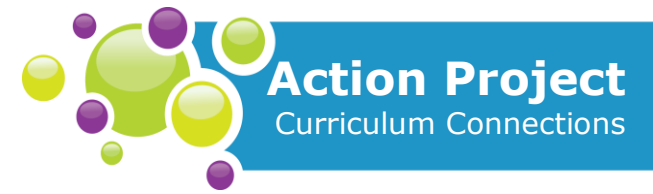


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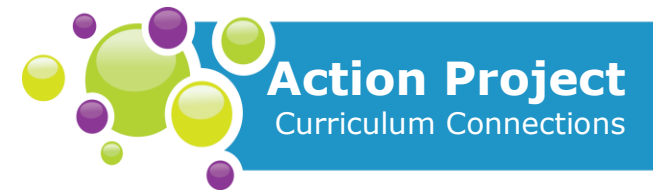
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Cycle	Subject	Topic Area	Lesson	Essential Knowledges/Strategies
Elementary Cycle 3	Elementary Science and Technology (2012)	Earth and Space	MINDS-ON 1, 2	Systems and interaction <ul style="list-style-type: none"> Technologies related to the Earth, the atmosphere and outer space
			MINDS-ON 3	Techniques and instrumentation <ul style="list-style-type: none"> Use of simple measuring instruments Design and manufacture of measuring instruments
			ACTION 1, 2	Techniques and instrumentation <ul style="list-style-type: none"> Use of simple measuring instruments
			ACTION 1, 2	Appropriate language <ul style="list-style-type: none"> Conventions and types of representations
			ALL	Appropriate language <ul style="list-style-type: none"> Terminology related to an understanding of the Earth and the universe
		Strategies	MINDS-ON 1, 2, 3	Exploration strategies <ul style="list-style-type: none"> Using different types of reasoning (e.g. induction, deduction, inference, comparison, classification)
			ACTION 1, 2	Communication strategies <ul style="list-style-type: none"> Using tools to display information in tables and graphs or to draw a diagram
			ACTION 1, 2	Exploration strategies <ul style="list-style-type: none"> Using empirical approaches (e.g. trial and error, analysis, exploration using one's senses)
			ACTION 2	Exploration strategies <ul style="list-style-type: none"> Taking into account the constraints involved in solving a problem or making an object
			CONSOLIDATION	Communication strategies <ul style="list-style-type: none"> Using different means of communication to propose explanations or solutions
			CONSOLIDATION	Communication strategies <ul style="list-style-type: none"> Organizing information for a presentation

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			CONSOLIDATION	Communication strategies <ul style="list-style-type: none"> Comparing different possible explanations for or solutions to a problem in order to assess them (e.g. full-group discussion) 		
			ALL	Strategies for recording, using and interpreting information <ul style="list-style-type: none"> Using different sources of information 		
			ALL	Strategies for recording, using and interpreting information <ul style="list-style-type: none"> Using a variety of observational techniques and tools 		
			Suggestions for Using Information and Communications Technologies	ALL	Strategies for recording, using and interpreting information <ul style="list-style-type: none"> Using different tools for recording information 	
				MINDS-ON 1, 2, 3	Information and Communications Technologies <ul style="list-style-type: none"> Conducting experiments with the help of a computer 	
				ACTION 1, 2	Information and Communications Technologies <ul style="list-style-type: none"> Producing a graphical representation of data 	
		Sec. Cycle 1	Secondary Science and Technology (2004)	The Earth and Space	MINDS-ON 2	General characteristics of the Earth <ul style="list-style-type: none"> Air (composition)
					ACTION 1, 2	General characteristics of the Earth <ul style="list-style-type: none"> Air (composition)
					ALL	Astronomical phenomena <ul style="list-style-type: none"> <i>Human Intervention: Canadian Space Program, International Space Station</i>
Exploration Strategies	MINDS-ON 1, 2, 3			Dividing a complex problem into simpler sub-problems		
	MINDS-ON 1, 2, 3			Using different types of reasoning (e.g. inductive and deductive reasoning, inference, comparison, classification)		
	ACTION 1, 2			Identifying the constraints and elements that must be taken into account to solve the problem		
	ACTION 2			Exploring various ways of solving the problem		

