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IB History timeline

1968 — **Founding of the IB**
Geneva - 25 October

1968 — **English and French**
IB official languages

1968 — Diploma Programme

1970 — **First official exams**
11 IB World Schools

1977 — **Heads Standing Conference**

1978 — **Standing Conference of Governments contributed to the IB**

1983 — **Spanish**
IB official language

1994 — Middle Years Programme

1996 — **Mission Statement**

1997 — Primary Years Programme

2004 — **DP Online courses**

1,000 IB World Schools

2,000 IB World Schools

2006

3,000 IB World Schools

2009 — **100,000 DP exam candidates**

4,000 IB World Schools

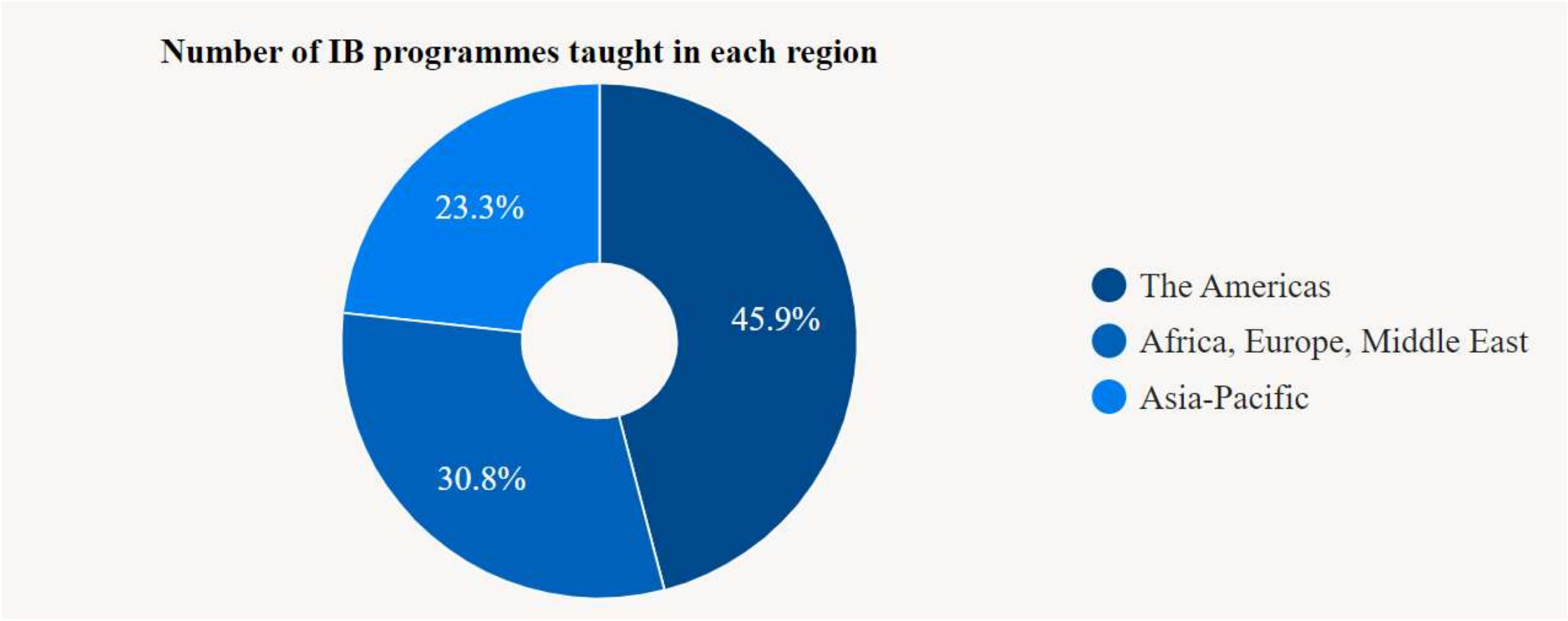
2012 — Career-related Programme

1968 69 70 71 72 73 74 75 76 77 78 79 1980 81 82 83 84 85 86 87 88 89 1990 91 92 93 94 95 96 97 98 99 2000 01 02 03 04 05 06 07 08 09 2010 11 12 13 14

