

Curriculum Description: Grade 1 Science

Welcome to IW Academy "Discovering Science", an innovative and interactive Grade 1 course designed to spark young learners' curiosity in the world of science. Our program introduces foundational scientific concepts, encouraging students to observe, question, experiment, and explore their physical world. Throughout this course, students will delve into a variety of exciting topics including:

1. "Nature's Palette" - Here, students will gain a basic understanding of the fascinating world of plants, animals, and their habitats. They'll learn about the life cycle of different living creatures and the role they play in our environment.
2. "All About Earth" – Our young learners will get to understand the various features of our planet, including landforms, water bodies, and the concept of day and night.
3. "Exploring the Universe" – This module will open a window to the mysteries of the sky as students learn about the sun, moon, stars, and basic space concepts.
4. "Force and Motion" – In this unit, students will get their first taste of physics, learning about different types of matter and the basics of how things move.

This interactive science course will engage young learners with hands-on experiments, stimulating activities, and fascinating visuals, reinforcing their learning in a fun and practical way. Through a blend of e-learning instruction, interactive learning experiences, gamifications, and continuous assessment, students will develop skills of scientific inquiry, problem-solving, critical thinking, and logical reasoning.

IW Academy Grade 1 Science curriculum is not just about acquiring knowledge; it's about nurturing curiosity, fostering a love for learning, and shaping scientific thinkers of the future. So, let's embark on this exciting journey of discovery together!

In order to teach the skills in this subject, the course uses a variety of teaching techniques to insure the mastery of the mentioned skills. In addition, there will be a focus on the correct applications of the mentioned skills and acquired knowledge.

The various teaching techniques will encompass: video narration, AI, micro-learning, video lectures, advanced graphics and animations, interactive exercises, games, interactive explanations, various evaluation methods, and internet exams.

Below are highlights of the curriculum content, curriculum chapters, and science skills that are covered in the course.

#	Chapter	Skills
1	Chapter One: Humans	• Specifying the main human body organs and their functions (head, arm, neck...etc.) • Specifying the basic needs for humans (nutrition, water, air...etc.)

		Understanding the healthy behaviors and unhealthy behaviors
2	Chapter Two: Plants	- Specifying plant parts and their functions (roots, stem, leaves...etc.) - Specifying the edible parts of a plant and providing examples - Specifying what plants require to grow (water, air...etc.)
3	Chapter Three: Animals	- Specifying animals parts and their functions (head, arms, etc) - Specifying the basic needs of animals (nutrition, shelter...etc.)
4	Chapter Four: Habitats of Living Organisms	- Classifying living organisms and non-living organisms - Specifying the needs of living organisms - Listing the components of an environment - Defining the polar region and its components - Defining the desert and its components - Defining the aquatic environment and its components - Classifying water as freshwater or saltwater, - Defining a food chain - Defining producers - Defining consumers - Classifying living organisms based on their nutrition as either carnivores or herbivores
5	Chapter Five: Matter in Our Lives	- Defining matter - classifying materials as either natural or manmade - specifying the uses of natural materials (cotton, wood, etc.) - specifying the uses of manmade materials (paper, plastic, etc.) - specifying the properties of materials (hardness, texture, thickness, etc.) - classifying materials based on their water absorbance as either water absorbent materials or waterproof materials - classifying materials according to their properties , types, and uses
6	Chapter Six: Force & Motion	- Classifying an object's motion as either static or dynamic - defining motion and position

		• specifying the types of motion (circular, swinging, etc.) • classifying force as either a pushing force or a pulling force • specifying the effect of force on an object's motion (stopping, moving, speeding, slowing, changing direction)
7	Chapter Seven: Magnets	• Defining a magnet • classifying materials as either magnetic or non magnetic • providing examples of magnetic materials (metal, etc.) • providing examples of non-magnetic materials (wood, plastic, etc.) • clarifying one of the shapes of a magnet (horseshoe) • specifying the poles of a magnet (North pole, South pole) • defining the attractive force and its center • specifying the magnetic poles that attract (opposite poles) • specifying the magnetic poles that repel (same poles)
8	Chapter Eight: The Earth & Sun	• Classifying the components of the earth (land and water) • listing the names of rocks and their uses (basalt, granite, etc.) • clarifying the importance of rocks in forming sand dunes • listing the uses and importance of water • mentioning several ways of water conservation • mentioning the importance of water conservation • defining the sun and its importance • clarifying the reason for the alternation of night and day • mentioning the four seasons and their characteristics • describing how weather changes when seasons change • comparing temperatures of each season

