

## Discovery Time at Home for the First Sunday in Lent, February 21, 2021

### Introduction

*To begin, explain to your child(ren) that we are in a special season called Lent. Lent six weeks long and is a time to prepare our hearts to celebrate Easter. A long time ago, most people who became Christians were adults. For many people, choosing to be baptized also meant making changes in their lives. Easter was the main time for baptisms. Lent was a time for people who wanted to be baptized to think about what they needed to do to live how Jesus taught us.*

**This Week's Story:** *Ask your child(ren) to retell what they know of the story of Noah as best that they can. Then retell the end of the story using the following as a basis.*

Genesis 9, selected verses

God said to Noah and his family, "I am making a special agreement with you and the people who will live after you. And I also make it with every living thing, with the birds, the tame animals, and the wild animals. This special agreement is with all the animals that came out of the boat with you and with every living thing on earth. I make this agreement: never again will a flood cover the whole earth. And the sign of my promise is this rainbow. When a rainbow appears, we will remember this agreement between me and you and every living thing."

Ask them the meaning of the rainbow in the story. Explain how in the story it is a sign that the whole world will not be flooded again but that in many ways it is a promise that God will look after the world and protect it. Because it is a promise with all of us, the rainbow reminds us to do the same thing. In the Jewish tradition, God established a covenant with Noah for all of the world. Called the Noahide Covenant, seven laws are given to Noah for everyone in the world.

These are the seven laws:

1. You shall not have any idols before God.
2. You shall not murder.
3. You shall not steal.
4. You shall engage in only loving relationships.
5. You shall not blaspheme God's name.
6. You shall not eat an animal's blood or an animal that is still living.
7. You shall have only laws that respect the above six.

These laws were embedded into the Teaching given at Sinai, but additional obligations were given to the Jewish people who are to be a sign of love and holiness in the world. It is because of this teaching that leaders in the early church (Acts 15:19-21) decided that Gentile Christians did not need to become Jewish first in order to be baptized.

Explain that because the rainbow is a sign that God has entered into a promise with all of the world and not just one segment of it, the rainbow is also a sign of unity and diversity, a sign that we can all be one family even though we're all different. We see this in the rainbow itself, made up of many colours of light but those colours all make up white light. This is why you sometimes see a flag made up of the colours of the rainbow. It means that everyone is welcome where that flag is displayed, regardless of race, gender, sexual orientation, gender identity, ability or age. That's a policy we try to live at Richmond Hill United Church.

## This Week's Activities

This week there are two possible activities. The first is a science experiment.

### Activity A – Secret Colours in Black Ink

The following is courtesy of The Exploratorium ([www.exploratorium.edu](http://www.exploratorium.edu)). Children learn that coloured inks are not what they seem. Black ink is actually made up of multiple colours, similar to how white light is a combination of multiple colours. The process is called chromatography.

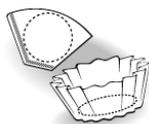
#### What do I need?

scissors, white paper coffee filter,  
black marker (not permanent),  
water, coffee cup or mug

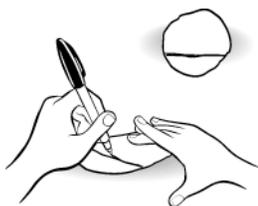


#### What do I do?

**1** Cut a circle out of the coffee filter. (It doesn't have to be a perfect circle, just a round shape that's about as big as your spread-out hand.)



**2** With the black marker, draw a line across the circle, about 1 inch up from the bottom.



**3** Put some water in the cup-enough to cover the bottom. Curl the paper circle so it fits in the cup. Make sure the bottom of the circle is in the water.



**4** Watch as the water flows up the paper. When it touches the black line, you'll start to see different colours.

**5** Leave the paper in the water until the colors go all the way to the top edge. How many colors can you see?

**6** If you have another black marker, draw a line on a clean, dry coffee filter circle. Put the circle in fresh water. Does this marker make different colours than the first one?

**Another Method:** Use a clean, dry coffee filter circle. Use your marker to draw a black spot in the center. Put the circle on a saucer, and put a few drops of water on the spot. In a few minutes you'll see rings of color that go out from the centre of the circle to the edges.

## Activity B - Rainbow shirts

### **What do I need?**

plain white t-shirts; fibre reactive clothing dye powder of various colours; plenty of water, measuring cups and spoons, soda ash, a container to dye t-shirt in, rubber gloves (see below).

### **What do I do?**

Before the activity begins, set out the containers of dye on a table. Set the containers that each child will dye the shirt on other tables, ensuring that each child will have plenty of room. The process for dyeing the t-shirts is known as Low Water Immersion dyeing.

**Low Water Immersion dyeing** is also known as "scrunch", "crumple" or "crackle" dyeing. In traditional immersion dyeing, you use a large volume of water, frequent stirring, and leveling agents to make the colour as smooth as possible. Low water immersion dyeing is the opposite. You use as little water as possible, crunching the fabric together for a sort of resist effect, with as little stirring as possible. **Wonderful colour gradations** are possible with this technique. The low water technique involves adding the fixer *\*last\**, after allowing the colours to slowly blend and creep along the fabric. The container to dye in should be plastic, glass, enamel, or stainless steel, not aluminum or iron. It container should be no wider than necessary to hold the fabric, as it is best to really cram the fabric in tightly, for maximum contrasts. Be sure to pre-wash all clothing to remove invisible finishes that can prevent the dye from getting to the fabric.

**Applying dye.** Crumple the t-shirt and stuff it tightly into a container. Then mix up one colour of dye, anywhere from 1/16 to 4 teaspoons of dye per cup, volume one to two cups (a teaspoon is about 5 ml, and a cup is 250 ml). Pour the dye over the t-shirt. **Mix** another colour and pour it over the t-shirt. The process can be repeated with other colours. A cup or two of water may be poured over the t-shirt between adding different colours. Or one colour could be put in the bottom of the container before the t-shirt is added, and another one poured over top. Do not stir or mush the fabric in this step, unless you wish to mute the variations in the final piece.

**Allowing the colours to blend and spread.** After enough dye and water has been added to almost cover the garment, leave it alone for anywhere from a few minutes to an hour. This time allows the colors to creep along the fabric, creating beautiful mixtures. Pre-mixed colors will tend to separate as the dyes creep along the fabric at their own individual rates. Too little time will not allow this diffusion separation to occur; too much time can actually reduce the amount of variation in the piece by allowing the dyes to diffuse **too much** and blend together.

**Fixing the dye.** When you have left the dye to rest long enough, you can now add the sodium carbonate (soda ash) as a fixer. A good concentration is one teaspoon (5 ml) for each cup (250 ml), total volume, in the dye bath - including whatever amount of water you will be using to dissolve the soda carbonate in for adding it. Soda ash dissolves best in warm water, about 95°F (35°C). If you have used a total of 8 cups of water in your dye bath, then, use 9 teaspoons of soda ash dissolved in an additional cup of water. Gently pour this solution over the top of the dye bath. You can add more water if the topmost bits of fabric are still sticking out of the liquid, at that point. Do not stir or agitate the mixture in any way.

**Reaction Time.** The soda ash must be left to react with the fabric and dye for at least an hour.