



Semester 1

Semester 2

Synthetic Materials & Humans

- o whose needs are more important when choosing a material to use?
- o why do we need synthetic materials?

Global Temperature

- o how do i impact what happens to our planet?
- o how does my carbon impact compare to others?
- o why is it hard to predict the impact of climate change?

Weather Systems

- o how does the water cycle impact weather systems?
- o why is it hard to predict the weather?

Human Impact on the Environment

- o what is my impact? both positive and negative on the environment.
- o what are potential solutions i can design to reduce my impact on the environment?

Energy in Waves

- o how do waves interact with different mediums?
- o how do we use waves to communicate?

Wave Applications

- o how can wave technology improve our lives?
- o is digital or analog more accurate?

Thermal Energy

- o how can we manage thermal energy to reduce resource waste?
- o how can we save money by monitoring our thermal energy use?

Forces, Motion, & Energy

- o how does physics make problem solving predictable and reliable?

Unity of Life

- o how do patterns in the natural world suggest a common ancestry?

Diversity of Life

- o how can we use math to predict population changes and understand past human populations?

Humans & Genetics

- o how has technology impacted natural selection in humans?
- o how does the media impact genetics?

1

Student performance reflects insufficient progress towards skills and knowledge

2

Student demonstrates basic knowledge of the goal. There are no major errors/omissions, BUT there are major errors/omissions regarding the complex ideas/processes

3

Student demonstrates they have the ability to meet the standard. There are no major errors/omissions regarding the information/processes that make up the goal

4

In addition to Level 3, student demonstrates in-depth inferences and applications that go beyond the goal

Grading Scale