

SUMMER CAMP 2026 / CURRICULUM 5 OF 5

Science

- Summer Camp 2026 Science Curriculum

Core Skills Students Will Learn

- Scientific-inquiry cycle (question → hypothesis → experiment → conclusion)
- Accurate measurement and safe use of lab equipment
- Data collection, graphing, and statistical interpretation
- Experimental design and troubleshooting strategies
- Creative problem-solving and engineering-design thinking
- Collaboration, peer review, and constructive feedback
- Clear scientific communication (lab notebooks, posters, mini-presentations)
- Observation and evidence-based reasoning
- Environmental awareness and ethics in scientific research

Daily Curriculum Overview

- Each of the following concepts will be accompanied by multiple hands-on activities and experiments.

Day 1 | Chemistry

- Big idea: Everyday ingredients can trigger chemical reactions that fizz, change color, or change texture.
- Key concepts: chemical reactions, non-Newtonian fluids (oobleck), using senses to explore matter.
- Skills nurtured: prediction, observation vocabulary, hands-on measuring.

Day 2 | Force and Motion

- Big idea: Forces and pressure make rockets move.
- Key concepts: force, motion, propulsion, air pressure.
- Skills nurtured: cause-and-effect reasoning, data recording, teamwork.

Day 3 | Animal & Plant Life

- Big idea: Living things have life cycles and structures we can model and observe.
- Key concepts: insect anatomy, metamorphosis, leaf venation, observation.

- Skills nurtured: careful observation, classification, respect for nature.

Day 4 | Weather, Wind & Earth Science

- Big idea: Air, water, and temperature create weather—and dramatic chemistry demos!
- Key concepts: air pressure, condensation/evaporation, clouds, exothermic reactions.
- Skills nurtured: linking models to real-world weather, safety in experiments.

Day 5 | Colors & Light

- Big idea: Light bends, mixes, and splits into rainbows we can capture indoors and out.
- Key concepts: reflection, refraction, dispersion, primary vs. secondary colors.
- Skills nurtured: inquiry about light, creative color exploration, record-keeping.

What parents can expect

- Daily take-homes: Reading material, simple experiment instructions or creations (e.g., lava lamp, UV flashlight).
- Emphasis on safety & inquiry: campers learn to ask “What do you think will happen?” before every test.
- All materials provided: from vinegar and cornstarch to microscopes and prisms.
- Outcome: a week of discovery that builds curiosity, basic scientific vocabulary, and confidence in experimenting.