

Ontario Science and Technology Curriculum

The new Ontario science and technology curriculum is organized into five strands. Strand A is an overarching strand that focuses on STEM skills and connections. Strands B to E are Life Systems, Matter and Energy, Structures and Mechanisms, Earth and Space Systems

Curriculum Expectations	Key Concepts		
A. STEM Skills and Connections			
 use a scientific research process, a scientific experimentation process, and an engineering design process to conduct investigations, following appropriate health and safety procedures use coding in investigations and to model concepts, and assess the impact of coding and of emerging technologies on everyday life and in STEM-related fields demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences 	scientific research experiment	engineering design innovation cumulat gess gess ering gesearch	coding data prototype www.
B. Life Systems - Biodiversity			
 assess the importance of biodiversity, and describe ways of protecting biodiversity demonstrate an understanding of biodiversity, its contributions to the stability of natural systems, and its benefits to humans 	biodiversity diversity organism microorganism species classification characteristics	ecosystem habitat natural community endangered extinction climate change interrelationship	invasive species symbiosis invertebrate vertebrate global warming
C. Matter and Energy - Electrical Phenomena, Energy, and	Devices		
 evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly demonstrate an understanding of the principles of electrical energy and its transformation into and from other forms of energy 	electrical energy current electricity static electricity hydroelectricity battery circuit parallel circuit series circuit	electrical current discharge voltage volt device	conductor insulator transform renewable energy non-renewable energy
D. Structures and Mechanisms - Flight			
 assess the environmental impacts of flying machines demonstrate an understanding of the ways in which properties of air can be applied to the principles of flight and flying machines 	air compress pressure mass propel	forces thrust weight drag glide lift	aviation aerodynamics adaptation

E. Earth and Space Systems - Space			
 assess the impact of space exploration on humans, society, and the environment demonstrate an understanding of the solar system, the phenomena that result from the movement of different bodies within it, and the technologies used in space exploration 	solar system sun planets natural satellites comet asteroid meteoroid orbit	spectroscope sundial telescope tilt space exploration spacecraft GPS	axis rotation satellite simulation gravity weight mass light

Curriculum Expectations are adapted from The Ontario curriculum, grades 1-8: Science and technology (2022). <u>https://www.dcp.edu.gov.on.ca/en/curriculum/science-technology/grades/grade-6/strands</u>