

## SCIENTIFIC LITERACY

Students develop a scientific literacy, which includes:

- ◆ an understanding of the natural world which we inhabit,
- ◆ an ability to plan and conduct scientific inquiry,
- ◆ an appreciation for its implications and consequences,
- ◆ an appreciation for the history of science as a human endeavor.

**The Harry Lee Cole School has aligned its Science Curriculum with State and National Frameworks.**



**HARRY LEE COLE  
ELEMENTARY SCHOOL  
(Grades: K-2)**

**(978) 887-2856**

**BOXFORD  
MASSACHUSETTS**

# Science



**Cole School  
FAQs**

**FREQUENTLY  
ASKED  
QUESTIONS  
SERIES**

# Science



The Harry Lee Cole School has the following philosophy:

*The overall goal of science education is to develop scientifically literate individuals who understand how science, technology, and society influence one another and who are able to use this knowledge in their everyday decision making. The scientifically literate person has a substantial knowledge base of facts, concepts, conceptual frameworks, and process skills, which enable the individual to continue to learn and think logically. This person both appreciates the value of technology in society and understands its limitations.*

## INQUIRY APPROACH TO SCIENCE

The Science Program at Cole School focuses not only upon the acquisition of a body of knowledge, but also upon the ways that knowledge is acquired and constructed.

- Students ask questions, seek answers and think critically about their observations.
- Students learn to collect evidence to support their ideas and learn how to analyze this evidence.
- Many science kits are used to promote active exploration and inquiry into different science topics.

Students use a hands-on approach to collect data, draw conclusions, enhance critical thinking, diagram, label, predict and analyze their information.

- An inquiry approach respects each student's scientific curiosity.

## Science Curriculum Map — Grades K-2

STRANDS	KINDERGARTEN	GRADE ONE	GRADE TWO
Earth Science	Seasons	Weather, Sunshine and Shadows	Earth, Air and Water Properties
Life Science	Living and Non-Living Things	Organisms / Habitats	Life Cycles
Physical Science	Properties of Matter	Heat and Light	Force and Motion
Technology and Society	Transportation	Recycling	Inventors

The **Science Curriculum** spirals using background scientific knowledge as a base to build on each year. Each year supports and extends learning from the previous year. This spiral curriculum is carried through Grade 6.

- Science curriculum is integrated across different domains to help students build connections and identify relationships.
- Science curriculum is successfully integrated into Mathematics, Social Studies and Language Arts.
- Cross curriculum connections are also supported in the Computer Lab (on-line research in lab) and in the Library (through literature connections and research).