

# Session 1

## ***Learning to use Flight Simulators***

Students will learn how to use Microsoft Flight Simulator and the basics of aeronautics.

## ***Crime Scene Investigation***

Crime has come upon Mass Academy. Catch the culprit by finding trace evidence and using forensics to narrow down a list of suspects.

## ***Rubik's Cubes***

Come learn the basics of Rubik's cubes, and try for yourselves!

## ***Scrapbooking***

Students will learn to make appealing scrapbook pages using their own photos (bring some!) to capture memories.

## ***Goo: Sticky Situations***

Students will investigate two different types of polymer slimes while learning the basic chemistry and properties of the substances.

## ***Puzzles in Motion***

Students will get up out of their chairs to solve challenging, active puzzles: physically and mentally

## **Session 2**

### ***Intro to HTML***

Students will learn the basics of HTML. Anyone with an interest in designing a web page with HTML should apply!

### ***Duct Tape Creations – Art and Structure***

Duct tape can be used “independently” to create useful and artistic structures. Learn the basics and make a geodesic sphere or rose.

### ***Creative Writing – Poetry***

Learn how to write poetry in two forms – rhyming and free verse. Share your poems.

### ***MAMAS Magic***

Have you ever wondered about levitation and how magic tricks really work? Experience the secret behind magic tricks and levitation in this exciting workshop.

### ***Edible Engineering***

Build a super tall structure using only foods. Working in a group, bring your best engineering and creativity skills to build the biggest food tower!

### ***Ahoy Me Mates!***

Build your own ship capable of carrying as many pennies as possible and keep your cargo.

## **Session 3**

### ***Intro to Aviation with a Flight Simulator***

In an intriguing class session, students will learn the basics of flight with the use of Microsoft Flight Simulator on a projected screen.

### ***Math Techniques: Fast Alternatives for Competition***

Come and learn a variety of techniques to help solve math competition problems. Topics will include Vedic math, series, sequences and geometry.

### ***Marshmallow Trebuchets! (Catapults)***

Explore the effects of projectile motion in a castle vs. castle approach – with marshmallows!

### ***Unravel the Secrets of Knitting***

Did you ever want to learn how to knit? Here's your chance! Students will learn the basics and start a scarf to take home.

### ***The Slippery Science of Slime!***

In this workshop, students will make slime while learning about its chemical bonds and properties.

### ***Marbles: Phun with Physics***

Students will play the timeless game of marbles and will observe the physics behind the game.

## **Session 4**

### ***Basic Photoshop***

Students will learn the basic tools used in Photoshop and apply these skills to manipulate photos.

### ***CSI: Mass Academy***

A crime was committed at Mass Academy. Use the evidence you collect and forensics learned in this class to solve the case.

### ***Improv Games***

Come play some improv games and have some fun! Get ready to laugh and be creative!

### ***Hip-Hop Dance***

Join us for Hip-Hop dance! Students will learn a quick routine accompanied by a rhythmic beat.

### ***We All Scream for Ice Cream***

Do you want to learn how to make delicious ice-cream? Learn about Hess' Law and other basic concepts of chemistry while enjoying a tasty treat.

### ***Balloon Blast: Who can go the furthest?***

Learn about air pressure while designing and building the best balloon rocket possible.

