

SCIENCES (PHYSICS) MYP TERM 2 YEAR 7

TOPICS	OBJECTIVES	AREAS OF INTERCATION	ASSESSMENT CRITERIA
<p>Unit: Solar systems and beyond</p> <p>Key Questions:</p> <ol style="list-style-type: none"> 1. Why do we have days, nights and years? 2. Why does the shape of the Moon seem to change? 3. Why is summer and winter different? 4. What is the solar system? 5. What is beyond our solar system? 	<p>(A) One World Give examples of science and scientific applications and describe how these could affect people, societies and the environment.</p> <p>(B) Communication in Science Present scientific information in appropriate formats (such as, laboratory reports, experimental accounts, explanations, essays, expositions, audio-visual presentations) with guidance, and become familiar with the system used in the school to acknowledge sources. Provide scientific information using appropriate modes of communication: oral, written, visual representation (formulae, graphs, tables, diagrams) with guidance.</p> <p>(C) Knowledge and Understanding Explain and apply simple scientific information to solve problems in familiar and, with guidance, in unfamiliar situations. Identify basic scientific components found in information from different sources (Internet, newspaper articles, television, scientific texts and publications) and be able to give an opinion justified by their knowledge and understanding of sciences .</p> <p>(D) Scientific Inquiry Ask questions of the type: What will happen if? Why does this happen when? and become familiar with making predictions and providing simple reasoning (“If I do this, then this will happen ...”)</p> <p>(E) Processing Data Organise and transform data into simple numerical and/or diagrammatic forms, including mathematical calculations and/or visual representations (tables, graphs and charts), with guidance</p> <p>(F)Attitudes in Science • show respect for themselves and others, and deal responsibly with the living and non-living environment.</p>	<p>Approaches to Learning</p> <ol style="list-style-type: none"> 1. Students will use mind maps and spider diagrams to give an overview and summary of the topic. 2. Use color coded diagrams to describe the solar system. 3. Students will use rhymes to learn the order of the planets in our solar system. <p>Environments</p> <ol style="list-style-type: none"> 1. Our Solar System has a star (Sun) and 9 planets (one is the Earth) that orbits around it. Satellites (moons) orbit the planets. There are also asteroids (small lumps of rock) in our Solar System. 2. Most of the asteroids are found between Mars and Jupiter in the Asteroid belt. 3. Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto are the nine named planets. 4. The first 4 planets make up the inner planets and are made of rock. The next 5 planets are the outer planets and the first 4 are made mostly from gas. 5. All the planets are non-luminous and only reflect sunlight. The planets look brighter than stars, because they are much closer to the Earth. 5. Our Solar System is part of the galaxy called the Milky Way. 6. There are millions of galaxies containing millions of stars that make up the Universe. 7. A pattern of stars are called a constellation and are named after gods or animals. 	<p>MYP Languages Assessment Criteria</p> <p>A)One world /6 B)Communication in science /6 C)Knowledge and D)Understanding /6 E)Scientific Inquiry /6 F)Processing Data /6 G)Attitudes in Science /6</p> <p>Each is worth 6 marks (total 36)</p> <p>In this unit criteria A, B will be formally assessed:-</p> <p>Solar system project (A, B) February 2009</p>

