

SPLISH Session 1

<u>DNA Extraction: Extracting the Ladder of Life</u>	Participants will extract DNA from fruit and model DNA sequences of different animal species.
<u>Racing Lego Robots: Maze Time Trial</u>	Participants will make modifications to LEGO Mindstorm robots in order to get the fastest time possible in a race through a maze.
<u>Plane Fun: How to Make a Perfect Paper Airplane</u>	Participants will learn about the forces that keep an airplane in flight. Then, they will apply this knowledge to create the best paper airplane.
<u>Lunar Landers</u>	Participants will build marshmallow landing devices to simulate planetary mission to the moon! Build and test your own landing apparatus in small groups on a budget to make sure the marshmallow doesn't fall out upon landing!
<u>Building a House of Cards</u>	Participants will learn how to build a house of cards using basic physics/math concepts. Then, participants will be split into groups and will compete to see which group can build the most strongest/tallest/creative tower.
<u>Mason Jar Creations</u>	In this activity, each participant will use Mod Podge to decorate a mason jar with newspapers, tissue paper, or magazines.

SPLISH Session 2

<u>Fruit DNA Extraction</u>	Participants will be introduced to working in a lab setting, will learn about DNA, and will extract DNA from a kiwi.
<u>Learn to Fence</u>	Participants will learn the basic background of the sport of modern fencing, practice basic skills, and play some related games.
<u>Balancing Act</u>	Participants will learn about the concept of torque by creating their own torque mobiles using everyday objects.
<u>An Intro to Chess: How to Play, Tactics, and Fun</u>	This workshop will teach the basics of chess. Participants will learn basic concepts, tactics, and strategies of chess.
<u>Fold with Fun</u>	This workshop will teach the exciting art of origami. Participants will learn a brief introduction of the history of origami and will create three different origami pieces.
<u>Acting Out: Drama Games</u>	This workshop is a series of fun, drama themed games focusing on improvisation, communication skills, and movement.

SPLISH Session 3

<u>Eye Can't Believe It! Drawing 3D Optical Illusions</u>	In this activity, participants will draw their own simple three dimensional optical illusions.
<u>Cat's Cradle Tricks</u>	Participants will learn the tricks of the string game of cat's cradle by making their own string loops and learning how to play the game.
<u>Fun with Drones</u>	Participants will learn about the mechanical and electronic aspects of drone technology and will race small quadcopters through obstacle courses.
<u>Can You Build This?</u>	This course will provide a fun chance to work on engineering projects that test participants' building skills. The participants will learn new ways of thinking while building towers and bridges made strictly of newspaper and computer paper.
<u>Let's Dance!</u>	Participants will learn about stretching and counting music, then they will lead and perform an entertaining routine!
<u>Build Your Own Roller Coaster!</u>	Students will learn some of the physics concepts that go into making roller coasters and then will make their own using only foam tubes and tape!

SPLISH Session 4

<u>Be the Next Bob Ross: Intro to Watercoloring</u>	Students will learn basic techniques for watercoloring and will create a masterpiece of their own to take home.
<u>Watchtower Build-Off</u>	Teams of participants will compete to see who can build the best watchtower that meets a set of requirements and can survive stormy conditions.
<u>Explore Your Curiosity: Design a Mars Rover</u>	Students will utilize the engineering design process to brainstorm, design, create, and modify rovers for a terrain traversing competition.
<u>Crime Scene Chemistry</u>	Participants will become the next Sherlock Holmes, as they use forensic science and chemical analysis to determine the identity of an unknown chemical substance and identify the culprit who sent a mysterious cake to prison.
<u>Balloon Carts</u>	In this workshop, participants will build balloon-powered carts and will learn the physics behind them.
<u>Junkyard Jams</u>	Students will make instruments using recyclables and other craft materials and will participate in mini solo or group performances after completing their instruments.