

## Friday May, 1st

**3-4 Years 3:00 PM**

### Liquid Separation

Compare the differences between heavy and light, and explore the different densities of liquids. Use this phenomenon to make a **magic potion** with 5 different layers of bright vivid colours!

- Materials:
- Food colouring
  - Honey
  - Oil
  - Dishwashing soap
  - Plastic cup or cylinder (clear)



**4-6 Years 4:15 PM**

### Dancing Milk

Magic and wonder are easy to find at home if you know where to look. Using something as simple as household items, the students will use chemistry to make milk turn into a beautiful dancing liquid around a bowl as if it were alive.

- Materials:
- Milk (low fat)
  - Food colouring
  - Dishwashing soap
  - Shallow Dish
  - Pipette



**6-10 Years 11:00 AM**

### Growing Salt Crystals

In this experiment, we begin growing crystals that children can see grow and grow each passing day. We will look at many types of crystalline forms and then make our own at home.

- Materials:
- Salt
  - Food colouring
  - Chopstick/popsicle stick
  - Water
  - Weight
  - Container
  - String



## Friday May, 15th

**3-4 Years 3:00 PM**

### Make a Helicopter

Learn about the physics behind the propellers of a helicopter and see how the blades help the vehicle spiral downward. Students will get even get to create their own helicopter and enjoy witness the forces of gravity, lift and thrust.

- Materiala
- Printout (provided)
  - Crayons
  - Tape
  - Paperclips



**4-6 Years 4:15 PM**

### Grow your own plants

Do you have 'green fingers'? Find out what it takes to grow the food we eat (it's not as easy as you think.) This is a lesson about where our food comes from and the care required to grow it.

- Materials
- Plastic Dish
  - Cotton Wool
  - Carrot Head x3
  - Water
  - Sugar
  - Salt



**6-10 Years 11:00AM**

### Make a lava lamp

You know the hypnotic sensation of watching a lava lamp! The motion of the coloured blobs is caused by the density and polarity of the substances. With this project, you can make your own (temporary) lava lamp with household materials! It's easy and safe, and it looks very cool.

- Materials:
- Citric acid powder/vinegar
  - Baking soda
  - Bottle
  - Oil
  - Water
  - Food colouring



## Friday May, 22nd

**3-4 Years 3:00 PM**

### Paper Planes

In this science experiment, our scientists will make paper planes and explore the principles of flight. We will investigate how wind resistance and force can help our planes take off and keep gliding through the air.

- Materials:
- Paper, A4
  - Crayons or pencils
  - Tapes
  - Chopsticks
  - Rubber bands



**4-6 Years 4:15 PM**

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- Materials:
- Citric acid powder/vinegar
  - Baking soda
  - Bottle
  - Oil
  - Water
  - Food colouring



**6-10 Years 11:00AM**

### Grow your own plants

This plant science lesson teaches our young botanists the necessities for growing plants. Through the scientific method, they will be guided to compare and contrast different growing condition variables like light and shade, and different types of soil and nutrition.

- Materials:
- Plastic Dish
  - Cotton wool
  - Carrot Head
  - Water



## Friday May, 29th

**3-4 Years 3:00 PM**

### The floor is lava

Let's find out all about chemical reactions in this exciting activity of fizzing bubbles and colourful explosions. With the tray, our molten surface is ready to go and once we add a few drops of vinegar, the experiment really comes alive.

- Materials:
- Food colouring
  - Waterpaint
  - Citric acid powder/vinegar
  - Baking soda
  - Pipette/Spoon



**4-6 Years 4:15 PM**

### The Amazing Liquid Tower

Compare the differences between 'heavy and light', and explore the different densities of liquids. Use this phenomenon to make a **magic potion** with 5 different layers of bright vivid colours!

- Materials:
- Food colouring
  - Honey
  - Oil
  - water
  - Corn syrup
  - Dish soap
  - Ping pong ball
  - Egg



**6-10 Years 11:00AM**

### The science of bubbles

How do bubbles work? How many can we make? How large can we make a bubble before it pops? All the questions and more will be answered in this exploration of bubbly fun.

- Materials:
- Water
  - Dish soap
  - Sugar
  - String
  - Shallow Dish
  - Straw
  - Chopsticks
  - Worksheet (printed)



## Friday June, 5th

**3-4 Years 3:00 PM**

### Bubble Mania

Who doesn't love bubbles?! In this lesson, we will all be able to make our own bubbles and challenge ourselves to make the biggest one we can before it pops.

- Materials:
- Water
  - Dish soap
  - Sugar
  - String
  - Shallow Dish
  - Straw
  - Chopsticks



**4-6 Years 4:15 PM**

### Hovercraft engineering

Hovercrafts are unique and amphibious because they can glide over any flat surface - land or water by riding on cushions of air. In our project, we'll make a hovercraft using a balloon instead of a fan. The air from the balloon creates the cushion needed for the hovercraft to glide.

- Materials:
- CD with bottle lid glued to it
  - Balloon
  - Bottle top with hole through it
  - Paper cutout



**6-10 Years 11:00AM**

### Toy Rockets Part 1

In the first of our two-part session, we will learn about the science of flight, we will look specifically at space flight and space engineering to make our own toy rockets!

- Materials:
- Toilet paper roll
  - Tape
  - String
  - cardboard base
  - Rocket made from craft paper (printed template)



## Friday June, 12th

**3-4 Years 3:00 PM**

### The Solar System Part 1

In this multi-lesson mini-series, we will learn about each of the planets and in turn, discuss what makes each one so unique. In each session, we will focus on one planetary body and make a miniature version to an ongoing solar system model.

- Materials:
- Polystyrene balls
  - Paint/pencils
  - String
  - Coat hanger



**4-6 Years 4:15 PM**

### Balancing Robots

This is a super fun science activity that gets kids thinking! Children will explore the balance and centre of gravity by creating a balancing robot!

Our scientists experiment with using the weight of two paperclips to make a robot stand up straight and defy gravity by sitting on your finger.

- Materials:
- Print out of robot
  - Paper clips
  - Colouring pencils
  - Tape
  - Thick paper cut in a strip (length of popsicle stick)



**6-10 Years 11:00AM**

### Toy Rockets Part 2

Our second part of our adventure into rocket science opens up the opportunity to make another toy rocket. Let's find out how high we can launch it into the air!

- Materials:
- tape
  - String
  - Colouring pencils
  - straw
  - Printed template

