



Switched-On
SCHOOLHOUSE® 2011 EDITION

Curriculum Catalog

Science 600

Welcome to Switched-On Schoolhouse!

We are excited that you are including Switched-On Schoolhouse as part of your program of instruction, and we look forward to serving you and your students.

Switched-On Schoolhouse comes complete with a full, multimedia-rich curriculum for grades 3-12 in five core subjects and electives.

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UNIT 1: PLANT SYSTEMS

Assignment Titles

- | | |
|---|--|
| 1. Photosynthesis: Location | 12. Transport System: Stems and Leaves |
| 2. Experiment: Anacharis Photosynthesis | 13. Experiment: Celery |
| 3. Photosynthesis: The Leaf Factory | 14. Quiz 2 |
| 4. Experiment: Seeds | 15. Regulatory System |
| 5. Photosynthesis: Products | 16. Experiment: Growing Roots |
| 6. Experiment: Digestive Enzymes | 17. Quiz 3 |
| 7. Photosynthesis: Raw Materials | 18. Special Project |
| 8. Investigation: Plant Growth | 19. Review Game |
| 9. Quiz 1 | 20. TEST |
| 10. Transport System: Roots | 21. ALTERNATE TEST |
| 11. Experiment: Root Observation | |

UNIT 2: ANIMAL SYSTEMS

Assignment Titles

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|--|---|
| 1. Digestive System: Structure | 13. Project: Lungs |
| 2. Digestive System: Function | 14. Experiment: Evaporation and Cooling |
| 3. Experiment: Digestion | 15. Quiz 2 |
| 4. Digestive System: Function (Part 2) | 16. Muscular System |
| 5. Experiment: Oil and Soap | 17. Skeletal System |
| 6. Experiment: Passing Food | 18. Quiz: Bone Quiz |
| 7. Quiz 1 | 19. Quiz 3 |
| 8. Circulatory System | 20. Special Project |
| 9. Experiment: Pulse Rate | 21. Review Game |
| 10. Project: Heart | 22. TEST |
| 11. Excretory System | 23. ALTERNATE TEST |
| 12. Experiment: Carbon Dioxide | |

UNIT 3: PLANTS AND ANIMAL BEHAVIOR

Assignment Titles

- | | |
|--------------------------------|--------------------------------|
| 1. The Nervous System | 12. Quiz 2 |
| 2. Report: The Eye | 13. Terrestrial Biomes |
| 3. Report: The Ear | 14. Aquatic Biomes |
| 4. Nerves and Spinal Column | 15. Food Chains |
| 5. Response and Intelligence | 16. Nature: Cycles and Balance |
| 6. Report: Instincts | 17. Report: Man's Influence |
| 7. Experiment: Response | 18. Quiz 3 |
| 8. Experiment: Trail and Error | 19. Special Project |
| 9. Quiz 1 | 20. Review Game |
| 10. Plant Behavior | 21. TEST |
| 11. Investigation: Tropisms | 22. ALTERNATE TEST |

UNIT 4: MOLECULAR GENETICS

Assignment Titles

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|---|---|
| 1. Reproduction | 13. Experiment: Albinos |
| 2. Project: Flower Structure | 14. Report: Genetics |
| 3. Male-Female Reproduction | 15. Mutation |
| 4. Project: Lima Bean Embryo | 16. Project: Seed or Seedless |
| 5. Quiz 1 | 17. The Use of Mutations |
| 6. Inheritance | 18. Project: Pea Pod |
| 7. Project: Mendel's Discovery | 19. Temperature Influence on Coloration |
| 8. Taste, Dominance, and Multiple Genes | 20. Quiz 3 |
| 9. Experiment: Taste Gene Lab | 21. Special Project |
| 10. Project: Traits | 22. Review Game |
| 11. Quiz 2 | 23. TEST |
| 12. DNA | 24. ALTERNATE TEST |

Science 600 (cont.)

