

I = Introduced
 C = Continued
 M = Mastered

SCIENCE

Scope and Sequence

Tower Grove Christian School

| | AE | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
|---|----|---|---|---|---|---|---|---|---|---|---|----|----|----|---|
| Science as Inquiry | | | | | | | | | | | | | | | |
| 1. Creation vs. evolution | | I | C | C | C | C | C | C | C | I | C | C | C | M | M |
| 2. Words, pictures, photographs, numbers and models | I | C | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 3. Graphs, charts, and maps | I | C | C | C | C | C | C | C | C | C | C | C | C | C | M |
| 4. Oral and written reports | | | I | C | C | C | C | C | C | C | C | C | C | C | M |
| 5. Scientific tools | | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 6. Asking questions | I | C | C | C | C | C | C | C | C | C | C | C | C | C | M |
| 7. Following directions | I | C | C | C | C | C | C | C | C | C | C | C | C | C | M |
| 8. Measuring and magnifying | I | C | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 9. Formulate and test hypotheses | | | I | C | C | C | C | C | C | C | C | C | C | M | M |
| 10. Accuracy in results | | | | | I | C | C | C | C | C | C | C | C | C | M |
| 11. Altering components | | | I | C | C | C | C | C | C | C | C | C | C | M | M |
| 12. Inventors and inventions | | | I | C | C | C | C | C | C | C | C | C | C | C | M |
| 13. Research paper | | | | | | I | C | C | C | C | C | C | C | M | M |
| 14. Laboratory study | | | | | | | | I | C | C | C | C | C | M | M |
| Physical Science | | | | | | | | | | | | | | | |
| 1. Matter | I | C | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 2. Energy | | | I | C | C | C | C | C | C | C | C | C | C | M | M |
| 3. Balance, position, force and motion | | | I | C | C | C | C | C | C | C | C | C | C | M | M |
| 4. Friction | | | I | C | C | C | C | C | C | C | C | C | M | M | M |
| 5. Simple and complex machines | | | I | C | C | C | C | C | C | C | C | C | C | M | M |
| 6. Wheels, axles and levers | | | I | C | C | C | C | C | C | C | C | C | C | M | M |
| 7. Pendulums, flight, catapults, speed and velocity | | | | | | | I | C | C | C | C | C | C | M | M |
| 8. Characteristics, properties and changes in materials | | | | | I | C | C | C | C | C | C | C | C | M | M |
| 9. Gravity | I | C | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 10. Magnetism | I | C | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 11. Electricity | | | I | C | C | C | C | C | C | C | C | C | C | M | M |
| 12. Radioactivity | | | | | | | I | C | C | C | C | C | C | M | M |
| 13. Sound and light | | | I | C | C | C | C | C | C | C | C | C | C | M | M |
| 14. Heat, conduction, convection and radiation | | | | | | I | C | C | C | C | C | C | C | M | M |
| 15. Air components | | | I | C | C | C | C | C | C | C | C | C | C | M | M |
| 16. Chemical reactions | | | | | | | | I | C | C | C | C | C | M | M |
| 17. Mixtures and solutions | | | | | | | | I | C | C | C | C | C | M | M |
| 18. Catalysts and enzymes | | | | | | | | I | C | C | C | C | C | M | M |
| 19. Solids, liquids, and gases | | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 20. Acids, bases, and salts | | | | | | | | | I | C | C | C | C | M | M |
| 21. Periodic table | | | | | | | | | I | C | C | C | C | M | M |
| 22. Atomic structure, elements, and compounds | | | | | | I | C | C | C | C | C | C | C | C | M |
| 23. Thermodynamics | | | | | | | | | | I | C | C | C | C | M |
| 24. Metals/semimetals | | | | | | | | | | I | C | C | C | C | M |
| 25. Solutions/colloids | | | | | | | | | I | C | C | C | C | C | M |
| 26. Kinetics | | | | | | | | | I | C | C | C | C | C | M |
| 27. Nuclear chemistry | | | | | | | | | I | C | C | C | C | M | M |
| 28. Organic chemistry | | | | | | | | | | | I | C | C | M | M |
| 29. Microscope | | | | | | | | | | I | C | C | C | M | M |

