

NATIONAL SCIENCE EDUCATION STANDARDS

Breathe In: Indoor Air Quality Presentation Guide (e-Book Download)

GRADE	CATEGORY	SUB-CATEGORY	STANDARD
5-8	Life Science	Populations And Ecosystems	The number of organisms an ecosystem can support depends on the resources available and abiotic factors, such as quantity of light and water, range of temperatures, and soil composition.
5-8	Life Science	Regulation And Behavior	All organisms must begin to be able to obtain and use resources, grow, reproduce, and maintain stable internal conditions while living in a constantly changing external environment.
5-8	Life Science	Structure And Function In Living Systems	Disease is a breakdown in structures or functions of an organism. Some diseases are the result of intrinsic failures of the system. Others are the result of damage by infection by other organisms.
5-8	Physical Science	Properties And Changes Of Properties In Matter	A substance has characteristic properties, such as density, a boiling point, and solubility, all of which are independent of the amount of the sample. A mixture of substances often can be separated into the original substances using one or more of the characteristic properties.
5-8	Physical Science	Properties And Changes Of Properties In Matter	Substances react chemically in characteristic ways with other substances to form new substances (compounds) with different characteristic properties. In chemical reactions, the total mass is conserved. Substances often are placed in categories or groups if they react in similar ways; metals is an example of such a group.
5-8	Science and Technology	Understanding About Science And Technology	Perfectly designed solutions do not exist. All technological solutions have tradeoffs, such as safety, cost, efficiency, and appearance.
5-8	Science as Inquiry	Abilities Necessary To Do Scientific Inquiry	Design and conduct a scientific investigation.

5-8	Science as Inquiry	Abilities Necessary To Do Scientific Inquiry	Develop descriptions, explanations, predictions, and models using evidence.
5-8	Science as Inquiry	Abilities Necessary To Do Scientific Inquiry	Use appropriate tools and techniques to gather and analyze, and interpret data.
5-8	Science as Inquiry	Understandings About Scientific Inquiry	Different kinds of questions suggest different kinds of scientific investigations. Some investigations involve observing and describing objects, organisms, or events; some involve collecting specimens; some involve experiments; some involve discovery of new objects and phenomena; and some involve making models.
5-8	Science as Inquiry	Understandings About Scientific Inquiry	Mathematics is important in all aspects of scientific inquiry.
5-8	Science in Personal and Social Perspectives	Personal Health	The potential for accidents and the existence of hazards imposes the need for injury prevention.
5-8	Science in Personal and Social Perspectives	Personal Health	The use of tobacco increases the risk of illness.
5-8	Science in Personal and Social Perspectives	Risks And Benefits	Important personal and social decisions are made based on perceptions of benefits and risks.
5-8	Science in Personal and Social Perspectives	Risks And Benefits	Risk analysis considers the type of hazard and estimates the number of people that might be exposed and the number likely to suffer consequences.
5-8	Science in Personal and Social Perspectives	Risks And Benefits	Students should understand the risks associated with natural hazards (fires, floods, tornadoes, hurricanes, earthquakes, and volcanic eruptions), with chemical hazards (pollutants in air, water, soil, and food), with biological hazards (pollen, viruses, bacterial, and parasites), social hazards (occupational safety and transportation), and with personal hazards (smoking, dieting, and drinking).