Directors General

Alec Peterson	Gérard Renaud	Roger Peel		Derek Blackman	George Walker	Jeffrey Beard	Siva Kumari

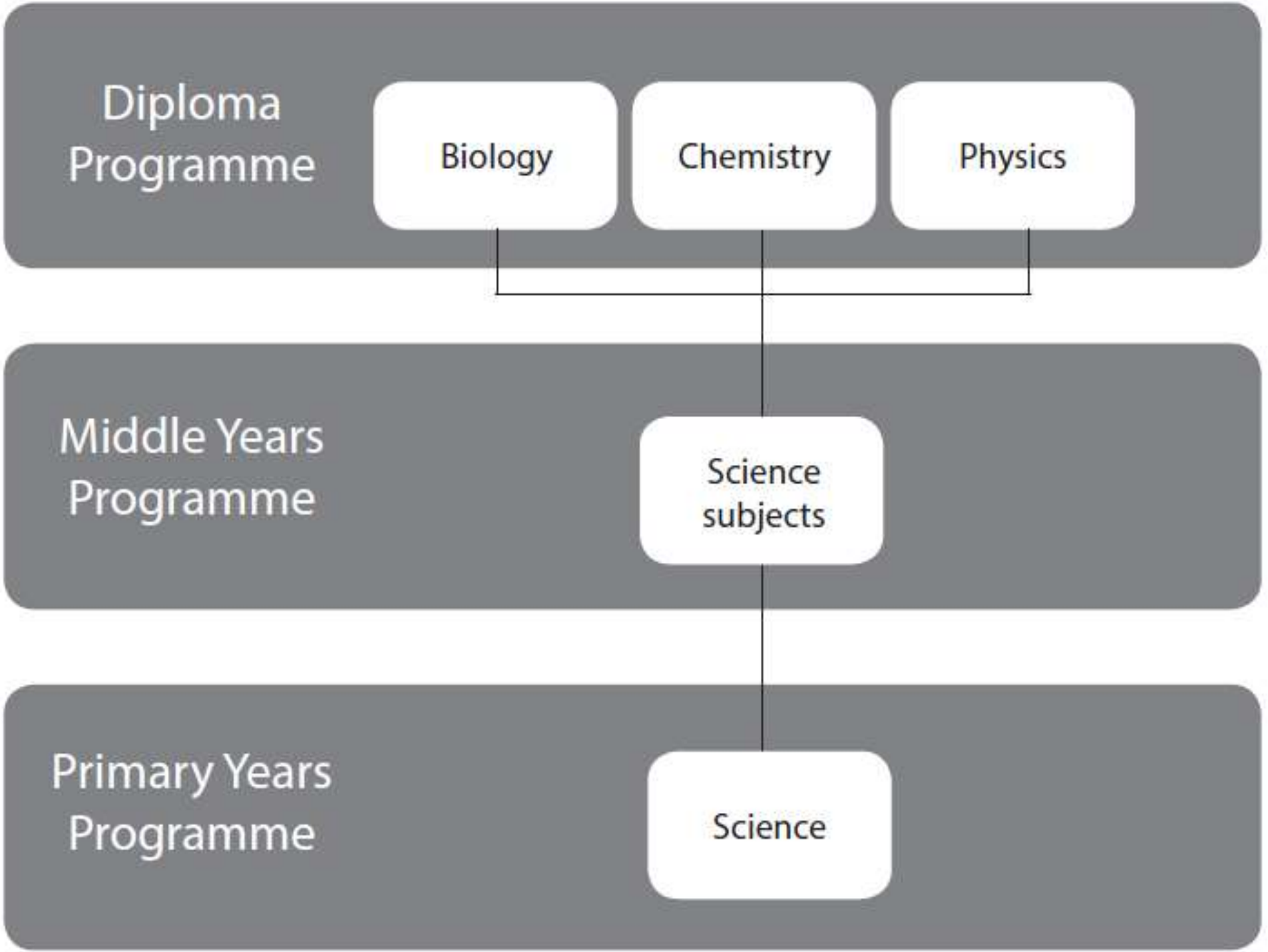
Number of IB programmes offered in different countries



Educati on Trends

- Critical Analysis
- Constructivi sm
- Transdiscipl inary
- Multiple perspectives
- Child-centered
- Student choice

Science in IB



Primary Years Programme

Science in PYP (Grade 1-5)

The science component of the PYP is characterized by concepts and skills rather than by content.

