POPSMART ACADEMY
Imagine. Create. Ignite.

MIDDLE SCHOOL

Science Olympiad

Explore scientific ideas, interpret evidence, and build problem-solving skills for Science Olympiad and classroom learning.

Anatomy and Physiology

Students explore how the human body works, connecting the structures of major body systems with the jobs they perform. The course develops the ability to interpret biological diagrams and explain how changes in one system can affect overall health.

LEARNING THEMES

- Body systems and their functions
- Hormones and regulation
- Connections between structure, function, and health

Botany

Students discover how plants grow, reproduce, and respond to their surroundings. From the roles of roots and leaves to the importance of plants in ecosystems and agriculture, this course builds observation and comparison skills while connecting plant science to everyday life.

LEARNING THEMES

- Plant structures and life processes
- Plant diversity and reproduction
- Ecological relationships and human uses

Disease Detectives

Students investigate how scientists identify patterns of illness and use evidence to protect communities. They learn to interpret public health information, consider possible causes of an outbreak, and evaluate explanations. The emphasis is on careful reasoning and making sense of data.

LEARNING THEMES

- Disease patterns and transmission
- Outbreak investigation
- Prevention and interpretation of health data

Heredity

Students explore how traits pass from one generation to the next and how genetic information shapes living organisms. They use models, family patterns, and probability to explain inheritance, while building a foundation for understanding the relationship between DNA, cells, and variation.

LEARNING THEMES

- Inheritance patterns
- DNA and cell division
- Genetic variation and applications of genetics

Subject overviews highlight broad learning areas. Please contact us for class availability.

POPSMART ACADEMY
Imagine. Create. Ignite.

MIDDLE SCHOOL

Science Olympiad

Explore scientific ideas, interpret evidence, and build problem-solving skills for Science Olympiad and classroom learning.

Water Quality

Students explore marine and estuary ecosystems and the clues that reveal whether an aquatic environment is healthy. The course connects living organisms with water chemistry and human impacts, developing skills in environmental observation, measurement, and interpreting scientific evidence.

LEARNING THEMES

- Aquatic ecosystems and indicator organisms
- Water properties and salinity
- Environmental monitoring and conservation

Dynamic Planet

Students investigate how freshwater moves across and beneath Earth's surface, shaping landscapes and supporting life. They connect rivers, groundwater, lakes, and wetlands with the wider water cycle, using maps and data to understand natural processes and human influences.

LEARNING THEMES

- Freshwater systems and the water cycle
- Erosion, landforms, and flooding
- Water resources and human impacts

Meteorology

Students examine the science behind severe weather and learn how observations help explain changing atmospheric conditions. By interpreting weather maps, images, and graphs, they build an understanding of storm development, weather hazards, and the evidence used to assess risk.

LEARNING THEMES

- Atmospheric conditions and storm formation
- Weather observation and data interpretation
- Severe weather hazards and safety

Remote Sensing

Students discover how satellites and other sensors help us study Earth from a distance. They learn to interpret images and maps, recognize patterns, and connect observations with environmental change. The course combines Earth science with visual analysis and spatial reasoning.

LEARNING THEMES

- Satellites, sensors, and light
- Image and map interpretation
- Monitoring landscapes, hazards, and environmental change

Subject overviews highlight broad learning areas. Please contact us for class availability.

POPSMART ACADEMY
Imagine. Create. Ignite.

MIDDLE SCHOOL

Science Olympiad

Explore scientific ideas, interpret evidence, and build problem-solving skills for Science Olympiad and classroom learning.

Rocks and Minerals

Students learn to read the clues found in rocks and minerals, connecting observable properties with how Earth materials form and change. The course builds careful identification and classification skills while exploring the geological processes that shape our planet.

LEARNING THEMES

- Rock and mineral properties
- Formation and the rock cycle
- Geological processes and practical uses

Solar System

Students explore worlds within and beyond our solar system, comparing their environments and considering what makes a world potentially habitable. They examine how observations and space exploration help scientists investigate distant objects, strengthening their ability to interpret evidence and make comparisons.

LEARNING THEMES

- Planets and moons
- Exoplanets and habitability
- Space exploration and astronomical evidence

Circuit Lab

Students connect the principles of electricity and magnetism with practical circuit work. They learn to interpret circuit diagrams, use measurements to understand electrical behavior, and troubleshoot simple systems. The course combines scientific reasoning with careful, hands-on problem solving.

LEARNING THEMES

- Current, voltage, and resistance
- Circuit components and measurement
- Magnetism and electrical applications

Crime Busters

Students apply chemistry and observation skills to the analysis of simulated forensic evidence. They compare materials, interpret test results, and bring different clues together to support a reasoned conclusion. The emphasis is on accurate observations and explaining what the evidence supports.

LEARNING THEMES

- Material identification and chemical properties
- Physical and trace evidence
- Laboratory reasoning and evidence-based conclusions

Subject overviews highlight broad learning areas. Please contact us for class availability.

POPSMART ACADEMY
Imagine. Create. Ignite.

MIDDLE SCHOOL

Science Olympiad

Explore scientific ideas, interpret evidence, and build problem-solving skills for Science Olympiad and classroom learning.

Food Science

Students explore the chemistry behind familiar dairy foods and how ingredients change during processing and preparation. The course connects food composition with observable changes, helping students develop laboratory reasoning while understanding the science behind food quality, nutrition, and preservation.

LEARNING THEMES

- Dairy ingredients and their properties
- Physical and chemical changes in food
- Processing, preservation, and nutrition

Thermodynamics

Students investigate how heat moves and how materials respond to changes in temperature. They connect energy concepts with practical questions about insulation and thermal performance, using measurements and data to explain results and evaluate design choices.

LEARNING THEMES

- Heat, temperature, and energy
- Heat transfer and changes of state
- Insulation and thermal performance

Codebusters

Students develop logical thinking through the challenge of decoding hidden messages. They explore how codes and ciphers work, recognize patterns in language and numbers, and practice testing possible solutions. Collaborative problem solving builds accuracy, persistence, and flexible thinking.

LEARNING THEMES

- Codes and cipher patterns
- Language and mathematical reasoning
- Collaborative decoding and problem solving

Experimental Design

Students learn to turn a scientific question into a fair, repeatable investigation. They practice planning tests, collecting and organizing observations, and using evidence to explain results. The course strengthens collaboration and clear scientific communication.

LEARNING THEMES

- Questions, hypotheses, and variables
- Measurement, graphs, and data analysis
- Evidence-based conclusions and scientific reporting

Subject overviews highlight broad learning areas. Please contact us for class availability.