



## SCIENCE FLYERS LEVEL

### I. INSTRUCTIONAL RESOURCES:

1. Textbook: Essential Science 5, Santillana, Richmond Publishing.
2. Online resources: National Geographic Kids

### II. COURSE PREREQUISITE

Students who have passed Movers 2 level can study all subjects required in Flyers. In cases of students with great consistency of English skills, they may request and be assessed for promotion to the next level. They will need to be assessed as part of their application process to the school to enable the correct level of placement.

All entry decisions will be provided by the IP management team.

### III. COURSE DESCRIPTION

The 40 minute class period will be used to present the concepts in the text books through a variety of interesting and exciting teaching methods.

Science 5 goes into even more detailed study of living things by cellular composition. The research of science testing data is expanded to the use time, speed, temperature and quantities. Data is organized by ratios, proportions and conversions. The results are summarized by mean, mode, median, probability and chance. Students conduct more lab experiments and use more independent thinking to make conclusions based on observable evidence.

Tomorrow's international science student is critical in the global movement of sharing the earth resources between many countries. The safe development of human, plant and animal needs is critical, along with the earth's resources. The earth's population is steadily increasing and many people, as well as animals and plants, do not have adequate food and water to meet the increasing growth pace. Therefore, the next generation of science students, that become working adults must meet this challenge to sustain a good quality of life for all of earth's inhabitants.

### IV. COURSE GOALS

On completion of Flyers level the students will:

1. Have learnt and understood the meaning of several hundred new words appropriate to the level of English and Science they are studying,
2. Have learnt the scientific principles (and vocabulary) appropriate to the level of science they are studying. These would include: the human body, the environment, physical properties of materials, life cycle of plants and animals, history of Science...

3. Have utilized this newly learned vocabulary in constructing correct sentences and phrases,
4. Have participated in a variety of interactive scientific activities in and out of class, all conducted in the English Language.

## V. COURSE OBJECTIVES

At the end of the course, students will achieve higher level of understanding pertaining to the following objectives from AERO Curriculum Framework

<b>LS1.4A</b>	Sort plants by observable characteristics Compare life cycles of different plants maturity, Reproduction including germination, Observe, identify and record external features of animals
<b>LS1.4B</b>	Basic needs of living things Students will classify different living things using similar and different characteristics, describe why organisms belong to each group
<b>LS1.8A</b>	Describe organization of multicellular organisms from cells to tissues to organs to system to organisms
<b>LS1.8B</b>	Classify organisms into the currently recognized kingdoms according to characteristics that they share Sort organisms with similar characteristics into groups based on internal and external structures
<b>LS4.4A</b>	Students will predict life stages of plants to compare organisms
<b>LS5.4A</b>	Give examples of how changes in the environment (drought, cold) have caused some plants and animals to die or move to new locations
<b>PS1.8A</b>	Students will explain that all matter is composed of minute particles called atoms
<b>PS1.4C</b>	Students will classify objects by properties, such as, mass, volume, density
<b>PS2.4A</b>	Students will describe how properties of certain materials change when specific actions are applied Content and Language Development – Comprehension – BB/Blackboard Activity – Students Differentiate between a physical change and a chemical change
<b>ESS2.4A</b>	Students will explain how earth events (abruptly and over time) can bring about changes in Earth's surface: landforms, ocean floor, rock features or climate Students describe land features (including hills, plateaus, mountains, valleys, depressions and coastal plains) by using pictures
<b>ESS4.4A</b>	All students will gain an understanding of the structure, dynamics and geophysical systems of the earth.
<b>ESS5.8A</b>	Identify the reservoirs of Earth's water cycle (e.g., ocean, ice caps/glaciers, atmosphere, lakes, rivers, biosphere, groundwater) locally and globally,
<b>ESS6.4A</b>	Students will demonstrate an understanding of the relationship between Earth's atmospheric properties and processes and its weather and climate Graph recorded temperature data to show monthly
<b>ESS6.4B</b>	Describe how temperature and precipitation determine climatic zones
<b>ESS7.4A</b>	Students will understand that Earth systems have a variety of cycles through which energy and matter continually flow.
<b>HS1.4A</b>	Identify ways scientists work together to solve problems (e.g., share results, teamwork, investigate).

