Nature of Science
Lesson: Models

Model: a representation of an object, a process, an event, or a system that is similar to the physical object or idea being studied
- Used to study things that are too big or too small, happen too quickly or too slowly, or are too dangerous or too expensive to study directly.

Some types of models in life science:
- Computer models
    - Examples include:
        - Magnetic resonance image (MRI)
            - Uses strong magnetic field and radio waves to produce high-resolution images of the body.
            - Diagnose any changes or damage to the body.
        - Computer tomography (CT) scan
            - Uses X-Ray images to provide a 3-D visual of the body.
            - Diagnose any changes or damages to the body.
        - Map – shows how locations are arranged in space.
            - Can be a small area, a country, or the world.
            - Used in Ecology

- Physical models
    - Examples include:
        - Artificial organs – like an artificial heart
            - Used to help the patient survive (heart) or thrive (prothesis for an arm or leg)
            - Depending on the patient and device, you might only get to use it for a certain amount of time.
        - Representation of organs or skeletal systems
            - Human Skeleton
            - Diagrams of organs