## 3-D ART

Everything we see around us, whether it is a person or a tall building, has three dimensions (3D): height, width and depth. Even a sheet of paper has measurable thickness. We work with dimensions in some way all the time.

Place some square or round objects - boxes of different sizes or a bowl of fruit - on a table under an overhead light. Walk around the table and study the shapes and sizes. Watch what the light does to the objects as you view them from different positions.

There are a number of ways you can express what you see in three-dimensional form. This Explorer 3D Art emblem will give you an opportunity to do just that. You will have an opportunity to work on a number of projects so you can create your own forms and objects.

## REQUIREMENTS:

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2. $\qquad$
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4. $\qquad$
5. $\qquad$
Date
Completed

Date
Completed

Complete the Bible activity - God's created world.

## Make candles!

Ceramics - Build a clay box or clay model, or paint a pre-shaped ceramic figure/sculpture.

Create a mobile or stabile.

Make a paper mache' piñata.

Leader's Signature

## REQUIREMENT \#1 - Candle Making

Candle making is a fun and creative way to show your artistic skills. Because you will be dealing with melted wax, it is important that you have an adult helping you on this particular project. First there are a number of safety rules you will need to follow:

1. Have an adult help you.
2. Spread newspapers under your work area on the table.
3. Be very careful with matches and lighted candles. Only
 adults should be using the matches. Do not carry or play with lighted candles.
4. Keep lighted candles away from younger children.
5. Be careful not to spill wax on any surface it could ruin.

Materials needed: one pound of paraffin wax, pan, \#10 tin can, scissors, pot holders, candle wicks, pencil, old crayons, small paper cup (hot drink kind), food coloring, perfume or scented candle pieces.

There are a number of different candles that you can make with this material - colored candles, scented candles or multi-colored chunky candles.

## Here's what to do:

- Put wax in a \#10 tin can. Place this can in a pan that has a couple of inches of water in it.
- Gently boil the water. If the water boils away to less than an inch, add more water. Keep water boiling until wax is melted.
- Handle the tin can and pan with pot holders. Don't play with melted wax or carry it around, because bits that drop on the floor are hard to clean up.
- Don't throw the water from the pan down the sink. Cool it and take out any bits of wax before disposing of the water. Wax can stop up a sink. Scrub the pan with soapy steel wool pad when you have finished. Melted wax can ignite so be sure that an adult is present when you make candles.


## Making the candles:

- Poke a very tiny hole in the bottom of a paper cup.
- Thread a wick through it. Pull through about an inch of the wick.
- Roll the other end of the wick around a pencil and lay the pencil across the top of the cup.
- Pour melted wax slowly into the paper cup.

To make a colored candle, add crayon bits to the melted wax. To make a scented candle, add bits of scented candle or perfume to the melted wax.

To make a multi-colored chunk candle, put multi-colored chunks of wax into the cup and then fill the cup the rest of the way with the melted wax.

- Let the wax in the cup stand and cool completely.
- Tear or peel off the paper cup.
- Cut off the wick from under the pencil.
- Turn the candle upside down and it is ready to use!

To make an "ice cube" candle, use a one quart milk carton as your mold. Cut the carton in half and use the bottom half. Set the wick in place with the help of the pencil. Before you pour the melted wax, fill the carton mold with ice cubes. Then pour in the melted wax and let it cool. Do the last step outside, over a large bowl or sink, so that as the ice melts it will not go all over the place. Now you have a candle with odd shaped holes in it, completely one of a kind.

## REQUIREMENT \#2 - Ceramics

For this requirement you may either make a clay model or paint a pre-shaped ceramic sculpture.


The term ceramic refers to the whole industry that uses clay and clay products. Clay is found almost everywhere. It could even be in your own backyard. It is usually gray, greenish, or red, and, when moist, is soft and malleable (easy to shape). You can get clay from the ground or you can buy it from brickyards, hobby shops or places dealing in clay and ceramic supplies.

For information on ceramics, the local library has ceramic magazines. These are full of ads from manufacturers and dealers who can supply you with clay or clay flour suited to your purpose. Clay flour in bags weighing 10 pounds or more costs a few cents a pound. You may need to visit craft supply shops for additional supplies and information.

A simple project to make with clay is slab-building. It consists of rolling out clay to a uniform thickness, cutting pieces from it like a batch of cookies, and then building an article from the pieces.

An easy item to make is a box. First make a cross-
 shaped pattern on a piece of paper like the picture on the right. Roll out a slab of clay about $3 / 8$ " thick.

Use an ordinary rolling pin with its ends riding on two sticks. Once the clay is flattened to the right thickness, place the cross-shaped pattern on the clay and cut out the pattern.

Let the clay dry a little and then bend the four sides of the box into shape. You may prefer to cut all sides apart and weld them together, which is often done. Use small coils of wet clay to aid in welding the sides and corners neatly together. A small smooth stick is handy for smoothing out corners.

For the cover, roll a slab of clay a little larger than the top of the box and cut the clay rectangle from the slab. Also, cut a flange smaller than the inside dimensions of the box and weld to the inside of the cover. (The flange holds the lid on so it will not slip off.) Have the cover fit loosely. For a knob or handle, roll a ball and weld this to the center of the cover.

A box of this type when complete can serve as a candy dish, nut dish or cookie dish. The next step is to decorate the box by indenting. This is perhaps the simplest form of decorating. You can easily cut or indent a simple design, using a round smooth stick, before the clay gets too hard.