SCIENCES (CHEMISTRY) MYP TERM 2 YEAR 7

TOPICS	OBJECTIVES	AREAS OF INTERCATION	ASSESSMENT CRITERIA
<p>Unit: Acids and Alkalis</p> <p>Key Questions:</p> <p>1. Are household acids dangerous or useful?</p> <p>2. Can I taste laboratory acids?</p> <p>3. How can I find out if a solution or product is an acid or an alkali?</p> <p>4. What can I use to determine if the solution is a weak or strong acid or alkali?</p> <p>5. What can I use to neutralise acidic or alkaline solutions?</p>	<p>A) One World: Understand that science is part of the world they live in by giving examples and commenting on ways in which science affects life, society and the world.</p> <p>B) Communication in Science Demonstrate understanding of basic scientific language by using appropriate scientific terminology, units of measurement and symbolic representation. Present scientific information in appropriate formats (such as, laboratory reports, experimental accounts, explanations, essays, expositions, audio-visual presentations) with guidance, and become familiar with the system used in the school to acknowledge sources</p> <p>C) Knowledge and Understanding Explain and apply simple scientific information to solve problems in familiar and, with guidance, in unfamiliar situations. Identify basic scientific components, relationships and patterns, both in experimental data and ideas</p> <p>D) Scientific inquiry 1. Recognize, with guidance, the problem or research question to be tested by a scientific investigation.</p> <p>E) Processing Data Collect and record data using appropriate units of Measurement. With guidance interpret data by identifying trends, patterns and Relationships, with guidance. Draw appropriate conclusions based on the data, with guidance.</p> <p>F) Attitudes in Science Carry out scientific investigations, with guidance, using materials and techniques safely and skillfully</p>	<p>Approaches to Learning</p> <p>1. Understand the pH scale to group substances as acidic, neutral or alkaline.</p> <p>2. Observe the colour change of Universal indicator to determine pH value of products.</p> <p>3. Observe the colour change of Universal indicator to determine pH value of products.</p> <p>Environments What impact would an acid spill have on the environment?</p>	<p>MYP Languages Assessment Criteria</p> <p>A)One world /6 B)Communication in science /6 C)Knowledge and D)Understanding /6 E)Scientific Inquiry /6 F)Processing Data /6 G)Attitudes in Science /6</p> <p>Each is worth 6 marks (total 36)</p> <p>In this unit D,E,F will be formally assessed:- Lab practical March</p>

SCIENCES (BIOLOGY) MYP TERM 2 YEAR 7

TOPICS	OBJECTIVES	AREAS OF INTERCATION	ASSESSMENT CRITERIA
<p>Unit: Environment and feeding relationships</p> <p>Key Questions:</p> <ol style="list-style-type: none"> 1. What is a habitat? 2. Which factors determines the conditions in a habitat (environment)? 3. How are plants and animals adapted for their habitat? 4. How do changes in their environment affect organisms? 5. How are animals and plants adapted for feeding? 6. How else can animals feed? 7. What are food chains and food webs? 8. How can we tell what eats what? 9. How do plants protect themselves from being eaten? 	<p><u>A) One World</u></p> <p>Make comments on the ways in which science is applied and used to solve local and global Problems.</p> <p>Give examples of science and scientific applications and describe how these could affect people, societies and the environment.</p> <p><u>B) Communication in Science</u></p> <p>Present scientific information in appropriate formats (such as, laboratory reports, experimental accounts, explanations, essays, expositions, audio-visual presentations) with guidance, and become familiar with the system used in the school to acknowledge sources. Recognize the need for honesty when collecting and processing data and information, and when acknowledging sources.</p> <p><u>C) Knowledge and Understanding</u></p> <p>Identify basic scientific components identify basic scientific components, relationships and patterns, both in experimental data and ideas, relationships and patterns, both in experimental data and ideas</p> <p><u>D) Scientific Inquiry</u></p> <p>Recognize, with guidance, the problem or research question to be tested by a scientific investigation.</p>	<p>Approaches to Learning</p> <p>Students should be able to formulate a research question on habitat and then do research about it Students should be able to collect information of different animals and plants and how they are adapted to the desert environment. Students should be able to draw a food web in a group and explain it to the class. Students should be able to recognize the relationship between and environment and the organism</p> <p><u>Environments</u></p> <p>Students should know how organisms adapt to the environment; Students must understand that the environment and organisms have an affect on each other; Organisms can change an environment and environment can change organisms. Students should know why animals adapt to their environment and how a change in the environment can have an affect on their numbers.</p>	<p>MYP Languages Assessment Criteria</p> <p>A)One world /6</p> <p>B)Communication in science /6</p> <p>C)Knowledge and D)Understanding /6</p> <p>E)Scientific Inquiry /6</p> <p>F)Processing Data /6</p> <p>G)Attitudes in Science /6</p> <p>Each is worth 6 marks (total 36)</p> <p>In this unit criteria C will be formally assessed:- An end of unit test</p>