To: Subject Advisors, Teachers, Parents and Caregivers of NS Tech Learners

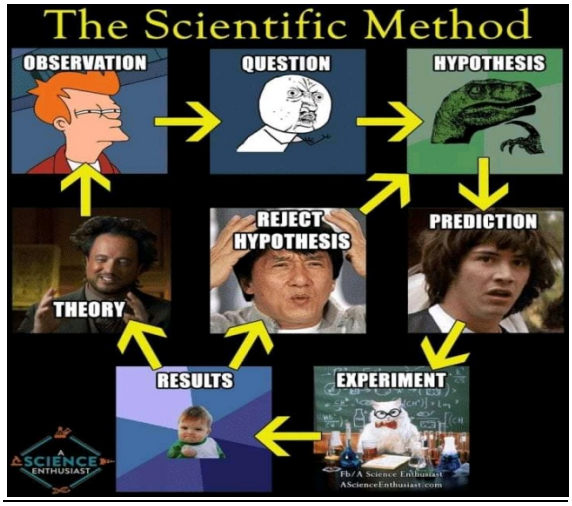
Topic: The Scientific Method

Message Objective(s):
- To explore the scientific method
-Applying the Scientific Method in developing of science and technology

The subject of science is pillared on laws, principles, theories and gathered facts. The scientific method is used in the establishing of science pillars. Many of the theories were initially founded on naturally occurring phenomena - a case in example being the famous Isaac Newton story of the falling apple and hence the discovery of the force of gravity popularly accepted as the **Law of Universal Gravitation.**

The Scientific Method is a multistep process used by Scientists around the world in exploring scientific phenomena leading to the gathering of scientific facts and data. Given below are the steps involved in the scientific method. Our learners being scientists should be acquainted with the step-by-step process:

1. **Observation** – Involves the use of our five senses to interact with naturally observable matter and energy around us
2. **Question** – What we perceive as naturally occurring leads us to question why matter and energy in space and time behave the way they do.
3. **Hypothesis** – An intelligent guess of what, why and how nature behaves the way it does. Also involves the **prediction** of what could be happening. A hypothesis can be accepted or rejected dependent on the outcome of experimental results
4. **Experimentation –** A rigorous science method of gathering facts and data. It is a measurement that is based process of acquiring data, refining and elimination of acceptable and rejectable findings.
5. **Conclusion** – Drawing up of findings into laws, theories and principles that are periodically tested and reviewed**.** These find widespread use in the building of other science cornerstones.



From: Justine Mafukidze
mafukidzej@nect.org.za

NATIONAL EDUCATION COLLABORATION TRUST

basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Read to Lead
A Reading Nation is a Leading Nation

NATIONAL READING COALITION
LET'S GET SOUTH AFRICA READING

2030 NDP