## Camp Invention®

# © In Control™

In Control puts campers in the driver's seat of their innovative journey by testing their navigation skills as they study travel maps and discover the use of artificial intelligence (AI) in everyday road trip items like GPS. They assemble their own receiver and custom Control Panel, and exercise their communication skills as they make exploration decisions.

- PHENOMENA EXAMPLES: Circuitry and engineering, experimenting with magnetic north
- LIFE SKILLS: Speaking and listening, goal setting, decision-making, multimedia communication, Morse code
- MATH CONCEPTS: Taking measurements, following multistep procedure
- LITERACY CONCEPTS: STEM vocabulary, reading informational text, reading and writing in Inventor Log, asking and answering questions
- WHAT THEY TAKE HOME: Custom cardboard Control Panel with radio transmitter and receiver, "Al Assistant" dashboard bobblehead

#### **Discover Curricula Highlights**



**Penguin Launch** sends campers on an eco-expedition to investigate penguins in their Antarctic habitat, entering penguin colonies with the help of a Snow-ver – a rover equipped with a robotic research penguin that can roll and glide across icy surfaces. Then, they unleash design thinking as they create flippers and launchers to propel plush magnetic penguins.

- PHENOMENA EXAMPLES: Using magnets; making and exploring polymer snow
- LIFE SKILLS: Curiosity, problem solving, collaboration and communication, persistence, creative and critical thinking
- MATH CONCEPTS: Identify and describe shapes, classify shapes by property, draw and identify lines and angles, counting
- LITERACY CONCEPTS: STEM
  vocabulary, presentation of
  knowledge and ideas, reading
  informational text, reading and writing
  in Inventor Log, asking and answering
  questions
- WHAT THEY TAKE HOME: Plush penguin with magnetic feet and flippers

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In **Claw Arcade**, campers use hands-on physics and engineering concepts to make a DIY claw machine inspired by the claws of the natural world, from lobster claws to eagle talons to crab pincers. Once they build their clawsome cardboard machine, they create one-of-a-kind prizes and explore entrepreneurship principles as they hook investors on their arcade experiences.

- PHENOMENA EXAMPLES: Gravity, balance and stability
- LIFE SKILLS: Creative and critical thinking, reasoning and problem solving, persistence, resilience
- MATH CONCEPTS: Identify and describe shapes, classify shapes by property, draw and identify lines and angles
- LITERACY CONCEPTS: STEM
  vocabulary, reading informational text,
  presentation of knowledge and ideas,
  reading and writing in Inventor Log,
  diagramming and sketching ideas,
  asking and answering questions
- WHAT THEY TAKE HOME: Custom cardboard DIY claw machine, mini NIHFty Bot™ plush keychain, pompom creature, light-up spiky ball

#### **Discover Curricula Highlights**



In **Illusion Workshop**, campers are introduced to captivating optical illusions, discovering the mechanics of how the mind and eye perceive surroundings. Then, they blend science and art to create their own spinning animation device and moving props, becoming special effects experts and designing new entertainment experiences of the future.

- PHENOMENA EXAMPLES: Optical illusion, circuitry and engineering, reflection experiments, animation activities
- LIFE SKILLS: Curiosity, creativity, career exploration, critical thinking, collaboration and teamwork
- MATH CONCEPTS: Taking measurements, following multistep procedure
- LITERACY CONCEPTS: Reading informational text, presentation of knowledge and ideas, reading and writing in Inventor Log, asking and answering questions
- WHAT THEY TAKE HOME: Custom built Spin-o-scope<sup>™</sup>, personalized pneumatic prop