MARINA INTERNATIONAL SCHOOL

SCIENCE SCHEME OF WORK

YEAR 6 - TERM 1

WEEK	TOPIC	TOPIC DETAILS
1.1	Identify body organs	. Body organs work together to form system which keeps us alive. .The major body organs are the heart, liver, stomach, brain, kidney and intestine.
1.2	Identify the position of major body organs	.The heart is located around the left side of the chest. . The liver is located at the upper right portion of the abdominal cavity . The stomach is located in vertebrates between the esophagus and the small intestine. . The brain is found in the head.
1.3	Describe the main functions of the major body organs	.The heart pumps blood around the body . Lungs are two spongy sacks like organs in the chest that provide the body with oxygen and remove carbon dioxide. The brain controls thinks, reasons and all body functions. . Stomach starts digestion of protein of protein and mixes with chewed, swallowed food with digestive juices. . small intestine is where digestion is completed
2.1	The heart	.The heart is a muscle found in the chest that pumps blood through the vessels to all part of the body. . Blood supplied the body with food and oxygen. .The heart, blood vessels and blood makes up the circulatory system.
2.2	Describe the major function of the heart	. It pumps oxygenated blood to the body through the arteries.
2.3	Heart beat and pulse	. The heart beat occurs when the heart squeezes to pump blood to the body. .The beating of the heart causes pulse which we felt in our skin.
2.4	Investigating pulse rate	. Pulse rate is the rate at which your heart beat per minute. Pulse rate increases as heart beat faster.

WEEK	TOPIC	TOPIC DETAILS
3.1	The lungs and breathing	. Lungs are the organs that we use for drawing air containing oxygen into the body and expelling air containing carbon dioxide out of the body.
3.2	Investigating breathing	. Our lungs get bigger and then fill with air when we breathe in. . Our lungs get smaller and push out air when we breathe out.
3.3	The digestive system	Kidneys are the organs that remove waste products from the body.
3.4	What kidneys does	Kidneys are the organs that remove waste products from the body.
4.1	When kidneys don't work	. Kidneys are bean shaped pair of organs found at the back of the body, below the ribs.
4.2	what does the brain do?	The brain controls all functions of the body. . Cerebrum is the largest part of the brain, it has many groove and bumps. It controls our thinking, senses, memory and language. . The cerebellum is found behind and below the cerebrum .It controls movement.
4.3	Describe main regions of the brain and their functions.	. The cerebellum is found behind and below the cerebrum .It controls movement. . Brain stem is found at the base of the brain. It controls heartbeat and body temperature. . Cerebrum controls our thinking , senses , memory and language.
4.4	Check your progress.	. To review the learning for this unit.
5.1	Reversible and Irreversible changes Investigating reversible and reversible changes	. Physical changes to materials can be reversed (can go back to it original form) , but chemical changes to materials cannot be reversed (cannot go back to it original form). .Heat makes substance change . Some changes are reversible for example, ice, melting and refreezing. . Some changes are irreversible, for example, burning a match. . Some changes cause a new substance to form(irreversible changes).
5.2	mixing and separating solids	. Mixture is made from different substances that are not chemically combined together.

WEEK	TOPIC	TOPIC DETAILS
5.3	Investigate how mixtures of solid can be separated(scientific inquiries)	. Mixture of solid can be separated by sorting and sieving.
5.4	Investigate how mixtures of solid can be separated(scientific inquiries)	. test ideas based on scientific knowledge and understanding . . make relevant observations and comparisons.
6.1	ACROSS THE BOARD TEST	REVISION
7.1	Separating insoluble substance Investigate separating mixture by filtering	. Soluble substance dissolved in liquids and insoluble substances do not dissolve in liquids. .filtering separates insoluble solids from liquids in mixtures. . In a filter small particles pass through tiny holes, but bigger particles cannot pass through.
7.2	Solution	. Solution is made up of a solute dissolved in a solvent. . solute is a solid that dissolves in a solvent . . Solvent is the liquid in which solid dissolves.
7.3	mixture and pure substances	. Mixtures are made of particles of different substance. . A pure substance contains particles of itself alone, not particles of other substance .
7.4	MID TERM BREAK	MID TERM BREAK
8.1	How we can make solids dissolve faster	. Stirring a solution makes solid solute dissolve faster.
8.2	Investigating dissolving	. Heating a solution makes solid solutes dissolve faster.
8.3	how grain size affect dissolving	. The grain size of a solute affect the rate at which it dissolve in a liquid.
8.4	Investigate how grain size affect dissolving	. Small grains dissolve faster than large grains. . Review learning for this unit.
9.1	Food chains in a local habitat	Habitat is a home in the environment for plant and animals. examples are woodland ,Savannah, desert etc.
9.2	Describing a habitat	. Food chain describes the feeding relationship between plants and animals.
9.3	food chain begin with plants	. Plants are producers because they make their own food.
9.4	describe how plants make food	.Plants use sunlight and carbon dioxide to manufacture their food. . Animals are consumers because they eat plants.