| | AE | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|----|---|---|---|---|---|---|---|---|---|---|----|----|----|
| 30. Laboratory study | | | | | | | | I | C | C | C | C | M | M |
| Life Science | | | | | | | | | | | | | | |
| 1. God's creation | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 2. Plant life/Biology | I | C | C | C | C | C | C | C | C | C | C | M | M | M |
| 3. Soil, seeds and roots | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 4. Leaves and stems | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 5. Photosynthesis | | | I | C | C | C | C | C | C | C | C | C | M | M |
| 6. Flower parts | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 7. Tree parts | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 8. Animals/Zoology | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 9. Vertebrates and invertebrates | | | I | C | C | C | C | C | C | C | C | C | M | M |
| 10. Insects/arthropods | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 11. Birds | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 12. Mammals | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 13. Reptiles and Amphibians | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 14. Fish | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 15. Food chains | I | | C | C | C | C | C | C | C | C | C | M | M | M |
| 16. Adaptation and survival | | | I | C | C | C | C | C | C | C | C | M | M | M |
| 17. Ecosystem and habitat | | | I | C | C | C | C | C | C | C | C | M | M | M |
| 18. Classifications and kingdoms | | | I | C | C | C | C | C | C | C | C | C | M | M |
| 19. Humans/Anatomy | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 20. Body systems | I | C | C | C | C | C | C | C | C | C | C | M | M | M |
| 21. Heart/Circulatory | | | | | | | I | C | C | C | C | M | M | M |
| 22. Digestive | | | I | C | C | C | C | C | C | C | C | M | M | M |
| 23. Endocrine | | | | | | | I | C | C | C | C | M | M | M |
| 24. Internal | | | | | | | I | C | C | C | C | M | M | M |
| 25. Lymphatic | | | | | | | | | | | I | C | M | M |
| 26. Muscular | | | | | | I | C | C | C | C | C | M | M | M |
| 27. Psychology | | | | | | | | | | | | I | C | M |
| 28. Brain/Nervous | | | I | C | C | C | C | C | C | C | C | M | M | M |
| 29. Lungs/Respiratory | | | | | | I | C | C | C | C | C | C | M | M |
| 30. Bones/Skeletal | I | C | C | C | C | C | C | C | C | C | C | M | M | M |
| 31. Skin | I | C | C | C | C | C | C | C | C | C | C | M | M | M |
| 32. Senses | I | C | C | C | C | C | C | C | C | C | C | M | M | M |
| 33. Cell structures and functions | | | | | | | | | I | C | C | C | M | M |
| 34. Genetics | | | | | | | | | I | C | C | C | M | M |
| 35. Heredity | | | | | | | | | I | C | C | C | M | M |
| 36. Genes and chromosomes | | | | | | | | | I | C | C | C | M | M |
| 37. DNA | | | | | | | | | I | C | C | C | M | M |
| 38. Microscope | | | | | | | | | I | C | C | M | M | M |
| 39. Laboratory study | | | | | | | | I | C | C | C | M | M | M |
| Earth and Space Science | | | | | | | | | | | | | | |
| 1. God's creation | I | C | C | C | C | C | C | C | C | C | C | C | M | M |
| 2. Earth's materials and structure | | | I | C | C | C | C | C | C | C | C | M | M | M |
| 3. Earth changes | | | | | I | C | C | C | C | C | C | M | M | M |
| 4. Soil structures | | | I | C | C | C | C | C | C | C | C | M | M | M |
| 5. Deposition, erosion and weathering | | | I | C | C | C | C | C | C | C | C | M | M | M |
| 6. Latitude and longitude | | | | | | | I | C | C | C | C | M | M | M |
| 7. Fossils | | | I | C | C | C | C | C | C | C | C | M | M | M |
| 8. Geology | | | | | | I | C | C | C | C | C | M | M | M |
| 9. Rocks and minerals | | | I | C | C | C | C | C | C | C | C | M | M | M |
| 10. Surface and subsurface rock | | | I | C | C | C | C | C | C | C | C | M | M | M |
| 11. Natural disasters: earthquakes, volcanoes, etc. | I | C | C | C | C | C | C | C | C | C | C | M | M | M |
| 12. Plate tectonics | | | | | | | | I | C | C | C | M | M | M |
| 13. Continental drift | | | | | | | | I | C | C | C | M | M | M |

