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| **MYP Year:** | 1 |  **Subject Group:** | Science |

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| **Unit Title** | **Key Concept** *(1)* | **Related Concepts***(2)* | **Global Context** *(1)* | **Statement of Inquiry** *(1 + 2 + 1)* | **MYP subject-group objective(s)** | **Content**(topics, knowledge, skills) |
| Think Like A Scientist | Systems | FormFunction | Scientific and Technical Innovation(explore through patterns) | The Scientific Method allows us to investigate the form and function of patterns observed in natural systems.  | A, D | Scientific method; testable question and hypothesis;variables;Observation vs Inference; Writing Conclusions;Lab Safety |
| **ATL Skills** |
| **Category:** Communication **Cluster:** Communication **Skill Indicator:** reading, writing, and using language to gather and communicate information; **Category:** Self-management **Cluster:** Reflection **Skill Indicator:** considering the process of learning; **Category:** Self-management **Cluster:** Organization **Skill Indicator:** managing time and tasks effectively |
| Discovering Electricity | Systems | EnergyMovement | Globalization and Sustainability(explore through consumption) | Energy produced by the movement of electricity through circuitry systems can impact our decisions as consumers. | A, B | Magnetism; Electric circuits and components;Properties of systems;ElectromagnetismInsulators,conductors, and resistance;Energy Conservation |
| **ATL Skills** |
| **Category:** Social **Cluster:** Collaboration skills **Skill Indicator:** Working effectively with others **Category:** Communication **Cluster:** Communication **Skill Indicator:** Exchanging thoughts, messages, and information effectively through interaction **Category:** Thinking **Cluster:** Transfer **Skill Indicator:** Using skills and knowledge in multiple contexts |
| Nature of Light | Relationships | InteractionEnergy | Scientific and Technical Innovation | Humans use their understanding of the relationship between how light interacts with energy to impact technical innovation. | A, B,C | Light energy transformations; how light travels; transparent, translucent, and opaque; shadows; prisms and white light; waves and the electromagnetic spectrum; additive and subtractive coloring mixing; absorption, reflection, and refraction |
| **ATL Skills** |
| **Category:**  Communication **Cluster:** Communication **Skill Indicator:** Make effective summary notes for studying **Category:** Social **Cluster:** Collaboration Skills **Skill Indicator:**  listen actively to other perspective and ideas **Category:** Thinking **Cluster:** Critical Thinking **Skill Indicator:** use models and simulations to explore complex systems and issues |
| What’s the **Matter** with Chemistry? | Change | FormInteraction | Identities and Relationships | How can we identify a substance based on its characteristics? | A, D | Properties of matter, chemical and physical change, compounds, elements, mixtures, solutions |
| **ATL Skills** |
| **Category:** Thinking **Cluster:** Creative-thinking **Skill Indicator:** generate metaphors and analogies **Category:** Communication **Cluster:** Communication **Skill Indicator:** use a variety of media to communicate with a range of audiences **Category:** Self-management **Cluster:** Organization **Skill Indicator:** plan shore and long-term assignments, meet deadlines |
| Ice Cream Design Challenge | Change | InnovationForm | Scientific and Technical Innovation | How can we design a better ice cream maker. | C, D | Relationship between temperature of a substance, the average kinetic energy of the particles that make it up, the state of matter, and the thermal energy of the system. |
| **ATL Skills** |
| **Category:** Thinking **Cluster:** Transfer **Skill Indicator:** Combine Knowledge, understanding and skills to create products or solutions.  **Category:** Thinking **Cluster:** Creative Thinking **Skill Indicator:** Design improvements to existing machines, media, and technologies **Category:** Thinking **Cluster:** Critical Thinking **Skill Indicators:** interpret data, draw reasonable conclusions and generalizations, test, and revise understanding based on new information and evidence **Category:** Social **Cluster:** Collaboration Skills **Skill indicator:** Manage and resolve conflict, and work collaboratively in teams **Category:** Communication **Cluster:** Communication **Skill Indicator:** Structure information in summaries, essays, and reports |
| We study the elements periodically | Systems | ModelsPatterns | Scientific and Technical Innovation | Through systems we use models to organize and identify patterns. | A | Structure of atoms; elements; organization of the periodic table; properties of metals, nonmetals and metalloids |
| **ATL Skills** |
| **Category:**  Self-management **Cluster:** Organization **Skill Indicator:** keep and organized and logical system of information files/notebooks **Category:** thinking **Cluster:** Critical-thinking **Skill Indicator:** use models and simulations to explore complex system and issues **Category:** Thinking **Cluster:** Transfer **Skill Indicator:** use effective learning strategies |