

Sixth Grade Science Standards

Science Essential Standards:

Quarter 1:

1. **G6.6S.C1.PO4:** I can analyze the interactions between the Earth's atmosphere and its bodies of water. - **25 Days**
2. **G6.6S.C2.PO5:** I can analyze the impact of large-scale weather systems on the local weather. - **25 Days**
3. **G6.6S.C2.PO6:** I can create a weather system model that includes the Sun, the atmosphere, and bodies of water. - **25 Days**
4. **6.RST.04:** I can determine the meaning of symbols, words and phrases in text. - **15 Days**
5. **G6.2S.C1.PO2:** I can describe how scientific innovations have revolutionized modern ways of thinking. - **15 Days**
6. **G6.2S.C2.PO1:** I can describe how scientific understanding changes in response to new information and discoveries. - **15 Days**

Quarter 2:

1. **G6.1S.C1.PO2:** I can create questions from observations that lead to a hypothesis. - **20 Days**
2. **G6.1S.C1.PO3:** I can locate research information for use in the design of a controlled investigation. - **20 Days**
3. **G6.1S.C2.PO3 (Teacher Assessed):** I can conduct a controlled investigation using scientific processes. - **20 Days**
4. **G6.1S.C2.PO5 (Teacher Assessed):** I can keep a record of observations using tools such as written and/or computer logs. - **20 Days**
5. **G6.1S.C3.PO5 (Teacher Assessed):** I can compare the results from a previous investigation to those of a current investigation. - **20 Days**
6. **G6.1S.C3.PO6 (Teacher Assessed):** I can create questions based on the results of a completed investigation. - **20 Days**
7. **G6.1S.C4.PO3 (Teacher Assessed):** I can use qualitative and quantitative information to communicate the results of an investigation. - **20 Days**
8. **6.RST.03:** I can follow procedures precisely to perform a task. - **10 Days**
9. **G6.4S.C3.PO2:** I can describe how quality of life is effected by water quality, climate, population density, and smog. - **10 Days**
10. **6.RST.08:** I can trace and evaluate the facts and details that support the author's argument. I can distinguish between fact and opinion. - **10 Days**
11. **G6.5S.C3.PO1:** I can identify various ways in which electrical energy is generated. - **10 Days**
12. **G6.5S.C3.PO4:** I can explain how thermal energy can be transferred by conduction. I can explain how thermal energy can be transferred by convection. I can explain how thermal energy can be transferred by radiation. - **10 Days**

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Quarter 3:

1. **G6.4S.C1.PO4:** I can differentiate between plant and animal cells. - **15 Days**
2. **G6.4S.C1.PO6:** I can relate the structures of living organisms to their functions:
PLANTS - **15 Days**
3. **G6.4S.C1.PO6:** I can relate the structures of living organisms to their functions:
ANIMALS - **25 Days**
4. **6.RST.07:** I can integrate information presented in different formats. - **10 Days**

Quarter 4:

1. **6.RST.01:** I can use evidence from a text to support my analysis. - **15 Days**
2. **G6.4S.C1.PO7:** I can describe how the respiratory and circulatory, muscular and skeletal, and digestive and excretory systems work together to perform a vital function. - **10 Days**

Science Yearly Standards:

- ★ **6.RST.10:** I can read and comprehend scientific texts.

Science Additional Standards:

