

ALSAGOFF ARAB SCHOOL
ACQUIRED KNOWLEDGE DEPARTMENT
PRIMARY 5 SCIENCE SCHEME OF WORK 2016

Term 1: Monday 4 January to Friday 11 March

School Holidays/Functions:

Week # 0	New Year's Day	Friday 1 January
Week # 1	First Day of School	Monday 4 January
Week # 3	Maulid Celebrations	Saturday 23 January
Week # 4	Maulid (In-Lieu)	Monday 25 January
Week # 5	Haflah Celebrations	Saturday 6 February
Week # 6	Chinese New Year	Monday 8 February & Tuesday 9 February
Between Term 1 & 2		Saturday 12 March - Sunday 20 March

*Week(s)	Chapter/Topic	Instructional Objectives	Period
1, 2, 3 & 4	<u>Chapter 1 (Cycles):</u> Reproduction in Plants	<ul style="list-style-type: none"> · State why living things reproduce. · Identify the male and female parts of a flower. · Recognise that pollination is the transfer of pollen grains from the anther to the stigma of a flower. · Identify the agents that help in pollination. · Describe the processes involved in fertilisation. · Describe what happens after fertilisation has taken place. · Recognise that dispersal is the scattering of fruits or seeds. · State the reason why the young does not grow near its parents. · Identify the dispersal methods of fruits and seeds by a plant. · Show an understanding of the different dispersal methods of fruits and seeds. · State the conditions necessary for germination to take place. · Trace the stages of growth of a plant from seed to young plant. · Recognise that non-flowering plants grow from spores. · Recognise that characteristics are passed on from parent plants to their young during reproduction. <p><i>Chapter Assessment</i></p>	17
5, 6 & 7	<u>Chapter 2 (Cycles):</u> Reproduction in Humans	<ul style="list-style-type: none"> · Recognise that sexual reproduction occurs between a male and a female. · Identify the male reproductive parts and cells in humans. · Identify the female reproductive parts and cells in humans. · Relate the formation of a new life to the fertilisation of an egg in the female by a sperm from the male. · Describe what happens to an egg after fertilisation. · Recognise that characteristics are passed on from parents to their young during reproduction. · List examples of characteristics that are passed on from parents to their young. · Compare the reproductive processes in humans and flowering plants. <p><i>Chapter Assessment</i></p>	10
8 & 9	Review	Review chapter to allow pupils to recall and prepare for Continual Assessment 1.	10
10	Continual Assessment 1	Administer pen and paper assessment. Go through answers and ensure that corrections are done.	5

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Term 2: Monday 21 March to Friday 27 May

School Holidays/Functions:

Week # 7 Labour Day (In-lieu)

Monday 2 May

Between Semesters 1 & 2

Saturday 28 May to 12 June

*Week(s)	Chapter/Topic	Instructional Objectives	Period
1, 2 & 3	<u>Chapter 3 (Cycles):</u> Water & Changes of State	<ul style="list-style-type: none"> · List examples of water in each of its three states. · Recognise that a change in state can occur when water gains or loses heat. · State the freezing point of water, melting point of ice and boiling point of water. · Describe the changes of states that take place during freezing, melting, condensation, boiling and evaporation. · Identify the similarities and differences between boiling and evaporation. · Investigate the factors that affect the rate of evaporation. <p><i>Chapter Assessment</i></p>	11
4, 5 & 6	<u>Chapter 4 (Cycles):</u> The Water Cycle	<ul style="list-style-type: none"> · Describe the water cycle with the help of a diagram. · Relate evaporation and condensation to the roles they play in the water cycle. · Recognise that the water cycle ensures a constant supply of fresh water on Earth. · Identify the roles of water in the functions carried out by different human body systems. · Identify the roles of water in germination and other life processes of plants. · Recognise that water is precious. · Show an understanding of the effects of water pollution. · Recognise that water conservation is using water carefully and not wasting it. · Identify ways to conserve water. <p><i>Chapter Assessment</i></p>	12
7	MYE: Paper 1, Oral & LC only		-
8	Revision	Review chapters to allow pupils to recall and prepare for Mid-Year Examination.	5
9 & 10	Mid-Year Written Examination		-

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Term 3: Monday 13 June to Friday 25 June, Monday 11 July to Friday 2 September

School Holidays/Functions:

Last 10 days of Ramadhan	Saturday 25 June to 10 July
Week # Youth Day (In-lieu)	Monday 4 July
Hari Raya Puasa	Wednesday 6 July
Week # 6 Family Day (In-lieu)	Monday 1 August
Week # 7 National Day	Tuesday 9 August & Wednesday 10 August
Week # 10 Teachers' Day	Friday 2 September