The knowledge component of science in PYP is arranged into four strands:

- Living things
- Earth and space
- Materials and matter
- Forces and energy.

HOW THE WORLD WORKS

Weather & Seasons

Subject Focus: English, Arts, Science and Technology, Social Studies

Transdisciplinary Theme
How the world works

Central Idea
Curiosity about nature can lead to discoveries.

Key Concepts
Change, Function, Causation

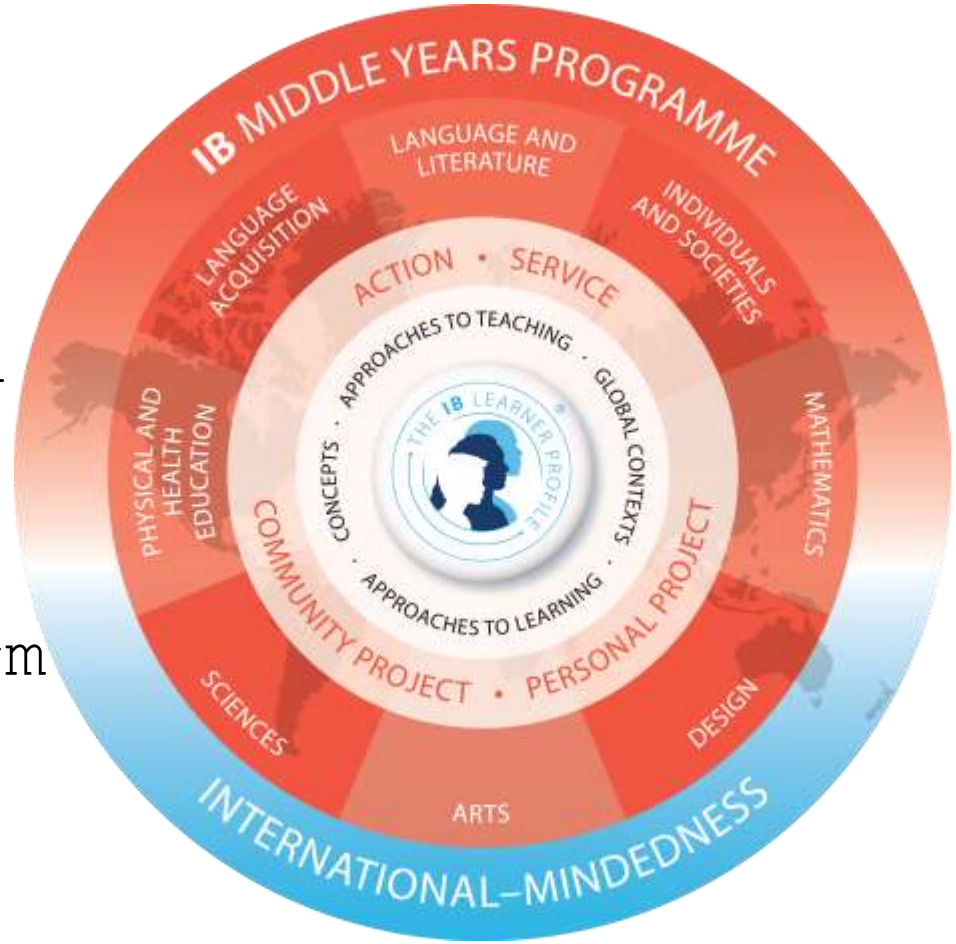
Lines of Inquiry
Observing the position of the sun and the earth helps us to understand the Earth's natural cycle.
Collecting data on weather develops understanding of weather patterns.
Weather variations impact people's lives around the world.