<b>SI1.A</b>	Record data in bar graphs.
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## VI. COURSE REQUIREMENTS

### 1. Assessments

To measure student progress made in academic learning, this course will include two achievement tests, midterm (30%) and final (50%), accounting for the assigned percentage of the overall course grades. The remaining percentages (20%) of student grades will come from class performance (e.g., activity book and attendance), behavior and attitude.

The summary of assessment is the following:

Midterm test.....30%

Final Test..... 50%

Others..... (20%): attendance, classroom participation includes quizzes, projects and exercises which will cover text material assigned and presentation of knowledge and ideas.

### 2. Special Class Activities

Students will also be assigned research projects to develop scientific thinking. They visit the E-library to research information and report back to class with short paragraph conclusion. They record the research in their own handwriting, then learn data entry by computer keyboard and printout their research report submission to their teacher. This is a key skill for students to learn to use, as the future demands the use of hi-tech devices and knowledge.

## VII. GRADING PROCEDURE

Students' progress in this subject will be evaluated and measured in accordance with the standard procedures of the school and applied by every teacher teaching the subject. The following tabulation will be followed for the whole academic year.

<b>1. Achievement Test</b>	<b>80%</b>
• Midterm Test	30%
• Final Test	50%
<b>2. Other Assessment</b>	<b>20%</b>
• Attendance	
• Classroom participation	
• Attitude and Behavior	
• Activity Book	
<b>Special Activities</b>	
• Online research	
• Quizzes	
• Writing	

## VIII. GRADING SCALE

This scale is operated to translate letter grades to numerical values and vice versa when computing and calculating student final grades.

<b>LETTER MARKS</b>	<b>RANGE</b>	<b>PERCENTAGES</b>
A	9-10	90-100%
B	8- 8.9	80-89%
C	6.5- 7.9	65-79%
D	5- 6.4	50-64%
F	0-4.9	0-49%

## **IX. POLICIES**

### **1. Foreign Teacher's Responsibilities**

- All foreign teachers are expected to provide rigorous and high level of standards for what an accomplished teacher should know and advocates significant duty and responsibilities to achieve goals and objectives of the subject. Accomplished teachers are dedicated to making knowledge accessible to all students.
- All foreign teachers should be committed, dedicated, responsible mentors to their students learning process and progress. Ready in their everyday teaching of the lesson with well-equipped teaching materials and complete lesson plan. Follow the sequence of the syllabus and apply the modern approach of teaching using technology.
- All foreign teachers should attend scheduled trainings and seminars for reflective professional development that links to the new research program and projects of the organization for the new discovery approach and techniques of teaching. Accomplished teachers should maintain the professionalism at all times.
- All foreign teachers are expected to write and express explicit comments with fair judgment based on their class standing and abilities without any prejudices and partiality and write correct marks on their report card of each semester and other related significant contribution to the progress of every student.

### **2. Student Responsibilities**

- All students must respect teachers and other students at all times. This includes their responsibility in knowing the school rules and regulations. Students are responsible for the consequences of their behavior. Students should know that a classroom is the extension of their house and they need to practice harmonious relationship with one another.
- All students must conduct themselves in an orderly manner, always walk, speak clearly, and respect the activities of others around them. Keep decisions that have positive results. Use appropriate language at all times.
- All students must carry necessary classroom materials each time. Personal necessities request permission to be out of seats or classroom.
- All students are productive and potential participants, they need to listen carefully and attentively to the teacher. Be a responsible for helping to make the classroom atmosphere conducive to learning.
- Let the teacher recognize the student before speaking out.
- Failures to abide the rules above are sanction to minimal penalty duly approved by the teacher and the students from the start of the school year

