

## James Hogg Middle School - Subject Group Overview - 2018-2019

### Sciences

MYP Year	Unit Title	Duration (hrs)	Key Concept	Related Concept(s)	Global Context	Statement of Inquiry	MYP Subject Group Objectives	Approaches to Learning Skills	Content (topic, knowledge, skills)
1	Energy Introduction	4	Change	Energy, movement, transformation	Identities & Relationships	Energy changes through transition, movement, and transformation.	Aiii, Dii	Communication, thinking	1,8A,9C
1	It's getting Hot,Hot, Hot	6	Change	Balance, energy, Movement	Orientation in space and time	Change becomes balanced through the migration and movement of energy.	Bii,Di	Social, Thinking	9A,B, 1A
1	Classifying Matter	16	Systems	Evidence, patterns	Personal & Cultural Expression	Systems are models based on patterns and interactions.	Aiii, Bii	Self-management, Research	5A
1	Chemical Change and Density	6	Change	Transformation, Evidence	Globalization and sustainability	Evidence of transformation is used to identify change and the knowledge is applied to urban planning and infrastructure.	Aiii, Dii	Communication, thinking	1A, 4A, 3A,C, 5D, 6B

1	Force, Motion, and speed	6	Change	Consequences, energy, movement	Fairness & development	Movement is the consequence of change because of the inequality of energy.	Aii, Cii	Thinking	2C, 4A, 8A-D
1	Geology	8	Change	Transformation, consequences	Scientific and technical innovation	Change and transformation in the environment have consequences on human activity.	Ci	Research	10A,B,C,D
1	Organism & Ecosystem	12	Relationship	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	2E, 12A,B,C,D,E,F
2	Great Diseases	16	Relationship	Consequences	Identities & Relationships	Because relationships exist, health consequences are far-reaching.	Aii, iii	Research	6A-C, 7A,B,12B,13A,B
2	Heredity & Genetic Structures	8	Change	Patterns, Transformation	Identities & Relationships	A change in pattern results in various transformations of form.	Aii, Civ, Diii	Thinking	14A,B,C

2	Biodiversity of Texas Ecoregions	36	Relationships	Environment, form, function	Globalization and sustainability	Students will understand how environments shape the structure and function of species through a study into how species in different Texas ecoregions have adapted to life in their specific environment.	Ci,ii, Div	Research	5A-C, 7C,10A-C, 11A-C, 12A, 13A,B
3	Ecosystems	20	Systems	Consequences, Interaction	Globalization and sustainability	The interactions of humans in the environment can cause consequences within a system.	Aiii, Diii	Research, thinking	11A,B,C,D, 2D,E
3	Earth, Sun and Moon	20	Systems	Models, movement, patterns	Orientation in space and time	Models are created to explain movement and patterns within a system.	Aii, Cv	Communication, thinking	7A,B,C,2D, 3B,C
3	The Universe	22	Change	Evidence, movement	Scientific and technical innovation	Evidence of movement and change can be used to create models and systems.	Aii,iii, Di,ii,iii,iv	Communication	8A,B,C,D,E

3	The Wonders of Atmospheric Movement	10	Systems	Energy, movement, patterns	Scientific and technical innovation	The energy of a system can generate movements and patterns that create specific conditions on the earth.	Ai, Ci,ii	Communication, thinking	10A, B,C
3	Plate Tectonics	14	Change	Form, models, transformation	Scientific and technical innovation	Changes on earth lead to transformations that can ultimately form various features on earth through scientific and technical innovation use of models we can determine how these features formations continue.	Biii, Cii, Dii	Communication	9A,B,C, 10A,B,C
3	Matter Matters (chemistry intro)	6	Systems	Form, models, patterns	Scientific and technical innovation	The systems of the world consist of various models, forms and patterns all used to describe intricate details of matter.	Ai	Communication, thinking	5A,B,C

3	Chemical Reactions	10	Change	Evidence, Interaction, Transformation	Scientific and technical innovation	We use the evidence of changes in the properties of materials to explain how the interactions of different substances can lead to transformations of matter.	Biv, Ci,ii	Thinking	5D,E,F
3	Up Up and Away with Physics	25	Change	Balance, Consequences, Interaction	Scientific and technical innovation	Change aids in the balance and interactions of objects, but may also identify the consequences of that change.	Biv, Ci,ii	Social, self-management, research	6A,B,C