The next step is firing the clay. If you have access to a kiln, you can then fire your clay project. NOTE: This part of the process should be done by an adult, who is skilled in the proper use of the kiln.

To model, you start with nothing and add on until you have something. To carve, you start with too much, and cut away with a sharp instrument until you are down to what you want to express.

Clay modeling is simple and fun. Take a batch of homemade clay or clay from the hobby shop; some cookie cutters and any interesting thing to mark the clay with, such as, a comb, nail, meat mallet, tooth picks, paper clips, pieces of old jewelry; a rolling pin and board to roll the clay on; cornstarch; knife; ruler; and clear shellac or nail polish.

First flatten the clay ball with your hands. Then roll it into a flat slab about 3/4 inch thick. If the rolling pin sticks, dust it with dry cornstarch. Cut the clay with one of the cookie cutters. Poke a hole in the top of the pattern with a tooth pick, if you want to hang the piece up later. Now decorate the item by scratching lines on it with a pointed object. You can also make designs on them by pressing buttons, nails or something into the top of the clay. Now set it aside to dry thoroughly. This will take two to three days. When the item is hard, you can mount a pin backing with white glue. Glue tiny pictures on the front, or paint with tempra paint. Let dry and then coat with shellac or clear nail polish.

Clay animals can be made free-hand. Make clay balls and rolls, then stick them together to form clay animals. Don't make the animals too thick; it takes longer for them to dry thoroughly. Make whatever designs or markings on the animals that you want, like eyes, ears, nose, paws, etc.

Once the animal is completed, it is very important that it dries thoroughly. Let it stand for at least two to three days. Once it is dry it may be painted. Add details like leopard spots or zebra stripes or colored eyes. Let the paint dry and then coat with clear shellac or nail polish.

## REQUIREMENT \#3 - Mobiles and Stabiles

Mobile space designs are objects that move while stabile space designs are objects that stay in place. These are called space designs because they have spaces between the parts.

For this requirement you may make a mobile, the octopus mobile or a stabile sculpture of your choice.

## Making a Octopus Mobile



Materials needed: small round balloon, gift wrap, scissors, ruler, construction paper, string and tape.

1. To make the octopus head, blow up a balloon and tie a knot in the end.
2. Measure the balloon's circumference. Cut a strip of gift wrap that is the same length.
3. Using the diagram below as a guide, trim the gift wrap to form the arms and punch a small hole in the end of each one.
4. Wrap the strip of arms around the balloon, making sure that the knot in the balloon is at the top of the head. Tape the strip in place.
5. Cut out two eyes and a mouth from
 construction paper and tape them onto the octopus.
6. Cut a $4 " \times 24$ " strip of heavy construction paper or cardboard and glue or tape the ends together to make a circle. Make eight holes around the bottom edge of the circle (to connect the octopus legs) and tie various lengths of string to each hole (20-30 inches). Tie the other ends of each string to the legs of the octopus.
7. Cut four holes evenly spaced around the top edge (to hang the mobile) and tie four pieces of string, (each the same length - about 12 inches) one to each hole.
8. Tie one end of a piece of string to the knot on top of the balloon and tie the other end to the four strings that will hang the mobile.

## Make Your Own Stabile Sculpture

Stabiles are space designs that do not move. For a stabile, you need a firm base that will allow you to "stick" objects into it. Clay makes the best base. You could also use various types of dough and even a thick base of sand. Place your base in a large bowl or pan and you are ready to design!

Once you have your base set, begin sticking objects into it to form your sculpture. Glue or fasten small objects to the sculpture to give it a balanced, three-dimensional look. You may have a theme for your objects like: things from home, sticks and twigs, old toys, etc., or you may want to mix and match all sorts of items. The choice is yours have fun and be creative!

## REQUIREMENT \#4 - Making a Piñata

Papier-mâché is a French phrase meaning chewed-up paper or molded paper pulp. In this area of 3D Art, you will learn how to use paper to make a piñata!

## To make a simple piñata, follow these easy steps:

1. Inflate a large round balloon.
2. Tear some newsprint into strips about 2-3 inches wide.
3. Make a paste with flour and water. Use 1 cup of flour and 1 cup of water. Pour the flour into a bowl then slowly mix in the water. It needs to be quite thick, so if it is runny add more flour, if it is too thick add more water.
4. Dip the newsprint strips one at a time into the paste and apply them onto the balloon until it is completely covered.
5. Allow the balloon to dry.
6. Glue toilet paper rolls or egg crates onto the balloon to make legs, ears and nose for your piñata.
7. Paper mache' the rolls and let them dry.
8. After the piñata is completely dry, decorate it with paint, cotton balls, pipe cleaners and other craft supplies.

If you would like to fill your piñata with candy or another treat, when your balloon is dry (step 5), cut a small hole in one end and fill the piñata with candy. Do not put too much in - it will make your piñata too heavy and it might break. Paper mache' over the hole and let it dry.

## REQUIREMENT \#5 - God's created world in 3D!

During your work on this emblem, you looked at and created objects that were three dimensional (3D); they had height, width and depth. God's created world has many examples of things that are high, wide and deep, as well as examples of things that are short, narrow and shallow.

Read with your leader the story of the creation (Genesis chapter 1) and write down things God created that can have height, width and depth:

| Height | Width | Depth |
| :--- | :--- | :--- |
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|  |  |  |
|  |  |  |
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In 1 Samuel 16:7 we read: "...The Lord does not look at the things man looks at. Man looks at the outward appearance, but the Lord looks at the heart." (NIV).

What does this Scripture verse mean? Discuss this with your leader.