UNIT 5: CHEMICAL STRUCTURE AND CHANGE

Assignment Titles

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|---------------------------------------|----------------------------------|
| 1. Chemical Structure | 15. Chemical Change |
| 2. Experiment: Solid, Liquid, Gas | 16. Project: Chart and Diagram |
| 3. Chemical Elements and Atoms | 17. Report: Chemical Discoveries |
| 4. Molecules and Compounds | 18. Acids and Bases |
| 5. Experiment: Copper Iodide | 19. Experiment: Acid or Base? |
| 6. Experiment: Calcium Carbonate | 20. Project: From Memory |
| 7. Quiz 1 | 21. Project: Cause and Effect |
| 8. Periodic Table | 22. Project: Chemical Symbols |
| 9. Project: Water Molecule Model | 23. Project: Discussion |
| 10. Atomic Mass | 24. Quiz 3 |
| 11. Project: Atomic Number | 25. Special Project |
| 12. Arrangement of the Periodic Table | 26. Review Game |
| 13. Project: Use the Periodic Table | 27. TEST |
| 14. Quiz 2 | 28. ALTERNATE TEST |

UNIT 6: LIGHT AND SOUND

Assignment Title

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|--------------------------------|---------------------------------------|
| 1. Waves: Sound | 12. Colors |
| 2. Experiment: Test Tube Tunes | 13. Project: Color Wheel |
| 3. Project: Sound Vibrations | 14. Experiment: Subtractive Colors |
| 4. Light Waves | 15. Experiment: Mixing Colored Lights |
| 5. Project: Light Waves | 16. Mixing Colors |
| 6. Project: Refracted Light | 17. Experiment: Mixing Colorants |
| 7. Quiz 1 | 18. Quiz 3 |
| 8. The Spectrum | 19. Special Project |
| 9. Project: Color Spectrum | 20. Review Game |
| 10. Project: Create a Rainbow | 21. TEST |
| 11. Quiz 2 | 22. ALTERNATE TEST |

UNIT 7: MANUFACTURING COMMUNITIES

Assignment Title

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|--|------------------------------------|
| 1. Motion, Force, and Work | 10. Experiment: The Law of Inertia |
| 2. Measurement of Work | 11. Quiz 2 |
| 3. Experiment: Forces of Lifting and Pulling | 12. Change in Motion |
| 4. Project: Unscramble Activity | 13. Quiz 3 |
| 5. Quiz 1 | 14. Special Project |
| 6. Power and Newton's Laws of Motion | 15. Review Game |
| 7. Report: Horsepower and Watts | 16. TEST |
| 8. Experiment: Your Horsepower | 17. ALTERNATE TEST |
| 9. Newton's Laws of Motion and Gravitation | |

UNIT 8: SPACESHIP EARTH

Assignment Title

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|----------------------------------|---------------------------------------|
| 1. Earth's Motion | 11. Quiz 2 |
| 2. Experiment: Balloon Globe | 12. The Solar System |
| 3. Earth's Rotation | 13. Report: Planets |
| 4. Time | 14. Asteroids, Comets, and Meteoroids |
| 5. Experiment: Observing Shadows | 15. Quiz 3 |
| 6. Earth's Orbit | 16. Special Project |
| 7. Quiz 1 | 17. Review Game |
| 8. Eclipses | 18. TEST |
| 9. Project: Fact or Opinion | 19. ALTERNATE TEST |
| 10. Experiment: Eclipses | |

Science 600 (cont.)

UNIT 9: ASTRONOMY AND THE STARS

Assignment Title

1. Astronomy	11. Light Years and Astronomical Units
2. Report: Great Astronomers	12. Quiz 2
3. Astronomy Today	13. Constellations and Major Stars
4. Quiz 1	14. Project: Betelgeuse and Aldebaran
5. Stars	15. Project: Constellations
6. Elements and Spectra	16. Quiz 3
7. Project: The Spectroscope	17. Special Project
8. Experiment: Spectrography	18. Review Game
9. Experiment: Oil on Water	19. TEST
10. Magnitude and Luminosity	20. ALTERNATE TEST

UNIT 10: THE EARTH AND THE UNIVERSE

Assignment Title

1. The Photosynthesis System	13. Physics and Chemistry: Sound
2. The Transport System of Plants	14. Physics and Chemistry: Motion
3. The Digestive System	15. Physics and Chemistry: Machines
4. The Excretory System	16. Quiz 2
5. Skeletal and Muscular Systems	17. Earth's Rotation
6. The Nervous System	18. Earth's Revolution
7. Genetics and Reproduction	19. Our Solar System
8. Ecological Systems	20. Quiz 3
9. Report: Biomes	21. Special Project
10. Quiz 1	22. Review Game
11. Physics and Chemistry: Matter	23. TEST
12. Physics and Chemistry: Light	24. ALTERNATE TEST