

## Grade 5 Nature of Science Terms:

- **Science** is a way of learning about the natural world.
- A **scientist** is someone who discovers new things and researches how things work.
- Scientists use skills such as observing, inferring, predicting, classifying, and making models to study the world.
- Examples of scientists:
  - **Astronomers** study stars, planets and galaxies.
  - **Botanist** specializes in plants.
  - **Epidemiologists** study the spread of diseases.
  - **Geologists** study the history of Earth.
  - **Biologists** study within the field of health, technology and the environment.
  - **Marine biologist** studies ocean plants and animals.
  - **Paleontologist** studies fossils.
  - **Ethologist** studies animal behavior
  - **Zoologists** study zoo animals.
- **Scientific investigation** usually begins with an observation. Scientists then ask questions about the observation and collect data to answer their question.
- **Scientific Method** is a process that scientists use to answer testable questions. Scientists complete experiments and use scientific methods to test their hypothesis.
- **A hypothesis** is a statement of what you think will happen in an investigation.
- The steps of the scientific method/investigation are:
  - 1. Ask Questions
  - 2. Develop a Hypothesis
  - 3. Design an Experiment
  - 4. Collect Data
  - 5. Interpret/Analyze Data
  - 6. Draw a Conclusion
  - 7. Communicate Findings with others
- **Communicating** is the sharing of ideas and results with others through written communication and oral communication.
- Scientists communicate with others in two ways by giving speeches at scientific conventions, exchanging ideas/information on the internet or publishing articles/research papers in scientific journals (scientific method).

