

**TOPIC 1: Practicing Science**

**Benchmarks:**

- SC.5.N.1.1 Define a Problem, Do Research, Investigate, Defend Conclusions
- SC.5.N.1.5 Recognize that Steps of the Scientific Method can vary
- SC.5.N.1.6 Understand the difference between personal interpretation and verified observations

**Objective:**

- Practice using science process skills.
- Predict possible outcomes before making observations.
- Make qualitative observations using the five senses.
- Make quantitative observations (measurements) using tools.

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- Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.
  - Compare and contrast observations made by other individuals and/or groups and seek reasons.
  - Classify objects and events on the basis of observable properties.
  - Identify examples of or distinguish among observations, predictions, and/or inferences.
- Interpret and analyze data to generate appropriate explanations based on that data

**Essential Content:**

- A. Science Process Skills
1. Predict
  2. Observe Qualitatively (using 5 senses)
    - a. color
    - b. texture
    - c. odor
    - d. shape
    - e. magnetic attraction

**Essential Content:**

1. Measure/ Observe Quantitatively (using tools)
  - a. Length
    - (1) Ruler/tape measure
      - (a) meter
      - (b) centimeter
      - (c) millimeter
    - b. Volume
      - (1) graduated cylinder
        - (a) liter
        - (b) milliliter
    - c. Mass
      - (1) balance
        - (a) gram
    - d. Weight
      - (1) Spring Scale
        - (a) Newtons
        - (b) grams
    - e. Temperature
      - (1) thermometer
        - (a) Degrees Celsius
        - (b) Degree Fahrenheit

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**Essential Content:**

- Classify (Look for patterns)
5. Infer (What do you think?)
  6. Communicate orally and in writing

Be sure to embed all Nature of Science Benchmarks throughout all topics.

ETO Elementary Science Scope and Sequence  
Grade: 5<sup>th</sup>



Suggested Activity(s)/ Journal Entry(s):	Suggested Activity(s)/ Journal Entry(s):	Suggested Activity(s)/ Journal Entry(s):	Suggested Activity(s)/ Journal Entry(s):
<p>(Reading Hands-on Inquiry notes, GIZMOS, foldables, reflective writing, drawing/illustrations, graphic organizers)</p> <p>FCAT Coach (5<sup>th</sup>) pages 20-24</p> <p><a href="#">Graphing Skills</a> <a href="#">Growing Plants</a> <a href="#">Study Jams: Identify</a> <a href="#">Measuring Volume</a></p> <p>Predictions</p> <ul style="list-style-type: none"> <li>- Speed Bag (2011): pages 19-24</li> </ul>	<p>(Reading Hands-on Inquiry notes, GIZMOS, foldables, reflective writing, drawing/illustrations, graphic organizers)</p> <ul style="list-style-type: none"> <li>- Reading Passage: The Method's the Key</li> <li>- PowerPoint with Guided Notes – Scientific Method (See Resource Folder)</li> <li>- Ladders to Success (Level D): pages 16-19</li> </ul>	<p>(Reading Hands-on Inquiry notes, GIZMOS, foldables, reflective writing, drawing/illustrations, graphic organizers)</p> <p>Essential Lab - Chemical Change in a Bag</p> <ul style="list-style-type: none"> <li>- Reading Passage: Passing Mustard – Er, Muster</li> <li>- Study Jams: Scientific Methods</li> <li>- GIZMO: Growing Plants</li> <li>- FCAT Coach (5<sup>th</sup>) pages 32-37</li> </ul>	<p>(Reading Hands-on Inquiry notes, GIZMOS, foldables, reflective writing, drawing/illustrations, graphic organizers)</p> <ul style="list-style-type: none"> <li>- FOCUS: SC.5.N.1.1 (1<sup>st</sup> Assessment)</li> </ul>
<ul style="list-style-type: none"> <li>- ScienceSaurus: pages 11, 18, 19</li> <li>- Graphic Organizer: T-Chart for Observation vs. Inference</li> </ul>	<ul style="list-style-type: none"> <li>- Brain Pop Video: Scientific Method</li> <li>- Brain Pop Activity: Graphic Organizer – Flow Chart</li> <li>- Speed Bag (2011): pages 1-6</li> </ul>		



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