WEEK	TOPIC	TOPIC DETAILS
10.1	Consumers in food chain	.Animals is consumers because they eat plants. .Animals eaten by predators is called their prey.
10.2	food chain in different habitat	. Predators are consumers that eat other animal. . preys are consumers eaten by predators. . Different habitat contains different plants and animals, resulting in many different food chains.
10.3	Deforestation	Deforestations happen when people destroy forest by cutting down trees.
10.4	Investigate effect of deforestation (scientific inquiries)	. Deforestation has negative effect on the environment as it causes global warming
11.1	ACROSS THE BOARD TEST	REVISION
12.1	Air pollution	Air pollution is caused by exhaust fumes and gases from coal and oil that is burnt in factories and factories. . It has negative effect on the environment.
12.2	Acid rain	. Acid rain is caused by sulfur dioxide dissolving in rain water to form an acid . Acid rain damages plants, animals living in water.
12.3	Investigating acid rain.	. Acid rain damages plants, animals living in water.
12.4	Investigate acid rain (scientific inquiries)	. Test Ideas bases on scientific knowledge and understanding. . Make relevant observations and comparisons
13.1	Recycling	.Recycling is when something is not thrown away but processed into something that can be used again. . Recycling has positive effect on our environment.
13.2	Reusing	.Recycling and reusing are ways of taking care of our environment
13.3	making compost (scientific inquiries)	. Test ideas based on scientific understanding and knowledge . Make relevant observations and comparisons.
13.4	Making compost (scientific inquiries)	Analysis and presentation of results using bar graphs.

WEEK	TOPIC	TOPIC DETAILS
14.1	Take care of your environment	we can take care of our environment by conserving energy and water.
14.2	Investigate ways of taking care of our environment(scientific inquiries)	.To make relevant observation and comparisons.
14.3	Investigate ways of taking care of our environment(scientific inquiries)	Analysis and presentation of results
14.4	Check your progress	. To review learning for this unit.
15.1	Language review	. To Review the scientific words used in this unit.
15.2	check your progress(corrections)	. make corrections
15.3	OPEN DAY	

SCIENCE SCHEME OF WORK

YEAR 6 - TERM 2

WEEK	TOPIC	TOPIC DETAILS
1.1	Conductors and Insulators	.Metals conducts electricity and are called Conductors. .other materials do not conduct electricity and are called insulators.
1.2	does water conducts electricity?	Pure water does not conduct electricity. . Water with salt dissolved in it does not conduct electricity.
1.3	how different metals conduct electricity	.All metals conduct electricity but some metals conduct better than others.
1.4	choosing the right materials for electrical appliances	.Electrical appliances are made up of materials that conduct electricity and insulating materials that do not conduct electricity. . Knowing about electrical conductors and insulators help us to use electricity safely.
2.1	Circuit symbols	.Circuit symbols represent the components of an electric circuit. . A circuit diagram shows where components are found in a circuit.
2.2	changing the number of components	. Removing or adding bulbs from a circuit causes them to glow more or less brightly. .Adding or removing cells used in a circuit causes bulbs to glow more or less brightly .
2.3	adding different components	. Different components need different strengths of electricity to work. .changing the number of cells affects how well components work.
2.4	investigate adding different components(scientific inquiries)	. predict and test ideas based on scientific knowledge and understanding. . make relevant observations and comparisons.

