## 2022-2023 Sciences Subject Group Overview

MYP Year	Subject Group	Unit Title	Hours	Key Concept	Related concept(s)	Global Context	Statement of Inquiry	Objectives	ATL Skills	Content
1	Science	Matter Chemistry	15	Relationships	Patterns	Identities & Relationships	Explore patterns and relationships of matter by being able to identify, compare and contrast.	Aiii, Dii	Organization, Communication	6.5A, 6.5B, 6.5C, 6.6A, 6.6B
1	Science	Energy	15	Change	Energy, Movement, Transformation	Identities & Relationships	Changes in energy through transformation and movement shape our personal identities and help us develop positive self-esteem.	Aii,Dii	Communication, Thinking	6.8A, 6.9C, 6.9A, 6.9B
1	Science	Force, Motion and Speed	15	Relationships	Consequences Movement	Scientific and Technical Innovations	Movement is the consequence of change because of inequalities and differences experienced.	Aii, Cii	Collaboration, Communication	6.8B, 6.8C, 6.8D

1	Science	Force and Motion- Simple Machines and STEM	15	Change	Transformation, Consequences, Movement	Scientific and Technical Innovation	Changes, movement and transformation of the geological plates and layers create transformations of earth, which creates consequences for human activity.	Ai, Dii	Communication, Organization	6.10A, 6.10B, 6.10C, 6.10D
2	Science	Cells and Analogies	17	Systems	Function, Patterns, Models	Scientific & Technical Innovation	How does scientific inquiry help our understanding	Aii, Cii	Thinking	7.12C, 4A, 8A-D
2	Science	Great Diseases of the World	17	Relationships	Consequences	Identities and Relationships	Relationships exist causing health consequences that are far- reaching.	Aii, Aiii	Research	7.14ABC
2	Science	Heredity & Genetics Studies	13	Relationships	Environment, Function, Interaction	Personal & Cultural Expression	Systems and institutions, based on different functions, interact to create the environment.	Aiii,Biii, Diii	Social, self- management, research	7.14ABC

2	Science	Biodiversity of the Texas Eco- Regions	30	Relationships	Environment, Form, Function	Globalization and Sustainability	Environments shape the structure and function of species in different Texas ecoregions resulting in adaptations.	Aii, iii	Research	7.5AB, 7.10ABC, 7.11ABC, 7.12A, 7.13A
2	Science	Designing a Watershed	13	Change	Consequences, energy, environment, models, movement.	Orientation in Space and Time	Modeling the movement of energy in an environment can demonstrate real world changes and consequences.	Aiii, Diii	Research, thinking	7.8ABC,
2	Science	Life in Our Universe	3	Relationships	Balance	Orientation in space and time	The balance that exists in our universe is necessary for certain relationships to occur.	Aii, Cv	Communication, thinking	7.9AB

3	Science	Atoms 3D!	25	Relationships	Form, models, patterns	Identities and Relationships	Identities and relationships can be described using models that can demonstrate patterns and forms.	A - i & ii	Communication, organization, transfer	8.5ABC
3	Science	Chemistry	20	Change	Evidence, form, transformation	Scientific and technical innovation	Change can be evident when transformation of form creates a new product.	B - iv, C - i,ii	Communication, thinking	8.5DE
3	Science	Physics	30	Relationships	Consequences, Interactions	Scientific and technical innovation	Relationships within systems rely on the consequences of interactions.	Biv, Ci,ii	Communication	8.6ABC

3	Science	Sun, Earth, and Moon	15	Systems	Models, Movement, Patterns	Orientation in Time and Space	Systems can model how patterns of movement can influence our experiences of interactions	A — ii C — v	Communication, thinking	8.7ABC
3	Science	The Universe	15	Change	Evidence, Movement	Orientation in Time and Space	Evidence of movement and change can be used to help us understand the scale of space and time.	A – ii, iii D – I, ii, iii, iv	Communication	8.8ABC
3	Science	Earth Science	15	Change	Consequences, Form	Identities and relationships	The consequences of transitions can cause changes of form.	B – iii C – ii D - ii	Communication, thinking	8.9ABC

3	Science	Ecosystem	15	Systems	Consequences, interactions	Globalization and sustainability	The interactions of humans in the environment can cause consequences withing a system.	A — iii D — iii	Research, thinking	8.11ABC
3	Science	Weather	5	Systems	Energy, movement, patterns	Globalization and sustainability	Human impact on the environment can generate new patterns and systems of energy.	A − i C − i, ii	Communication, thinking	8.10ABC

3	Science (IPC)	Matter and Its Makeup	26	Systems	Patterns Form	Identities and Relationships	Patterns and forms with systems can for the identities and the relationships within those systems.	Bi, ii, iv	Inquiring designing	IPC 6.A IPC 6.B IPC 6.C IPC 6.D
3	Science (IPC)	Changes in Matter	24	Change	Interaction Evidence	Scientific and technical innovation	Evidence produced from interactions can be observed as change.	Ci, ii	Research	IPC 7.A IPC 7.B IPC 7.C IPC 7.D IPC 7.E IPC 7.F
3	Science (IPC)	Solutions	10	Relationships	Consequences Form	Scientific and technical innovation	Consequences can be predicted from the type of relationships within a system.	Cii	Communication Thinking	IPC 6.E IPC 6.F
3	Science (IPC)	Heat and Energy	12	Change	Energy Interactions	Globalization and sustainability	Interactions in energy can result in changes in the environment.	Aiii Dii	Self-Management Research	IPC 5.A IPC 5.B IPC 5.D IPC 5.E IPC 5.H IPC 5.I
	Science (IPC)	Electricity and magnetism	12	Systems	Interactions Function	Scientific and technical innovation	A substance's properties can be transformed by changing the interaction with another substance through movement.	Bii, iii	Research Thinking	IPC 5.C IPC 5.F

3	Science (IPC)	Force and Motion	24	Systems	Interactions Consequences	Orientation in time and space	Interactions between systems can result in consequences.	Ai, ii	Research Thinking	IPC 4.A IPC 4.B IPC 4.C IPC 4.D IPC 4.E IPC 4.F IPC 4.G
3	Science (IPC)	Waves	12	Relationship	Energy Movement	Scientific and technical innovation	Energy and its transfer depend on the relationship of its movement in a system.	Ai, ii	Thinking	IPC 5.G