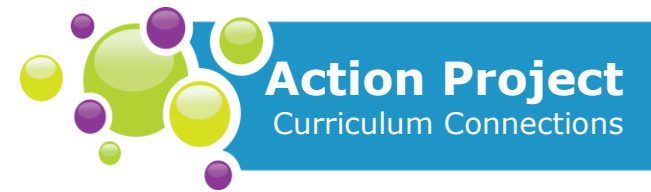
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			ACTION 2	Ensuring that the procedure is appropriate and safe and making the necessary adjustments
			ACTION 2	Recalling similar problems that have already been solved
		Instrumentation Strategies	ACTION 1, 2	Using different tools for recording information (e.g. diagrams, notes, graphs, procedures, logbook)
		Communication Strategies	ACTION 1, 2	Using tools to display information in various formats: data tables, graphs or diagrams)
			CONSOLIDATION	Using various means of communication (e.g. oral presentation, written presentation, Web page)
		Attitudes of Rigour	ALL	Willingness to cooperate effectively with others Concern about using proper language and correct terminology Concern for health and safety
Sec. Cycle 2 (Sec III)	Secondary Science and Technology (2004)	The Earth and Space	MINDS-ON 2	Conditions conducive to the development of life
			ALL	Cultural references: Canadian Space Agency, Space exploration missions
		Exploration Strategies	ACTION 2	Collecting as much scientific, technological and contextual information as possible to define a problem or predict patterns
			ACTION 2	Anticipating the results of a method
			ACTION 2	Exploring various possible solutions
		Analytical Strategies	MINDS-ON 1, 2, 3	Dividing a complex problem into simpler sub-problems
			ACTION 2	Identifying the constraints and important elements related to the problem-solving situation
			CONSOLIDATION	Using different types of reasoning (e.g. inductive and deductive reasoning, comparison, classification, prioritization) in order to process information
		Technological Techniques	ACTION 1, 2	Constructing a graph using instruments
		Science Techniques	MINDS-ON 3	Using measuring instruments
			ALL	Safely using laboratory materials and equipment
		Sec. Cycle 2 (Sec IV)	Environmental Science and Technology	The Earth and Space
MINDS-ON 2	<i>Atmosphere</i> - contamination			

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		Exploration Strategies	ACTION 2	Collecting as much scientific, technological and contextual information as possible to define a problem or predict patterns
			ACTION 2	Anticipating the results of a method
			ACTION 2	Exploring various possible solutions
		Analytical Strategies	MINDS-ON 1, 2, 3	Dividing a complex problem into simpler sub-problems
			ACTION 2	Identifying the constraints and important elements related to the problem-solving situation
			CONSOLIDATION	Using different types of reasoning (e.g. inductive and deductive reasoning, comparison, classification, prioritization) in order to process information
		Technological Techniques	ACTION 1, 2	Constructing a graph using instruments
		Science Techniques	MINDS-ON 3	Using measuring instruments
			ALL	Safely using laboratory materials and equipment
		Sec. Cycle 2 (Sec IV)	Science and the Environment	The Earth and Space
Exploration Strategies	ACTION 2			Collecting as much scientific, technological and contextual information as possible to define a problem or predict patterns
	ACTION 2			Anticipating the results of a method
	ACTION 2			Exploring various possible solutions
Analytical Strategies	MINDS-ON 1, 2, 3			Dividing a complex problem into simpler sub-problems
	ACTION 2			Identifying the constraints and important elements related to the problem-solving situation
	CONSOLIDATION			Using different types of reasoning (e.g. inductive and deductive reasoning, comparison, classification, prioritization) in order to process information
Technological Techniques	ACTION 1, 2			Constructing a graph using instruments
Science Techniques	MINDS-ON 3			Using measuring instruments
	ALL			Safely using laboratory materials and equipment