WEEK	TOPIC	TOPIC DETAILS
3.1	Length and thickness of wire in a circuit	. Changing the length or thickness of wire in a circuit will change the strength of current.
3.2	Investigate length and thickness of wire in a circuit	. predict and test ideas based on scientific knowledge and understanding. . make relevant observations and comparisons.
3.3	How scientists invented batteries?	. Scientists have combined evidence from observation from observation and measurement with creative thinking to suggest new ideas and explanations for batteries and electricity.
3.4	check your progress	. To review learning for this unit
4.1	ACROSS THE BOARD TEST	REVISION
5.1	Caring for the environment	. Humans have positive and negative effect on the environment e.g. loss of species, protection of habitat.
5.2	Investigate negative effect humans can have on the environment	pollution of water, air or land and littering are the negative effects human have effects on the environment.
5.3	Greenhouse effect	Greenhouse is a naturally occurring, essential process that warms the earth surface.
5.4	check your progress	. To review learning for this unit
6.1	Mass and Weight	.Mass is the amount of matter in an object. . Weight is the amount of earth of force that pulls objects towards the earth.
6.2	Relationship between mass and weight	We measure mass in kilogram and weight in newtons.
6.3	Distinguish between mass measuring in kilogram and weight measuring in newton.	. We use force meter to measure force and beam balance to measure mass.
6.4	SCIENTIFIC INQUIRIES	.Predict and test ideas based on scientific knowledge and understanding
7.1	How forces act?	Forces act in different directions.
7.2	Investigate how forces act in pairs using force diagrams.	Forces act in pairs. Each force in a force pair acts in opposite direction to the other. Forces diagrams show the direction and size of forces.

WEEK	TOPIC	TOPIC DETAILS
7.3	MID TERM BREAK	MID TERM BREAK
8.1	Balanced unbalanced forces and	. When both forces on an object are the same size, the forces are balanced.
8.2	investigate balance and unbalanced forces	. When one force on an object is bigger than the opposite force, the forces are unbalanced. When two opposite forces are not balanced, there is a net force.
8.3	investigate balance and unbalanced forces(scientific inquiries)	. Predict and test ideas based on scientific knowledge and understanding . Make relevant observations and comparisons
8.4	investigate balance and unbalanced forces(scientific inquiries)	. Analysis and presentation of results using bar graph
9.1	Effects of forces	.Forces changes the movement of an object by speeding it up or slowing it down.
9.2	Investigate what forces do	. Forces change the direction movement of an object. . Forces change the shape of an object.
9.3	investigate what forces do (scientific inquiries)	. predict and test ideas based on scientific knowledge and understanding. . make relevant observations and comparisons
10.1	MID YEAR ASSESSMENT	REVISION
11.1	forces and energy	. A force is that which causes an object to move or stop the direction of a moving object. . energy is the ability to do work
11.2	When work is done.	moving objects have energy . Work is the amount of energy transferred to an object to make it move.
11.3	How much is done	the amount of work done depend on the amount of force exerted and the distance it moves.
11.4	investigate work done.	. predict and test ideas based on scientific knowledge and understanding.

WEEK	TOPIC	TOPIC DETAILS
12.1	friction	.Friction is a force that stops things sliding past each other. .Friction slows down moving objects. . Friction can be useful as it helps objects to grip on surfaces.
12.2	Investigating friction	Friction can be a problem as it makes objects wear and get hot. .Frictional force is bigger over large surfaces than small surfaces.
12.3	Air resistance and drag	Air resistance is a force caused by air pushing against moving objects. Air resistance is bigger over large surfaces. A parachute use air resistance to work
12.4	investigate how parachute works(scientific inquiries)	To predict and test ideas based on scientific knowledge and understanding.
13.1	Check your progress	.To review leaning for this unit
13.2	revision	

SCIENCE SCHEME OF WORK

YEAR 6 - TERM 3

WEEK	TOPIC	TOPIC DETAILS