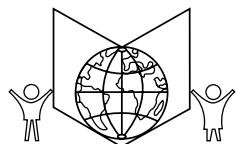


## THE INTERNATIONAL SCHOOL Science Curriculum



The International School science curriculum is extensive and specially designed to teach age-appropriate concepts which build from one year to the next. The curriculum challenges students to understand the world around them, and prepares them for more advanced science studies in middle school and beyond.

As with all subjects at The International School, this comprehensive science curriculum is taught in the target language. The focus is on science and the

language is simply the medium to explain, discuss & explore. Children in the older grades are also taught key science vocabulary in English to facilitate their transition into English middle school science programs. The result is increased fluency in both the subject matter and in the target language.

The following chart lays out the main science topics covered in each grade. Topics are taught through a combination of hands-on experiments, field trips, readings, projects, and science biographies.

	Ecology	Biology	Physics / Astronomy	Chemistry	Earth Science / Geology
<b>Pre-school</b>	Animal habitats.	Human body: basic needs, senses, body parts, life cycle. Plants, plant parts.	Properties of water, air & light. Physical characteristics of objects.	Three states of matter.	Seasons & weather.
<b>Kinder</b>	Conservation. Animals & their needs.	Plants & plant growth. 5 senses, caring for your body.	Intro to magnetism.		Seasons & weather characteristics.
<b>1st grade</b>	Habitats. Food chain. Environmental changes. Basic animal classification. Plants and how they grow.	Basic human body systems. Health & nutrition. Illness prevention programs & basic hygiene.	Intro to Electricity. Intro to the Solar System & the sun as source of energy.	Three states of matter (cont'd). Intro to atoms. Measurement; length, volume and temperature.	Earth features inside & out. Geographical features of the earth's surface. Oceans & undersea life.
<b>2nd grade</b>	Animal groups. Insects: roles in nature, lifestyles, life cycles	Animal life cycles. Basic reproduction in plants & animals. Human body cells, digestion, nutrition.	Magnetism: poles, orienteering. Simple machines, friction. Properties of heat, light & sound.		Seasonal cycles & the earth's orbit. Water cycle, air & weather.
<b>3rd grade</b>	Animal classification. Ecosystems. Balance of nature. Environmental threats.	Body systems: muscular, skeletal, nervous, vision, hearing	Properties of light, optics & sound. Astronomy - Big Bang, galaxies, gravity, space exploration.		
<b>4th grade</b>		In depth circulatory & respiratory systems (parts, functions).	Electricity types, circuits, conductors & insulators. Electromagnets, using electricity safely. Energy sources.	Atoms, protons, etc. Properties of matter. Elements. Concentration, solution.	Fossil records. Earth's layers. Formations, mountains & rocks. Weather & erosion. Meteorology, forecasting.
<b>5th grade</b>	Classification of all living things, kingdoms.	Plant & animal cells: structures & processes. Human body: puberty, endocrine & reproductive systems.	Mechanical concepts: mass, force, energy, power, heat & matter.	Atoms, molecules & compounds. Structures, motion. Periodic table. Chemical change.	

*Science as the Focus*

*Spanish/Japanese/Chinese as the medium to explain, discuss & explore*