MakerSpace Challenge of the Week

All About You

This week you will get to use craft supplies and your imagination to make a sculpture of you!

Supplies:
- Popsicle sticks
- Glue
- Fabric
- Yarn
- Google eyes
- Markers
- Clay
- Other creative supplies...
MakerSpace Challenge of the Week

Sea Creatures

This week you will get to use craft supplies, INCLUDING A PAPER PLATE, and your imagination to make a creature from under the sea!

Supplies:
- Paper plates
- Construction paper
- Tissue paper
- Ribbon
- Paint
- Yarn
- Cupcake cups
- Sequins
MakerSpace Challenge of the Week

**Speed Challenge**

This week you will get to use craft supplies and your imagination to make an object that LOOKS FAST! It does not need to actually move, but should have elements that make it look like it is fast.

Consider:
- Color
- Shape
- Size
MakerSpace Challenge of the Week

Weaving Challenge

This week you will weave together materials to make something new. You could weave paper, stretch bands, foam, or anything else you find in the Makerspace.

Some materials include:
- Foam strips
- Paper strips
- Elastic bands
- Cardboard
- Yarn
MakerSpace Challenge of the Week

Weaving Challenge

This week you will get to use yarn and other supplies and your imagination to make a weaving of your choice.

Some options include:
- Finger weaving
- Loom weaving
- Make your own loom from twigs
- Make your own loom from cardboard
- Make your own loom from a paper plate
MakerSpace Challenge of the Week

Creating a Biome

This week you will be making a diorama of a biome of your choice.

Be sure to include representations for:
- The sun
- Water
- Soil
- Animals
- plants
MakerSpace Challenge of the Week

**Color Challenge**

This week you will be finding a creative way to mix colors using an optical illusion. First, create a pinwheel or other spinning item. Then use two colors to paint, draw, or glue onto your spinning craft. When it spins, what happens?

Supplies you could use:
- Cardboard Tube
- Construction paper
- Paint
- Yarn
MakerSpace Challenge of the Week

Thanksgiving Marionnette

This week you will be creating your very own puppet called a marionnette! Since it is getting close to Thanksgiving, try making it in the fashion of a Pilgrim or a Native American.

Some of the materials to consider using include:

- Paper rolls
- Pipe cleaners
- Fabric
- Beads
- Feathers
MakerSpace Challenge of the Week

Make a Turkey

This week, in the spirit of Thanksgiving, you will be creating a turkey out of objects of your choice.

Some of the materials to consider using include:

- Pine cones
- Pipe cleaners
- Fabric
- Feathers
- Construction paper
- Boxes or containers
MakerSpace Challenge of the Week

**Egg Carton Sculpture**

This week you will be creating a sculpture using an egg carton as your main component.

Some of the other materials to consider using include:
- Pipe cleaners
- Paint
- Felt
- Feathers
**MakerSpace Challenge of the Week**

**Hour of Coding**

This week you will get some practice with coding! With a friend, you will design a code using arrows to tell the “computer” the placement of the cups to make a structure. Then your partner will test your code by following it to build an identical structure.

**Supplies:**
- Cups
- Arrows
- Graph placemat
Bookmarks for Charity

This week you will be creating bookmarks to give away to those in need. You will start with a piece of thick paper, but after that be creative!

Some of the materials to consider using include:

- Rubber stamps
- Stickers
- Ribbon
- Beads
MakerSpace Challenge of the Week

**Decorative Frame**

This week you will be creating a picture frame with a winter/holiday theme. How you choose to decorate it is up to you!

Some of the materials to consider using include:

- Watercolor paint
- Candy canes
- Glitter glue
- Glue
- Sequins
- Felt
MakerSpace Challenge of the Week

Telephone Challenge

This week you will make and experiment with a paper cup telephone. Does sound travel better with shorter string, longer string? Does the thickness or type of string make a difference? Does the way you hold the cup change how well you can hear people speak?

