## Lake Metroparks STEM/STEAM Integrated Programs 2021-2022

**STEM** stands for Science, Technology, Engineering, and Mathematics. <u>STEM Education</u> is driven by problem-solving, discovery, exploratory learning, and requires students to actively engage a situation in order to find its solution. The **STEAM** designation also includes the Arts.

## STEM Integrated programs (55 Programs) STEAM Integrated programs (4)

- ➤ All Star Lab programs
  - Starlight Express
  - o Constellation Investigation
  - o Sun, Moon, & Stars
  - o Plate Tectonics
  - Orbit Odyssey
  - o Biodiversity of the Night
  - Solar and Lunar Cycles
- A Big Splash: The Wonders of Water
- ➤ Advanced Linking Up: From Owl Pellets to Food Webs
- > Animal Architects
- ➤ Animals Through Time
- ➤ Apollo Project
- > A Spider Named Charlotte (STEAM)
- ➤ Biodiversity Bonanza
- ➤ Biomimicry of Ecosystems
- ➤ Biospheres
- ➤ Biotech Institute (3 Programs)
- ➤ Bottle Rocket Blast
- ➤ Build a Beak
- Chair Factory Falls: A Link To the Past
- ➤ Changes In Motion
- ➤ Wildlife 911
- > Decomposition
- ➤ Discover Maple Syrup
- ➤ Ecosystems & Energy

- ➤ Energy Through the Farm
- Environmental & Climatic Changes
- > Erosion and Deposition
- Fiber Arts From the Farm (STEAM)
- > Forces In Motion
- ➤ GPS Know Your Location
- ➤ GPS Safari
- > Grist For the Meal
- ➤ Ice Cream
- > Interactions In Ecosystems
- Linking Up: From Owl Pellets to Food Webs
- ➤ Little Red Hen
- ➤ Lake Effect
- ➤ Measurement: Mass To Volume
- ➤ Mission To Mars
- ➤ One Great Lake
- ➤ Operation Worm Watch
- > Owls: Engineered for Stealth
- ➤ Owls: The Night Shift
- Picky Eaters, Sticky Seeds (STEAM)
- ➤ Pizza Farm
- ➤ Snowshoe Climatology
- ➤ Soap Bubble Chemistry
- > Sounds Of Nature (STEAM)

- ➤ Stream Study
- > Studies In Biodiversity
- ➤ The Chemistry of Cheese Making
- > Snowbelt Climatology

- ➤ Talking Bones
- ➤ The Climate For Snowshoes
- > Weather Explorers
- > Wee Weatherwatchers

Grade Band	Program Name	2	Operation Worm Watch
		2-4	A Spider Named Charlotte
All Gra des	Star Lab programs	3	Studies In Biodiversity
All Gra	Constellation Investigation	3	Measurement: Mass to Volume
All Gra	Discover Maple Syrup	3-5	Grist for the Meal
des		3-5	Ice Cream
All Grades	Biodiversity Bonanza	3-5	Chemistry of Cheese Making
All Gra	Pizza Farm	3-8	Apollo Encounter
des		3-12	Alien Invaders: Invasive Species
PK-K	Wee Weatherwatchers	4	Spiders
PK-1	Starlight Express	4	Erosion & Deposition
PK-2	Little Red Hen	•	
K	Weather Explorers	4	Chair Factory Falls: A Link To the Past
K-2	Sun, Moon, & Stars	Grade	Program Name
K-2	Soap Bubble Chemistry	Band	
K-3	Picky Eaters, Sticky Seeds	4	Environmental & Climatic Changes
K-12	Apollo Project: Bald Eagle	2.4.5	
K-12	Adopt Apollo	3, 4, 5	Wildlife 911
1	Build a Beak	4-5	Lake Effects
1.0	A Big Splash: The Wonders of	4-5	Orbit Odyssey
1-2	Water	4-5	Linking Up: From Owl Pellets to
1-2	Changes In Motion		Food Webs
2	Biospheres	4-6	Sounds Of Nature
2	Mission to Mars	4-8	Fiber Arts From the Farm
		5	Biomimicry Of Ecosystems

5	Talking Bones	
5	Interactions In Ecosystems	
5	Decomposition In Action	
5	Owls: The Night Shift	
5-6	Forces & Motion	
6	Animal Architects	
6-7	One Great Lake	
6-8	Advanced Linking Up: From Owl Pellets to Food Webs	
6-8	Bottle Rocket Blast	
6-8	Decomposition	
6-8	Owls: Engineered for Stealth	
6-8	The Climate For Snowshoes	
6-8	GPS Safari	
6-8	Plate Tectonics	
6-12	Biotech Institute (3 Programs)	
7	Ecosystems & Energy	
7	Energy Through the Farm	
7	Solar & Lunar Cycles	
7-12	Stream Study	
8	Animals Through Time	
8	Physics of Flight	
9-12	GPS Know Your Location	
9-12	Snowshoe Climatology	