1. **G6.3S.C1.PO1:** Evaluate the effects of the following natural hazards: sandstorm, hurricane, tornado, ultraviolet light, lightning-caused fire. **(Month 1)**
2. **G6.3S.C1.PO2:** Describe how people plan for, and respond to, the following natural disasters: drought, flooding, tornado. **(Month 1)**
3. **G6.4S.C3.PO1:** Explain that sunlight is the major source of energy for most ecosystems. **(Month 1)**
4. **G6.6S.C1.PO1:** Describe the properties and the composition of the layers of the atmosphere. **(Month 1)**
5. **G6.6S.C1.PO2:** Explain the composition, properties, and structure of the Earth's lakes and rivers. **(Month 1)**
6. **G6.2S.C1.PO1:** Identify how diverse people and/or cultures, past and present, have made important contributions to scientific innovations (e.g., Jacques Cousteau [inventor, marine explorer], supports Strand 4; William Beebe [scientist], supports Strand 4; Thor Heyerdahl [anthropologist], supports Strand 6). **(Month 2)**
7. **G6.2S.C1.PO3:** Analyze the impact of a major scientific development occurring within the past decade. **(Month 2)**
8. **G6.2S.C1.PO4:** Describe the use of technology in science-related careers. **(Month 2)**
9. **G6.3S.C2.PO1:** Propose viable methods of responding to an identified need or problem. **(Month 2)**

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10. **G6.6S.C1.PO5:** Describe ways scientists explore the Earth’s atmosphere and bodies of water. **(Month 3)**
11. **G6.6S.C2.PO1:** Explain how water is cycled in nature. **(Month 3)**
12. **G6.6S.C2.PO3:** Analyze the effects that bodies of water have on the climate of a region. **(Month 3)**
13. **G6.6S.C2.PO4:** Analyze the following factors that affect climate:
 - ocean currents
 - elevation
 - location **(Month 3)**
14. **G6.2S.C2.PO2:** Describe how scientific knowledge is subject to change as new information and/or technology challenges prevailing theories. **(Month 3)**
15. **G6.2S.C2.PO3:** Apply the following scientific processes to other problem solving or decision making situations:
 - observing
 - communicating
 - measuring
 - organizing data
 - generating hypotheses
 - predicting **(Month 3)**
 - questioning
 - comparing
 - classifying
 - inferring
 - identifying variables
16. **G6.1S.C1.PO1:** Differentiate among a question, hypothesis, and prediction. **(Month 4)**
17. **G6.1S.C2.PO1:** Demonstrate safe behavior and appropriate procedures (e.g., use and care of technology, materials, organisms) in all science inquiry. **(Month 4)**
18. **G6.1S.C2.PO2:** Design an investigation to test individual variables using scientific processes. **(Month 4)**
19. **G6.1S.C2.PO4:** Perform measurements using appropriate scientific tools (e.g., balances, microscopes, probes, micrometers). **(Month 4)**
20. **G6.1S.C3.PO2:** Form a logical argument about a correlation. **(Month 4)**
21. **G6.1S.C3.PO1:** Analyze data obtained in a scientific investigation to identify trends. **(Month 4)**
22. **G6.1S.C3.PO4:** Interpret simple tables and graphs produced by others. **(Month 4)**
23. **G6.1S.C3.PO3:** Evaluate the observations and data reported by others. **(Month 4)**
24. **G6.1S.C6.PO4:** Create list of instructions. **(Month 5)**
25. **G6.1S.C4.PO5:** Communicate results/conclusion. **(Month 5)**
26. **G6.5S.C3.PO2:** Identify several ways in which energy may be stored. **(Month 6)**
27. **G6.5S.C3.PO3:** Compare the following ways in which energy may be transformed:
 - mechanical to electrical
 - electrical to thermal **(Month 6)**
28. **G6.4S.C1.PO1:** Explain the importance of water to organisms. **(Month 7)**
29. **G6.4S.C1.PO2:** Describe the basic structure of a cell, including: cell wall, cell membrane, nucleus. **(Month 7)**
30. **G6.4S.C1.PO3:** Describe the function of each of the following cell parts: cell wall, cell membrane, nucleus. **(Month 7)**

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31. **G6.4S.C1.PO5**: Explain the hierarchy of cells, tissues, organs, and systems.
(Month 7)
32. **G6.3S.C2.PO2**: Compare possible solutions to best address an identified need or problem. **(Month 10)**
33. **G6.3S.C2.PO4**: Describe a technological discovery that influences science.
(Month 10)