The Middle Years Programme

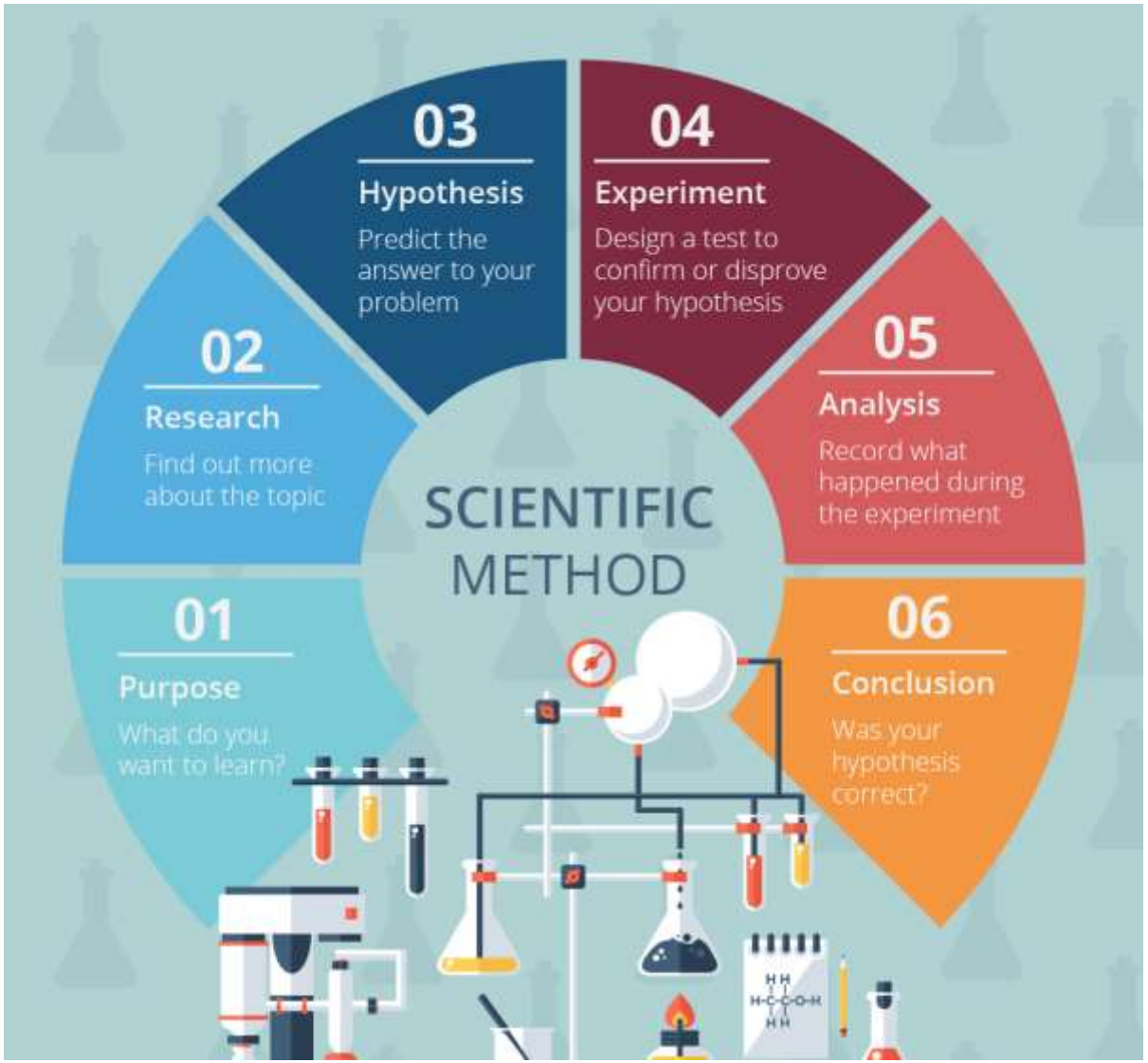
Science in MYP (Grade 6-10)

The MYP sciences group aims to encourage and enable students to:

- Understand and appreciate science and its implications
- Cultivate analytical, inquiring and flexible minds that pose questions, solve problems, construct explanations and judge arguments
- Develop skills to design and perform investigations, evaluate evidence and reach conclusions
- Apply language skills and knowledge in a variety of real-life contexts
- Develop sensitivity towards the living and non-living environments



Science in MYP



The Diploma Programme

Science in DP (Grade 11-12)

Group 4 Subjects :

