

ARHS SCIENCE LEARNING EXPECTATIONS

The ARHS Science Learning Expectations reflect Science Department and District expectations for student learning in content, skills, and habits of mind. They incorporate goals of the District's mission statement and social justice commitment.

Students will:

- demonstrate mastery of scientific concepts through individual assessment tools within each classroom. These may include assessments of student products, oral and written communications skills, and laboratory techniques.
- apply critical and creative thinking skills, scientific inquiry and mathematics to solve practical problems and to create models of scientific phenomena.
- develop scientific literacy, by
 - demonstrating mastery of appropriate scientific vocabulary;
 - identifying possible sources of bias;
 - recognizing the need to support scientific conclusions with replicable empirical evidence.
- develop skills in cooperation and communication in the practice of scientific inquiry.
- demonstrate an awareness of hazardous situations and appropriate procedures and behavior in the laboratory and classroom.
- read, write and compute at grade level as indicated by standardized tests such as the MCAS, at the proficient level.
- use computers in the presentation, graphing, and analysis of data; and in scientific research. Students will access current technology to
 - solve problems,
 - analyze case studies, and
 - compare qualitative and quantitative results.
- develop an awareness of personal, community, and environmental responsibility, emerging from an understanding of current scientific knowledge.
- learn to value multiple points of view in order to inform and synthesize their world perspective.
- have an opportunity to explore different fields of science, through such offerings as internships and invitations to workshops at the five local colleges, and two community colleges.