

Air Quality Health Index

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AQHI Curriculum Links & Activities

ELEMENTARY

Grade 1 Topic B: Seasonal Changes

- Identify human preparations for seasonal change and identify activities that are done on a seasonal basis
- Explore weather change, and how the ups and downs of weather affect their own lives

Grade 5 Topic D: Weather Watch

- 5-8: Observe, describe and interpret weather phenomena
- 5-9: Investigate relationships between weather phenomena and human activity

Grade 6 Topic A: Air and Aerodynamics

- Explore the characteristics of air
- Recognize that air is composed of different gases; identify evidence for different gases

Suggested Activities:

- Indi the Caterpillar (available: <http://www.ec.gc.ca/cas-aqhi/default.asp?lang=En&n=869F719D-1>)
- AQHI Learning Stations (available on resource CD, or online: <http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=9E2991C8-3A47-4AB2-9003-F97DBE1F8BA1>)
- Clean Foundation Teacher resources and Super Eddie Enviro Game: <http://clean.ns.ca/programs/youth-engagement/sustainability-education/teacher-resources/>

JUNIOR HIGH

Grade 7 Unit E: Planet Earth

- Describe and demonstrate methods used in the scientific study of Earth, and in observing and interpreting its component materials, identify and explain the purpose of different tools and techniques used in the study of Earth.

Grade 8 Unit A: Mix and Flow of Matter

- Investigate and compare the properties of gases and liquids; relate variations in their viscosity, density, buoyancy and compressibility to the particle model of matter

Grade 8 Unit B: Cells and Systems

- Interpret the healthy function of human body systems and illustrate ways the body reacts to internal and external stimuli

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- Describe, in general terms, body systems for respiration, circulation, digestion, excretion and sensory awareness
- Describe, in general terms, the role of individual organs and tissues in supporting the healthy functioning of the human
- Describe ways in which various types of cells contribute to the healthy functioning of the human body
- Describe changes in body functions in response to changing conditions

Grade 9 Unit C: Environmental Chemistry

- Investigate and describe, in general terms, the role of different substances in the environment in supporting or harming humans and other living things
- Identify questions that may need to be addressed in deciding what substances—in what amounts—can be safely released into the environment
- Identify processes for measuring the quantity of different substances in the environment and for monitoring air and water quality
- Identify chemical factors in an environment that might affect the health and distribution of living things in that environment
- Apply and interpret measures of chemical concentration in parts per million, billion or trillion
- Analyze and evaluate mechanisms affecting the distribution of potentially harmful substances within an environment
- Describe mechanisms for the transfer of materials through air, water and soil; and identify factors that may accelerate or retard distribution
- Investigate and evaluate potential risks resulting from consumer practices and industrial processes, and identify processes used in providing information and setting standards to manage these risks

Suggested Activities:

- AQHI Jeopardy Game (available at <http://airquality.alberta.ca>)
- AQHI Fact or Fiction (available at <http://airquality.alberta.ca>)
- Straw Asthma Demonstration (available at <http://airquality.alberta.ca>)

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HIGH SCHOOL

Grade 10 Science

- Unit A: Energy and Matter in Chemical Change
- Unit D: Energy Flow in Global

Chemistry 20-30

- Unit A: Thermochemical Changes
- Unit B: Forms of Matter (Gases)

Science 20-30

- Unit B: Chemistry and the Environment

CTS Courses: Environmental Stewardship (NAT)

- Introduction to Stewardship
- Fostering Stewardship
- Living with the Environment
- Natural Resources
- Resource Management
- Environmental Health & Safety