**IBMYP Subject Overview**

**Subject Area: Life Science Course: 6th grade Life Science MYP Level: 1 Teacher(s): Forester**

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| Time **Frame**  **(Dates)** | Unit Title and Topic (\*=interdisciplinary connection; @=Action) | **MYP Objectives** | State Standards | **Key Concept** | **Related Concepts** | **Global Context** | **Statement of Inquiry** | **MYP Assessment Task**  **&**  **ATL Focus** | **MYP Criteria** | **Learner Profile Focus** |
| Sep -  Oct. | Lab Safety and Measurement:  Why are rules and units important?  \*use while grocery shopping/making projects neat | C – Processing and Evaluating | LS 1 | Systems | Interaction  Environment  Consequences | Globalization and Sustainability | Show knowledge and consequences of knowing the metric system as they interact with the environment around them, and the global connections the system provides. | Metrics At Home Project  Communication | C | Knowledgeable |
| Oct-Nov | Scientific Investigation: What’s Your Problem?  \*Help rake neighbors/family leaves so leaf pigments won’t stain landscaping | D – Inquiring and Designing | LS 1 | Change | Evidence  Transformation | Scientific and technical innovation | Evidence of transformation of a single color natural leaf as it becomes separated and changes into multiple visible natural pigments | Leaf Chromatography Lab  Critical Thinking | D | Thinkers |
| Nov - Dec | Characteristics and Needs of Living Things: Is Change a good thing?  \*When planting trees, etc., know the best locations to plant them for optimal growth. | B – Inquiring and Designing  C – Processing and Evaluating  IDU B - Synthesizing | LS 3  LS 4  LS10 | Relationships | Energy  Balance  Movement | Fairness and Development | Relationships of energy through movement of seed dispersal. Balance of life through comparing insect metamorphosis with human journeys. | Biomimicry Seed Lab,  Bean Root Direction Lab  Collaboration | B, C  IDU B | Inquirers |
| Dec - Jan | Cells: Which Model do you prefer?  <https://docs.google.com/document/d/1qdM_YHOQX2Y6SouzYKyRr_Xs0mZDwCgR76y7gdRpIhY/edit#heading=h.gjdgxs> | A – Knowing and Understanding | LS 2  LS 3  LS 5 | Systems | Models  Form  Function | Scientific and technical innovation | Systematic form and function of plant and animal cells are shown through models | Tinkercad 3-D Cell Project  Self -Management | A | Communicators |
| Jan –Feb | Genetics:  Are you my Brown- Eyed Girl?  \*Volunteer to help others who need assistance or in nursing homes | D – Reflecting on the Impacts of Science | LS 12  LS 13 | Relationships | Function  Interaction  Consequences | Identities and Relationships | Relationships between organisms shape identities, lead to interactions and consequences determined by the function of genes | Genetics Disease Presentation  Research | D | Balanced |
| Feb - March | Classification: One of a Kind! | A – Knowing and Understanding | LS 4  LS 9 | System | Evidence  Patterns | Personal and Cultural Expression | Patterns within the naming system of classifying organisms show accurate evidence of existence. | Create a Species Project  Creative Thinking | A | Risk Takers |
| April – May | Ecosystems:  Where do I belong?  \*Make a compost pile and recycle | B – Inquiring and Designing | LS 6  LS 7  LS 8  LS 9  LS 10  LS 11 | Relationships | Environment  Function  Interactions | Scientific and technical innovation | Habitats are designed dependent on the relationships within the environment for beneficial interactions between organisms for the effective function of the design. | Biome Bloxels Create a Game Project  Collaboration | B | Caring |
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**Support of Personal Project: This class will support the skills for the Personal Project by developing students’ organization, time management through long term projects, research throughout the year, computer and digital media literacy, oral presentation skills, reflection, and an understanding of which type of learning style they do best with. Students will be encouraged to be independent thinkers who think globally and outside of the normal paradigms, as well as have the ability to work successfully in collaborative groups. Students will gain experience with responding to questions that are open ended and/or have more than one correct answer.**

**Throughout the year, students will work in collaborative groups where they must create a timeline and divide the project requirements however they decide will best meet the critieria to be successful. We start the year with the bean direction lab where they are given the guidelines and all work together to gather data and results. We have independent assignments mid-year like designing a 3-d cell in tinkercad and discovering which disease they want to research and learn about, where they learn the time management skills for their own timeline. We end the year with the Bloxels Biome Game Project, where they decide within their group who will be responsible for each part of the project in order to come together in the end with creating a game of their choice that has all of the working components, including not only game creation, but also must incorporate the learning components of the correct biome, food chain, habitats, and energy pyramid curriculum included.**