- Physics
- Chemistry
- Biology

Science from Grade 1 - 12

GRADES 1-6

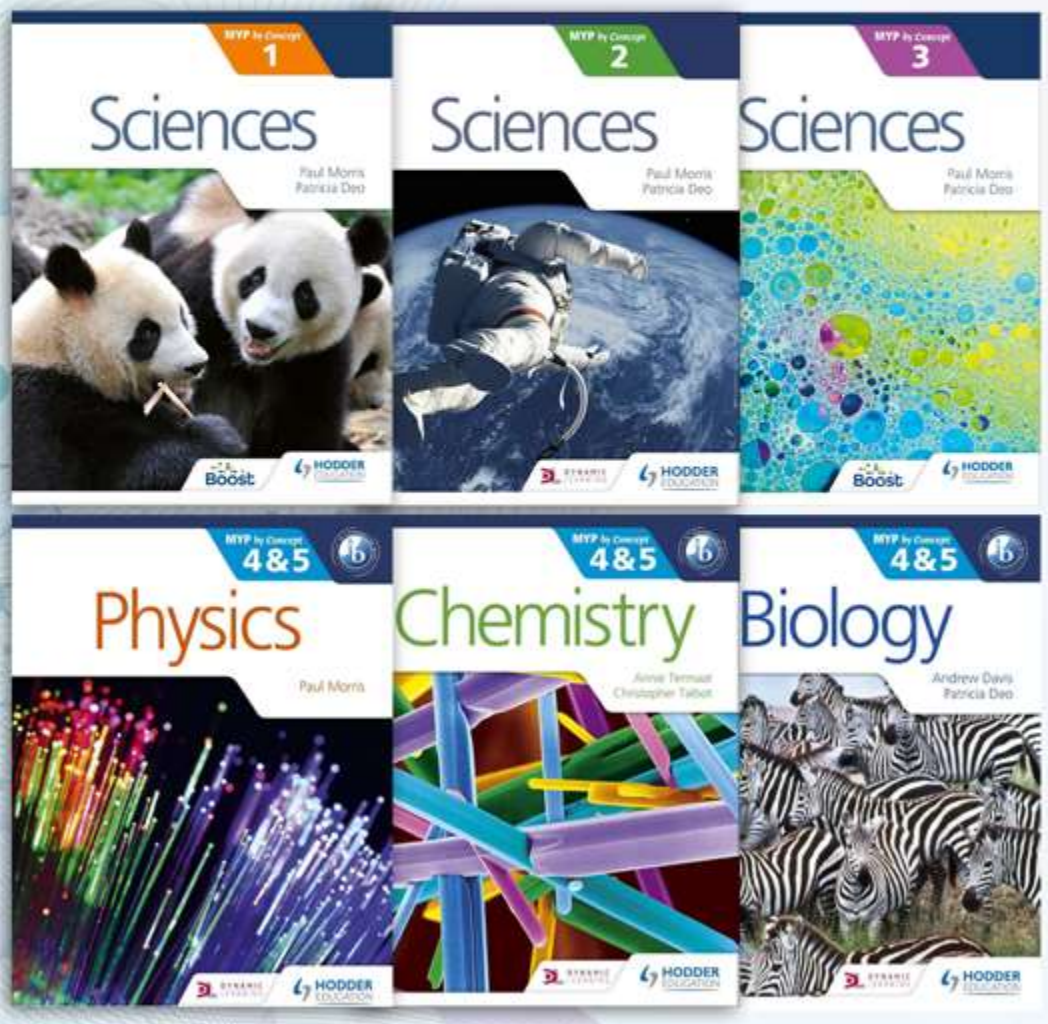
GRADES 7-10

GRADES 11-12

Science from Grade 1 - 12

GRADES 1-6

GRADES 7-10



GRADES 11-12

Science Covering Grades 1 – 12, British Curriculum

Grades 11-12

Pearson

PHYSICS
CHEMISTRY
BIOLOGY

CENGAGE Learning

SCIENCE
PHYSICS
CHEMISTRY
BIOLOGY

Grades 7-10

Grades 1-6

macmillan education

max science

Science Covering Grades 1 – 12, British Curriculum

Grades 11-12

Pearson

PHYSICS
CHEMISTRY
BIOLOGY

Grades 7-10

HODDER EDUCATION

SCIENCES
PHYSICS
CHEMISTRY
BIOLOGY

Grades 1-6

macmillan education

max science


Thank you for your attention

Topic list for Integrated science

- Atoms (atomic structure and electron configuration)
- Bonding (word and chemical reactions and formulas; acids, bases and pH)
- Cells (tissues, organs and systems; cell division; reproduction)
- Electromagnetism (magnetism, magnetic fields; electric circuits)
- Forces and energy (motion, motion graphs, Newton's laws; energy transfer and transformation)
- Fuels (combustion)
- Interactions between organisms (food chains and webs)
- Matter (particles and kinetic theory)
- Metabolism (digestion, gas exchange)

