

Grades K-2 TVO mPower **Mathematics** Content Overview

Grade	Math Game	Mathematics Strand	Big Idea	Learning Goal	Game World	Location
К	Nature Numbers	Number	Quantity Relationships	Subitize quantities, using a variety of materials and strategies	My Street	Park
К	More Fish Less Fish	Number	Quantity Relationships	Identify and compare sets with more, fewer, or the same number of objects	My Street	School
К	3 Alarm Patterns*	Algebra	Patterns & Relationships	Identify, extend, and create patterns	My Street	Fire Station
К	Sorting Salad*	Data	Collection and Organization of Data	Group and organize objects according to similarities and differences	My Street	Home
К	Weather or Not	Data	Probability	Use mathematical language to describe the probability of everyday events	My Street	Home
К	Pattern Block Pictures*	Spatial Sense	Geometric Relationships	Compose pictures using two-dimensional shapes	My Street	School
К	Over, Under, In Between	Spatial Sense	Location & Movement	Communicate an understanding of basic spatial relationships	My Street	Park
1	Care Clinic	Number	Number Sense	Use mental math to solve addition and subtraction problems	My Town	Medical Clinic
1	Sport n' Sort*	Data	Data Collection and Organization	Organize objects by sorting and displaying them in graphs, and answer questions about collected data	My Town	Laundromat
1	Measure Mart	Spatial Sense	Measurement, Attributes and Measurement Relationships	Estimate and measure lengths using non-standard units	My Town	Grocery Store
1	Picture Puzzles*	Spatial Sense	Geometric and Spatial Reasoning	Identify shapes and compose pictures using common two-dimensional shapes	My Town	Library
1	Geo Garden	Spatial Sense	Geometric and Spatial Reasoning	Create, identify and sort two-dimensional shapes based on attributes	My Town	Park
1	Money Midway	Financial Literacy	Money and Finances	Identify various coins, and represent money amounts using a variety of strategies	My Town	Street Fair

All TVO mPower games promote Social-Emotional Learning Skills (SEL Skills) in Mathematics.

TVO mPower games focus on student development and the application of social-emotional learning skills to support the learning of math concepts and skills. They also foster overall well-being and an ability to learn, while building resilience. Simply stated, these games ensure all math learners thrive.

Free, creative online games that support the development of foundational K-6 math and STEM skills while fostering positive attitudes towards math in the classroom.

- Learner-centred
- Curriculum-based
- Free

- Assessment-driven
- Safe, Advertising-free

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2	Boreal Builders	Number	Number Sense & Operations	Use a variety of strategies and tools to solve addition and subtraction problems	My Clubhouse	Forest (Beaver)
2	Timberland Tally	Number	Number Sense	Compare whole numbers to 100	My Clubhouse	Forest (Blue Jay)
2	Amazon River Researcher	Data	Data Literacy Data Collection and Organization/ Data Visualization/ Data Anaylsis	Collect, organize and display data, and read and answer questions about data presented in bar graphs	My Clubhouse	Aquatic (Arapaima)
2	Savanna Trail Tracker	Spatial Sense	Measurement, Attributes, Measurement Relationships	Measure length, time, or mass using a variety of tools	My Clubhouse	Grassland (Giraffe)
2	Geo Tundra Trek	Spatial Sense	Geometric and Spatial Reasoning	Identify, sort and create two-dimensional shapes based on properties	My Clubhouse	Tundra (Arctic Hare)
2	Undersea Symmetry	Spatial Sense	Geometric and Spatial Reasoning/ Location and Movement	Locate lines of symmetry and complete symmetrical designs	My Clubhouse	Aquatic (Octopus)
2	Gobi Gear Getter	Financial Literacy	Money and Finances	Represent, compare, order, and add money amounts to 100¢	My Clubhouse	Desert (Drone)

Grades K-2 mPower STEM Content Overview

Grade	STEM Game	Frame or Strand	Big Ideas or Topic	Challenge	Game World	Location
К	Storybook Theatre*	Problem Solving and Innovating	There are many ways to communicate thinking, theories, ideas and feelings We use technology and design for different purposes	Design and test a dramatic story to communicate feelings and ideas to an audience	My Street	School (Classroom)
1	Insect Inn*	Understanding Life Systems	Needs and Characteristics of Living Things	Design and build a shelter that will help maintain a healthy environment and meets the basic needs of insects	My Town	Community Centre
2	Forest Explorers*	Understanding Life Systems	Growth & Changes in Animals	Design an animal protection area by investigating the characteristics of animals.	My Clubhouse	Forest (Bear)