*Week(s)	Chapter/Topic	Instructional Objectives	Period
1	<u>Chapter 1 (Systems):</u> The Plant Transport System	<ul style="list-style-type: none"> · State the function of the plant transport system. · Identify the parts of the plant transport system. · Describe the functions of the parts of the plant transport system. · List the substances that are transported by the plant transport system. · Trace the path that substances take as they are transported by the plant transport system. · Observe how a stem transports water from the roots to the other parts of a plant. <p><i>Chapter Assessment</i></p>	5
2 & 3	<u>Chapter 2 (Systems):</u> Air & the Respiratory System	<ul style="list-style-type: none"> · Recognise that air is a mixture of gases such as nitrogen, carbon dioxide, oxygen, water vapour and other gases. · State the function of the human respiratory system. · Recognise that breathing is the process of taking air into the body and giving it out. · Identify the organs of the human respiratory system. · Describe the functions of the parts of the human respiratory system. · Describe how humans take in and give out air. · Describe how fish take in and give out air. · Describe how plants take in and give out air. · Compare how humans, fish and plants take in and give out air. <p><i>Chapter Assessment</i></p>	10
4 & 5	<u>Chapter 3 (Systems):</u> The Circulatory System	<ul style="list-style-type: none"> · State the function of the human circulatory system. · Identify the organs of the human circulatory system. · Describe the functions of the parts of the human circulatory system. · List the substances that are transported by the human circulatory system. · Trace the flow of blood and the path that substances take as they are transported by the human circulatory system. · Recognise that the human respiratory and digestive systems work together with the human circulatory system to carry out life processes. <p><i>Chapter Assessment</i></p>	10

*Week(s)	Chapter/Topic	Instructional Objectives	Period
6 & 7	<u>Chapter 3 (Systems):</u> The Unit of Life	<ul style="list-style-type: none"> · Recognise that a cell is the smallest unit of life. · List some organisms that are made up of only one cell. · Recognise the relationship between a cell, a tissue and an organ. · Recognise that the cells in an organism differ in shape, size and function. · Identify the parts of a plant cell and an animal cell. · Describe the functions of the parts of a plant cell and an animal cell. · State the similarities and differences between a plant cell and an animal cell. <p><i>Chapter Assessment</i></p>	10
8 & 9	Review	Review chapters to allow pupils to recall and prepare for Mid-Year Examination.	10
10	Continual Assessment 2		5

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Term 4: Monday 12 September to Friday 18 November

School Holidays/Functions:

Week # 1 Hari Raya Haji

Monday 12 September & Tuesday 13 September

Week # 4 Children's Day

Friday 7 October

*Week(s)	Chapter/Topic	Instructional Objectives	Period
1 & 2	<u>Chapter 5 (Systems):</u> Electrical Systems	<ul style="list-style-type: none"> · Recognise that an electric circuit is an electrical system because it is made up of components that work together, where each has its own function. · Identify the different components of an electric circuit and relate them to their function(s). · Differentiate between a closed circuit and an open circuit. · Observe that an electric current flows only when an electric circuit is closed. · Recognise that an electrical conductor is a material that allows electric current to flow through it. · Recognise that an electrical insulator is a material that does not allow electric current to flow through it. · Classify different materials as electrical conductors or insulators. · Draw circuit diagrams using the symbols of electrical components, such as a battery, wire, switch and bulb. · Construct simple electric circuits based on circuit diagrams. <p><i>Chapter Assessment</i></p>	10
3 & 4	<u>Chapter 6 (Systems):</u> Using Electricity	<ul style="list-style-type: none"> · Recognise that a series connection of batteries involves connecting the positive terminal of one battery to the negative terminal of another battery. · Investigate how the number of batteries in an electric circuit can affect the brightness of a bulb. · Recognise that a series connection of bulbs involves connecting the bulbs one after another. · Investigate how the number of bulbs in an electric circuit can affect their brightness. · Recognise that a parallel connection of bulbs involves connecting the bulbs such that an electric current flows along separate paths to each bulb. · Investigate how the arrangement of bulbs in an electric circuit can affect their brightness. · Investigate which arrangement of bulbs in an electric circuit allows the bulbs to work independently of one another. · List the factors that affect the brightness of a bulb in an electric circuit. · Recognise the need to conserve electricity. · List ways in which one can help to conserve electricity. · Recognise that electricity can cause harm if not used with care. · List ways in which one can use electricity safely. <p><i>Chapter Assessment</i></p>	10
5 & 6	Review	Review chapters to allow pupils to recall and prepare for the End-of-Year Assessment.	10
7 & 8	End-of-Year Assessment	Administer pen and paper assessment.	-
9 & 10	Post-Examination Activities		-