



**Switched-On**  
SCHOOLHOUSE

# Course Catalog

## General Science I

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**COURSE OVERVIEW**

General Science I is a basic intermediate course intended to expose students to the designs and patterns in God’s physical universe. This course expands on the Science 600 course, providing a set of basic scientific skills and a broad survey of the major areas of science. Some of the areas covered in General Science I include the scientific method, overview of the four major areas of science, mathematics in science, astronomy, the atmosphere, natural cycles, weather and climate, human anatomy and physiology, and careers in science.

The course seeks to develop the student’s ability to be aware of and participate in scientific inquiry. The units contain experiments and projects to capitalize on the students’ natural curiosity. The student will explore, observe, and manipulate everyday objects and materials in their environment. Students at this level should show understanding of interrelationships between organisms, recognize patterns in systems, and expand their knowledge of cellular dimensions of living systems. Collectively, this should help students develop and build on their subject-matter knowledge base.

Upon completion of the course, students should be able to do the following:

- Use their main senses for observation of the world around them.
- Demonstrate a knowledge of the different tools and methods used in science.
- Calculate and convert units in the metric system.
- Discuss historical and current views on astronomy.
- Describe the atmosphere and the weather around the earth.
- Demonstrate a basic knowledge of the different systems in the human body.

UNIT 1: WHAT IS SCIENCE?	
GENERAL SCIENCE I	<b>Assignment Titles</b>
	1. Course Overview
	2. Tools of a Scientist 1
	3. Tools of a Scientist 2
	4. Quiz 1: Tools of a Scientist
	5. Methods of a Scientist 1
	6. Methods of a Scientist 2
	7. Quiz 2: Methods of a Scientist
	8. The Scientist
	9. The Four Major Areas of Science
	10. Quiz 3: Work of a Scientist
	11. Careers in Science
	12. Quiz 4: Careers in Science
	13. Special Project*
	14. Test
	15. Alternate Test*
16. Reference	

UNIT 2: PERCEIVING THINGS	
GENERAL SCIENCE I	<b>Assignment Titles</b>
	1. Measurement: The Metric System
	2. Measurement: Size and Distance
	3. Measurement: Area
	4. Measurement: Volume
	5. Measurement: Mass and Density
	6. Experiment: Finding Density
	7. Quiz 1: Measurement
	8. Graphs: Uses, Bar, and Line
	9. Graphs: Pictographs and Pie Charts
	10. Experiment: Making Graphs
	11. Quiz 2: Graphing Data
	12. Special Project*
	13. Test
	14. Alternate Test*
15. Reference	

UNIT 3: EARTH IN SPACE (PART 1)		
GENERAL SCIENCE I	<b>Assignment Titles</b>	
	1. Stargazing	8. Astronomers
	2. Star Charts	9. Essay: Galileo*
	3. Experiment: Constellations	10. Quiz 3: Astronomers
	4. Quiz 1: Stargazing	11. Special Project*
	5. Astronomy	12. Test
	6. Experiment: Astrolabe*	13. Alternate Test*
	7. Quiz 2: Astronomy	14. Reference

UNIT 4: EARTH IN SPACE (PART 2)		
GENERAL SCIENCE I	<b>Assignment Titles</b>	
	1. The Sun's Energy	8. Quiz 3: The Moon
	2. Quiz 1: The Sun's Energy	9. Eclipses
	3. The Sun's Family	10. Quiz 4: Eclipses
	4. Outer Planets	11. Special Project*
	5. Asteroids and Comets	12. Test
	6. Quiz 2: The Sun's Family	13. Alternate Test*
	7. The Moon	14. Reference

UNIT 5: THE ATMOSPHERE		
GENERAL SCIENCE I	<b>Assignment Titles</b>	
	1. Structure of the Atmosphere	8. Pollution
	2. Solar Effects	9. Quiz 3: Pollution
	3. Experiment: The Greenhouse	10. Special Project*
	4. Quiz 1: Structure of the Atmosphere	11. Test
	5. Water Cycle	12. Alternate Test*
	6. Other Natural Cycles	13. Reference
	7. Quiz 2: Natural Cycles	

UNIT 6: WEATHER		
GENERAL SCIENCE I	<b>Assignment Titles</b>	
	1. Elements of Weather	8. Quiz 2: Weather in Motion
	2. Wind	9. Weather Forecasting
	3. Pressure	10. Quiz 3: Weather Forecasting
	4. Experiment: Dew Point	11. Special Project*
	5. Quiz 1: Elements of Weather	12. Test
	6. Weather in Motion	13. Alternate Test*
	7. Fronts	14. Reference

UNIT 7: CLIMATE		
GENERAL SCIENCE I	<b>Assignment Titles</b>	
	1. Climate: General	7. Quiz 3: Regional Climate Types and Distribution of Climate Types
	2. Quiz 1: Climate: General	8. Special Project*
	3. Climate: Worldwide	9. Test
	4. Quiz 2: Climate: Worldwide	10. Alternate Test*
	5. Regional Climate Types	11. Reference
	6. Distribution of Climate Types in the World	

GENERAL SCIENCE I		UNIT 8: THE HUMAN ANATOMY (PART 1)	
		Assignment Titles	
GENERAL SCIENCE I	1.	Human Building Blocks	8. Project: Human Brain*
	2.	Experiment: Cheek Cell	9. Senses
	3.	Quiz 1: Human Building Blocks	10. Quiz 3: Human Nervous System and Senses
	4.	Human Framework	11. Special Project*
	5.	Skin	12. Test
	6.	Quiz 2: Human Framework	13. Alternate Test*
	7.	Human Nervous System	14. Reference

GENERAL SCIENCE I		UNIT 9: THE HUMAN ANATOMY (PART 2)	
		Assignment Titles	
GENERAL SCIENCE I	1.	The Respiratory System	9. The Excretory System
	2.	Quiz 1: The Respiratory System	10. Quiz 4: The Excretory System
	3.	The Circulatory System	11. The Endocrine System
	4.	Experiment: Heart Rate	12. Quiz 5: The Endocrine System
	5.	Quiz 2: The Circulatory System	13. Special Project*
	6.	The Digestive System--Part 1	14. Test
	7.	The Digestive System--Part 2	15. Alternate Test*
	8.	Quiz 3: The Digestive System	16. Reference

GENERAL SCIENCE I		UNIT 10: WORKING IN SCIENCE	
		Assignment Titles	
GENERAL SCIENCE I	1.	Scientists at Work	12. The Medical Scientist at Work
	2.	Experiment: Red Celery	13. Nervous and Endocrine Systems
	3.	Famous Scientists	14. Circulatory and Respiration Systems
	4.	Quiz 1: Scientists at Work	15. Digestive and Excretory Systems
	5.	The Astronomer at Work	16. Quiz 4: The Medical Scientist at Work and Body Systems
	6.	Planets	17. Special Project*
	7.	Quiz 2: The Astronomer at Work	18. Test
	8.	The Meteorologist at Work	19. Alternate Test*
	9.	Studying the Weather	20. Reference
	10.	Studying Climates	
	11.	Quiz 3: The Meteorologist at Work	

(\*) Indicates alternate assignment