

For Teacher

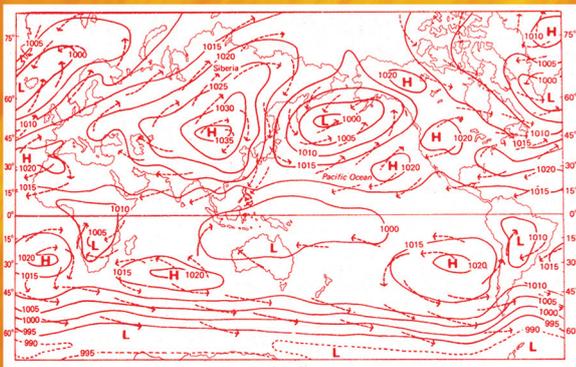
Grade 7 Science

# Earth and Space

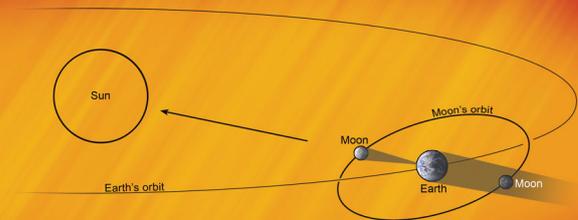
## MODULE 1 The Philippine Environment



## MODULE 2 Solar Energy and the Atmosphere



## MODULE 3 Seasons and Eclipses





## Earth and Space

### Overview

What do we want the students to learn about “Earth and Space” in Grade 7? We want students to know that whatever they observe in the environment, whether these are things or processes, are related to the location of our country on the planet. In other words, different countries have different environments because they are located in different places. For example, some countries are located near the equator while others are near the poles. Will these countries have the same climate? Obviously not! Some countries are located near bodies of water while others are surrounded by land. Which countries are more likely to experience typhoons? Some countries are located near trenches while others are not. Which countries are more likely to be hit by earthquakes? The location of a certain place will determine what we see and what happens in the environment.

There are three modules in this quarter: Module 1 is about the Philippine Environment, Module 2 is about Solar Energy and the Atmosphere, and Module 3 is on Seasons and Eclipses. The concepts and skills are presented in an integrated manner not just within the science disciplines (e.g., Life Science, Chemistry, Physics, and Earth/Environmental Sciences) but also whenever possible, across learning areas such as *Araling Panlipunan*, Mathematics, Health, Technology and Livelihood Education, and *Edukasyon sa Pagpapakatao*.

An integrated approach to teaching and learning will help students recognize the relevance of the science topics to real life. The environment is where we get the things we need and use to survive and enjoy life. What happens around also affects us, directly or indirectly, sometimes in disastrous proportions. Knowledge of what these events are and how they occur will help us prepare and cope with their negative effects or even prevent them from happening. Students will realize that many environmental phenomena are interrelated and complex in nature, so understanding that “everything is connected to everything else” will also help us get ready for unexpected events.

In each module, the first lesson starts with activities that will help students recall prerequisite concepts and skills. The understanding of these concepts and skills will be deepened through inquiry-based activities such as analyzing information on the globe, in maps, tables, graphs, and/or illustrations and discovering on their own, relationships and connections from the data gathered. The concepts learned in these modules will prepare

students to tackle more abstract science concepts about Earth and space in higher grade levels.

There is a pre/post test for each module using selected-response and constructed-response questions. The result of the pre-test should guide you in focusing the lesson so that concepts already understood may already be applied to the current lesson without spending much time reviewing them. The questions in the text and pre/post test may also be used as exemplars when formulating your own test items.