Topic list for Physics (Grade 9-10)

- Forces and energy (measurement in science; states and properties of matter, kinetic theory, density; forces and effects of forces; forces and motion, speed, motion graphs, Newton's laws; pressure; work and power, efficiency; gravity and gravitational fields; energy sources and resources, fuels and environmental impact; energy transfer and transformation, conservation of energy)
- Electromagnetism (magnetism, electric and magnetic fields; static electricity; electromagnetic forces and induction, AC and DC; current, voltage, power, generation and transmission of electricity; electric circuits)
- Astrophysics (the solar system, planets and satellites, the Big Bang theory)
- Heat, light and sound (thermal physics; heat transfer, condensation and evaporation)
- Waves (longitudinal and transverse waves, sound waves;

Topic list for Chemistry (Grade 9-10)

- Periodic table (metals and non-metals; transition metals, noble gases, trends, periods, groups)
- International Union of Pure and Applied Chemistry (IUPAC naming and classification of: alkanes, alkenes, alcohols, carboxylic acids and esters; structural formulas)
- The atmosphere (characteristics of gases; atmospheric composition, testing and treatment; extraction, emission and environmental implications)
- Matter (states and properties of matter; particle/kinetic theory, diffusion; atomic structure [including isotopes]; electron configuration and valency)
- Pure and impure substances (types of mixtures [solutions, oils, alloys, emulsions]; separation techniques, including: filtration, distillation [including crude oil], chromatography)
- Bonding (structure and bonding, properties, chemical formulas, chemical reactions and the conservation of mass; balancing equations, the mole concept and chemical calculations; reaction kinetics [rates, and factors affecting rates/collision theory]; equilibria/reversible reactions;

Topic list for Biology (Grade 9-10)

- Cells (tissues, organs, systems, structure and function; factors affecting human health; physiology; vaccination)
- Organisms (habitat, ecosystems, interdependency, unity and diversity in life forms; energy transfer and cycles [including nutrient, carbon, nitrogen]; classification)
- Processes (photosynthesis, cell respiration, aerobic and anaerobic, word and chemical equations)
- Metabolism (nutrition, digestion, biochemistry and enzymes; movement and transport, diffusion; osmosis; gas exchange; circulation, transpiration and translocation; homeostasis)
- Evolution (life cycles, natural selection; cell division, mitosis, meiosis; reproduction; biodiversity; inheritance and variation, DNA and genetics)
- Interactions with environment (tropism, senses, nervous system, receptors and hormones) Interactions between organisms (pathogens/parasites, predator/prey, food chains and webs; competition, speciation and extinction)
- Human interactions with environments (human influences, habitat change or destruction, pollution/conservation; overexploitation, mitigation of adverse effects)

DP Chemistry Syllabus outline

Chemistry is an experimental science that combines academic study with the acquisition of practical and investigational skills.

Higher level (240 hours)

- Internal assessment (individual investigation): 20%
- External assessment: 80%

Standard level (150 hours)

- Internal assessment (individual investigation): 20%
- External assessment: 80%

DP Physics Syllabus outline

Physics is the most fundamental of the experimental sciences, as it seeks to explain the universe itself from the very smallest particles to the vast distances between galaxies.

Higher level (240 hours)

- Internal assessment (individual investigation): 20%
- External assessment: 80%

Standard level (150 hours)

- Internal assessment (individual investigation): 20%
- External assessment: 80%

DP Biology Syllabus outline

Biologists investigate the living world at all levels using many different approaches and techniques.

Higher level (240 hours)

- Internal assessment (individual investigation): 20%
- External assessment: 80%

Standard level (150 hours)

- Internal assessment (individual investigation): 20%
- External assessment: 80%