Some of the materials to consider using include:
- Paper cups (of varying sizes)
- Different Yarns
MakerSpace Challenge of the Week

**Helicopter Challenge**

This week you will make a helicopter from paper of your choice. You will then experiment with your helicopter to try and land it on the center of our helipad. Can you land it on the center from 1 meter away? From 2 meters?

Some of the materials to consider using include:
- Construction paper
- White paper
- Cardboard
- Paper clips
MakerSpace Challenge of the Week

Musical Instrument Challenge

Instruments can make sounds by either being hit (percussion), strummed (strings), or blown into (wind). This week you will invent your own instrument and construct it using any of the materials in the MakerSpace.

Some of the materials to consider using include:

- Paper cups
- yarn/string
- Shoe box
- Water bottles
- Straws
- Rubber bands
- Tissue paper
MakerSpace Challenge of the Week

**Airplane Challenge**

Take a look at the different models of paper airplanes and determine which ones you think would stay in the air the longest. Make your own airplane and experiment with the way it can be folded to make a plane that can stay in the air for the longest amount of time.

Some of the materials to consider using include:

- Paper
- Construction paper
- Cardboard
- Paper clips
- Tape
MakerSpace Challenge of the Week

**Experimenting with Electricity**

This week we will be experimenting with electrical circuits. Using the Little Bits, explore by mixing the power, input, wire, and output options to create working inventions.
MakerSpace Challenge of the Week

Board Game Challenge

This week you will be inventing your own board game! This is a pretty big challenge, so you will want to think carefully and plan your game out before beginning. Some things to consider include:

1. What theme will your game have?
2. What will a player have to do to win the game?
3. How many people can play the game at once?
4. How will they take turns? (dice, spinner, pick a card)
MakerSpace Challenge of the Week

Marble Run

This week you will be creating your own track for a marble run!

Suggested Materials:
- Paper towel tubes
- Cardboard
- Tape
- Popsicle sticks
- Wood pieces
- Plastic cups
MakerSpace Challenge of the Week

**Spaghetti Structure Challenge**

This week you will be creating trying your best to build a structure out of spaghetti. This week, the ONLY materials you can use are spaghetti and clay! The challenge is to try and figure out how to make the spaghetti strong enough to hold an object.

Suggested Materials:
- Spaghetti
- clay
MakerSpace Challenge of the Week

**Bridge Challenge**

You worked last week with spaghetti to try and make a strong structure. This week you will be creating trying your best to build a strong bridge. Remember what you learned from last week’s challenge as you explore ways to make your bridge strong.

Suggested Materials:
- Popsicle sticks
- Glue
- Cardboard
- Paper towel tubes
- Fabric
- Yarn
MakerSpace Challenge of the Week

Animal Habitat Challenge

We have been looking at the habitats of animals. This week you will get to design a model of the habitat of an animal of your choice. Be sure to include its food and water sources, shelter, and things for the animal to do.

Suggested Materials:

- Popsicle sticks
- Glue
- Cardboard
- Paper towel tubes
- Fabric
- Yarn
MakerSpace Challenge of the Week

Self Portrait

I’m curious to know all of the things that you find interesting about yourself. We will be tracing your body on a large sheet of paper and it will be up to you to color it in, designing it to reflect who you are. Will you put yourself in a favorite outfit? Add glitter to your hair? Or use the MakerSpace materials to show your likes in some other way?

Suggested Materials:
- Markers
- Glitter
- Fabric
- Yarn
- Ribbon
- Buttons
MakerSpace Challenge of the Week

Leaf Person

We’ve been learning a lot about the types and characteristics of leaves. Can you use that knowledge to make your own person out of leaves? Think about what shapes there are in a person. Are there leaf shapes that match those?

Suggested Materials:
- Construction Paper
- Glue
- Leaves
- Stems
- bark
MakerSpace Challenge of the Week

**Rock Collection**

Let’s make a special container for your very own rock collection! Use an egg carton and other supplies to design the perfect treasure chest for the rocks and minerals you collect.