



## LIFE SCIENCE GRADE 7

*Counselors are available to assist parents and students with course selection and career planning. Parents may arrange to meet with the counselor by calling the school's guidance department.*

### **COURSE DESCRIPTION**

Life Science is a laboratory and activity-centered program that provides students with a broad foundation in the biological sciences. Topics range from cells, plants, and animals to heredity and career opportunities. Laboratory investigations and activities are the primary means for developing problem-solving skills and for understanding scientific concepts and principles. Students will develop inquiry and problem-solving skills through scientific investigation. Research and decision-making skills are further developed through the investigation of local or national issues and concerns that result from the interaction of science, technology, and society.

### **COURSE GOALS**

- Develop a foundation of concepts and principles in the life sciences
- Develop problem-solving and decision-making skills through experimentation, research, and discussion
- Develop an awareness of the interdisciplinary nature of science and its relevance to society
- Develop basic communication skills
- Explore the application of scientific principles in careers and in other areas of interest
- Provide reading and study skills

### **PREREQUISITE**

Sixth-grade science

### **OPTION FOR NEXT COURSE**

Physical Science 8

### **REQUIRED STUDENT TEXTBOOKS**

Glencoe Science: *Life Science*, 2008

### **MINIMUM REQUIREMENTS**

- Demonstrate knowledge and understanding of all core objectives through laboratory investigations, issue investigations, projects, and oral and/or written tests, quizzes, and reports
- Participate in the laboratory experiences, adhering to all safety procedures
- Prepare written reports for laboratory activities
- Investigate career opportunities and areas of interest in the life sciences

**THE INSTRUCTIONAL OBJECTIVES THAT COMPRISE THE GRADE 7 LIFE SCIENCE COURSE ARE LISTED AS FOLLOWS FROM THE PRESCRIBED CURRICULUM:**

- Demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.
- Investigate and understand that all living things are composed of cells.
- Investigate and understand that living things show patterns of cellular organization.
- Investigate and understand how organisms can be classified.
- Investigate and understand the basic physical and chemical processes of photosynthesis and its importance to plant and animal life.
- Investigate and understand that organisms within an ecosystem are dependent on one another and on nonliving components of the environment.
- Investigate and understand that interactions exist among members of a population.
- Investigate and understand how organisms adapt to biotic and abiotic factors in an ecosystem.
- Investigate and understand that ecosystems, communities, populations, and organisms are dynamic, change over time, and respond to daily, seasonal, and long-term changes in their environment.
- Investigate and understand the relationships between ecosystem dynamics and human activity.
- Investigate and understand that organisms reproduce and transmit genetic information to new generations.
- Investigate and understand that populations of organisms change over time.



**VIRGINIA BEACH CITY PUBLIC SCHOOLS**  
A H E A D O F T H E C U R V E

**Mission Statement**

*The Virginia Beach City Public Schools, in partnership with the entire community, will empower every student to become a life-long learner who is a responsible, productive and engaged citizen within the global community.*

Dr. James G. Merrill, Superintendent

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