## X. COURSE SCHEDULE

### Flyers

MONTH	TOPIC/LESSON	CONTENT OF INSTRUCTION	TIME FRAME	NOTES
August	Living Things Worksheet 1	Students look at the photo and answer their Teacher's questions Students classify living and non-living things at home	A period in a week	
	Cells The Organization of Living Things	Students examine the mixture of milk and plain yogurt Students answer the questions	A period in a week	
	Worksheet 2	Students look at the atlas Teacher explains Students do the exercises	A period in a week	
	Kingdoms Worksheet 3	Students make the tree diagram	A period in a week	
September	Plants Worksheet 5	Students complete word map	A period in a week	
	Plant Nutrition Worksheet 4	Students write and apply knowledge to vocabulary exercises	A period in a week	
	Plant Reproduction Worksheet 6	Match words in box with photos and complete the table	A period in a week	
	Project 1, 2	Complete Tables of Projects 1 and 2	A period in a week	
October	Review and Midterm Test	Review unit 1 - 2	A period in a week	
	Invertebrates Worksheet 7	Student complete the Vocabulary Exercises	A period in a week	
	Invertebrate Groups Worksheet 8	Students complete the Exercises – tick the True, order of information and investigate and find the Names	A period in a week	
	Arthropods Worksheet 9	Students complete exercise of Classify Invertebrate Groups	A period in a week	
	Vertebrates Worksheet 12	Students will complete the Identify and Vocabulary exercises	A period in a week	
November	Birds Worksheet 10	Students complete writing exercises 1 and 2	A period in a week	
	Reptiles	Content and language development - comprehension	A period in a week	
	Fish and amphibians	Read Worksheet Parts 1 and	A period	

	Worksheet 11	2, then write answers to Parts 3 and 4	in a week	
	Worksheet 13	Read Worksheet, Look at Photos and Write Answers	A period in a week	
December	Review and Final Term Test		A period in a week	
	Matter	Content and Language Development – Comprehension – BB/Blackboard Activity – Students answer True of False	A period in a week	
	School Report		A period in a week	
	The Properties of Matter Worksheet 17	Complete the Word Map and Vocabulary Box - Match	A period in a week	
	Changes in Matter Worksheet 20	Complete the multiple-choice and write-in exercises	A period in a week	
January	Changes of state	Content and Language Development – Comprehension – BB/Blackboard Activity – Students answer Multiple Choice exercises	A period in a week	
	Worksheet 19, 21	Students will complete writing exercises on both worksheets	A period in a week	
	The Atmosphere	Content and Language Development – Comprehension – BB/Blackboard Activity – Students answer True of False	A period in a week	
	The Hydrosphere Worksheet 22	Complete Diagram and Vocabulary	A period in a week	
February	The Geosphers Worksheet 24	Students will Look and Write, then Complete each Sentence	A period in a week	
	Volcanoes, Earthquakes and Weathering	Content and Language Development – Comprehension – BB/Blackboard Activity – Students will Match the half-answers	A period in a week	
March	Worksheet 23	Students will answer the open-end questions	A period in a week	
	Review and Midterm Test		A period in a week	
	The landscape	Content and Language Development – Comprehension –	A period in a week	

		BB/Blackboard Activity – Students will finish the sentences		
	Worksheet 25	Students will answer the open-end questions	A period in a week	
	Mountains and plains in Spain Worksheet 26	Students will complete the Differences and Vocabulary exercises	A period in a week	
April	Rivers Worksheet 28	Students will Match, Answer True/False and Name or Write the most important river in their home town or city	A period in a week	
	Climate Worksheet 29	Students compare landscapes Students discuss about the zone they live in and the climate in Vietnam	A period in a week	
	Vegetation and Fauna Worksheet 30	Teacher explains all parks have rules to protect nature Students form groups to make posters about plants and animals in Vietnam	A period in a week	
	Worksheet 31	Students complete data about the temperature in the area Students analyze bar graphs	A period in a week	
May	Review and Final Test		A period in a week	
	School Report		A period in a week	
	Project 3	Students complete data about the temperature and precipitation in the area Students analyze bar graphs	A period in a week	
	Project 4	Students do experiment with vinegar and bicarbonate Students look and write about what is inside the bottle and the balloon	A period in a week	