable, Water resistance.	Celestial bodies, Data, Day (daytime), Degrees Celsius, Discovery, Earth, Evidence, Gravity, Jupiter, Line graph, Line of best fit, Mars, Mercury, Model, Moon, Neptune, Night (nighttime), Orbit, Phase, Planet, Pluto, Saturn, Season, Solar system, Spherical, Star, Temperature, Testable, Uranus, Venus.	Anomaly, Evidence, Foetus, Gestation period, Hormones, Life cycle, Line graph, Old age, Period (menstruation), Puberty, Rate, Relationship.

Wessex Primary School
Key Learning and vocabulary
Science

Key vocabulary for each term has been highlighted

Wessex Primary School
Key Learning and vocabulary
Science

Year 6					
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Classifying big and small	**Evolution and inheritance**	**Light and reflection**	**Electricity**	**Circulation and exercise**	**Consolidation Making connections**
Key Learning	**Key Learning**	**Key Learning**	**Key Learning**	**Key Learning**	**Key Learning**
Knowledge To explain how organisms are classified using the Linnaean system.	Knowledge To explain why there are differences within a species. Working scientifically To group factors.	Knowledge To describe the pathway of light. Working scientifically To use evidence to form conclusions.	Knowledge To use recognised symbols for electrical components.	Knowledge To identify factors that affect our health and how to reduce their negative impact. Working scientifically To evaluate sources of information.	Knowledge To revise the units Circulation and health and Light and reflection. Working scientifically To plan a comparative test.
Knowledge To classify the cold-blooded vertebrate groups using their common characteristics. Working scientifically To use a classification key to	Knowledge To recognise the inheritance of characteristics in plants and animals.	Knowledge To describe how we see. Working scientifically To draw scientific diagrams.	Knowledge To predict and present results for electrical circuits. Working scientifically To use standardised symbols when drawing diagrams.	Knowledge To summarise the key structures and purpose of the circulatory system.	Knowledge To revise the units Light and reflection and Circuits, batteries and switches. Working scientifically To gather and

Wessex Primary School
Key Learning and vocabulary
Science

classify frog species.					record data.
Knowledge To classify the warm-blooded vertebrate groups using their common characteristics. Working scientifically To use a classification key to classify vertebrates.	Knowledge To explain why adaptation is necessary.	Knowledge To explain how shadows change. Working scientifically To pose questions.	Knowledge To recognise a link between the number of components and resistance. Working scientifically To explain results using scientific knowledge.	Knowledge To identify the key roles of blood. Working scientifically To evaluate a model.	Knowledge To revise the units Light and reflection and Circulation and health. Working scientifically To conclude and evaluate the investigation.
Knowledge To classify invertebrates using their characteristics. Working scientifically To use a classification key to classify invertebrates.	Knowledge To model how natural selection affects population size. Working scientifically To evaluate the degree of trust and pose new questions for further enquiry.	Knowledge To investigate what affects the angle of the reflected ray. Working scientifically To record results as a line graph.	Knowledge To identify ways to change voltage within an electrical circuit. Working scientifically To design a results table.	Knowledge To explore the relationship between animal size and heart rate. Working scientifically To interpret patterns in data.	Knowledge To revise the units Classifying big and small, Evolution and inheritance, Light and reflection and Circulation and health. Working scientifically To use further data to inform a conclusion.

Wessex Primary School
Key Learning and vocabulary
Science

Knowledge To describe how the plant kingdom is organised (based on shared characteristics). Working scientifically To produce a working classification key.	Knowledge To describe the theory of evolution. Working scientifically To consider evidence used to inform theories.	Knowledge To explain how a periscope works.	Knowledge To investigate how voltage affects bulb brightness. Working scientifically To plan an enquiry.	Knowledge To investigate the relationship between exercise and heart rate. Working scientifically To write a method.	Knowledge To revise the units Light and reflection and Circulation and health. Working scientifically To report on findings in the form of an advert.
Knowledge To describe and classify micro-organisms. Working scientifically To use a classification key to classify bacteria.	Knowledge To recognise evidence that can be used for evolution. Working scientifically To consider the degree of trust in the evidence used.	Knowledge To explain how mirrors are helpful. Science in action To explore different jobs or inventions that depend on reflection	Knowledge To apply knowledge of circuits and components to a practical solution. Science in action To recognise that scientific knowledge can solve a problem	Knowledge To describe the relationship between heart rate and fitness. Working scientifically To draw a line graph.	
Vocabulary	**Vocabulary**	**Vocabulary**	**Vocabulary**	**Vocabulary**	**Vocabulary**
amphibian, bird, characteristic, classification key,	adaptation, anomaly, characteristic, competition, control,	anomaly, cast, conclusion, control variable, evaluate, evidence, fair test,	anomaly, battery, bulb, buzzer, cell circuit, circuit diagram, control,	anomaly, balanced diet, blood, bloodstream, blood vessels, carbon	adaptation, amphibian, bar chart, bird, bulb, characteristic, circuit,

Wessex Primary School
Key Learning and vocabulary
Science

classify, cold-blooded, conifer, exoskeleton, fern, fish, flowering plant, insect, invertebrate, life processes, mammal, micro-organism, moss, organism, reptile, snail, spider, vertebrate, warm-blooded, worm	variable, environment, environmental, evaluate, evidence, evolution, extinct, fossil, gene, habitat, inherit, inheritance, mean, average, model, natural selection, offspring, parent (biological), population, reliable, reproduce, scientific theory, selective breeding, survival of the fittest, variable, variation	light, ray, light source, line graph, line of best fit, luminous, mean, average, non-luminous, opaque, pupil, ray, diagram, reflect, reflective, relationship, reliable scale shadow, testable, units, variable	variable, current, data, electricity, evaluate, evidence, fair test, hazard, mean, average, model, motor, power source, relationship, resistance safety, switch, units, variable, voltage wire	dioxide, circulatory system, control, variable, data, drug, evaluate, evidence, fair test, heart, heart rate, line graph, lungs, mean, average, model, oxygen, pulse rate, relationship, reliable, secondary source, trustworthy, variable	circuit diagram, classify, component, conclusion control, variable, electrical circuit, evaluate, evidence fish, habitat, health, inherit insect, invertebrate, lifestyle, light ray, light, source, luminous, mammal method
Key vocabulary for each term has been highlighted					