Grades 3-6 TVO mPower **Mathematics** Content Overview

Grade	Math Game	Mathematics Strand	Big Idea	Learning Goal	Game World	Location
3-6	Polar Pictures	Number	Number Sense and Operations	Represent, compare, and order fractional amounts and regrouping fractional parts/demonstrating equivalent fractions	My Ontario	Polar Bear Park
3-6	RoboWash 3000	Algebra	Patterns and Relations	Identify, extend and predict growing patterns presented in a graph, in a table of values and as a pattern rule	My Ontario	Kenora
3-6	Cyber Siege	Algebra	Equations and Inequalities Variables and Expressions Equalities and inequalities	Understand the inverse relationships to determine equality between expressions and balance equations	My Ontario	Sault Ste. Marie
3-6	Plant Lab	Data	Probability	Make predictions, perform experiments, determine the probability of an outcome, and make comparisons	My Ontario	Wabakimi Provincial Park
3-6	Fencing Frenzy	Spatial Sense	Measurement, Attributes, Measurement Relationships	Create two-dimensional shapes with a given length, perimeter or area in standard-units	My Ontario	Guelph
3-6	Capital Cleanup	Spatial Sense	Geometric and Spatial Reasoning	Identify various angles using benchmarks and a protractor	My Ontario	Ottawa River
3-6	Sort Right Job Site	Spatial Sense	Geometric and Spatial Reasoning	Identify, compare, and classify various polygons by their geometric properties	My Ontario	Thunder Bay
3-6	Harmony Honey Farm*	Spatial Sense	Geometric and Spatial Reasoning/ Location and Movement	Identify locations on a grid, create and analyse designs, and identify and perform transformations	My Ontario	Timmins
3-6	Food on the Move	Financial Literacy	Money and Finances Quantity Relationships	Determine the cost of purchases (using unit rates in grades 4-6) and add and subtract money amounts	My Ontario	Sauble Beach

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Grades 3-6 TVO mPower STEM Content Overview

Grade	STEM Game	Science Strand	Topic	Learning Goal	Game World	Location
3	Community Garden*	Understanding Life Systems	Growth & Changes in Plants	Design and test a garden that meets the needs of different plants based on different characteristics	Player's Town	Springhill
3	Snowboard Snapshots*	Understanding Structures and Mechanisms	Strong and Stable Structures	Design and test a strong and stable structure that will withstand the forces of weather	Player's Town	Winterwood
3	Lazy River*	Understanding Matter and Energy	Forces Causing Movement	Design and test a ride that uses forces that cause movement (propulsion, gravity and wind) to control speed and direction	Player's Town	Summerside
4	Wildlife Crossing*	Understanding Life Systems	Habitats and Communities	Design and test an animal crossing to protect the paths of local wildlife	Player's Town	Springhill
4	Scene Machine*	Understanding Structures and Mechanisms	Pulleys and Gears	Design and test a stage production using pulley and gear systems to lift, rotate, and move props on stage	Player's Town	Winterwood
4	Sound School*	Understanding Matter and Energy	Light and Sound	Design and test a soundstage by applying the properties of sound to disperse sound evenly using absorption and reflection	Player's Town	Summerside
5	Function Factory*	Understanding Life Systems	Human Organ Systems	Design and test a processing facility to demonstrate how organs in major systems of the human body work and interact	Player's Town	Winterwood
5	Adventure Playground*	Understanding Structures and Mechanisms	Forces Acting on Structures and Mechanisms	Design and test a strong and stable adventure playground that enables safe play	Player's Town	Springhill
5	Green City*	Understanding Earth and Space Systems	Conservation of Energy and Resources	Design and test a city that makes greater use of renewable and alternative sources of energy and infrastructure	Player's Town	Summerside
6	Conservation Area*	Understanding Life Systems	Biodiversity	Design a wildlife conservation area that will preserve biodiversity	Player's Town	Springhill
6	Flight Zone*	Understanding Structures and Mechanisms	Flight	Design and test a flying device by applying knowledge and understanding of the properties of flight	Player's Town	Summerside
6	Space Sim*	Understanding Earth and Space Systems	Space	Design and test a space station that can meet the basic needs of humans in space	Player's Town	Winterwood

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