RAINBOW PRESCHOOL UNIT

I am so excited to have finally put this together. I hope that you find this helpful in your preschool experiences. I am big into science and created this, because I didn’t find very many resources online that fit what I was looking for.

I have included websites to resources that I found and tips and suggestions throughout. You are free to use this for your own personal use.

We will be reading “A Rainbow of My Own” by Don Freeman as our literary focus. I usually read the main book every day. I have found that repetition is wonderful for building literacy skills. You can use whatever literary materials you choose.

Enjoy! Sincerely, Dari

RAINBOW PRESCHOOL UNIT

**Create a Beautiful Indoor Rainbow with this Experiment**

**\***This is pasted right from the website. I could not copy and paste the URL. Sorry!\*

written by: Ricky • edited by: Elizabeth Wistrom • updated: 11/22/2011. Source: Cool Science: Indoor Rainbow Experiment online. Web: Dec. 29, 2012.

Kids are naturally enamored by nature's rainbows and the beautiful colors that spread across the sky. This experiment is easy to set up and teaches students the concept of refraction of light, with a little bit of humor on the side.

* Here is an experiment which your stidents will surely love to do. It involves creating their own rainbow (or at least a sort of rainbow) inside your classroom. The icing on the cake is that you do not need any costly equipment or colors to create this magic. Nature already has the ingredients that you require in the form of light. You simply need an arrangement to split the light up into its components. This will form the rainbow.
* **Requirements**
	+ A strong flashlight or source of light which produces white light
	+ A wide-sized vessel made of glass, filled with clear water
	+ A small piece of mirror which fits into the vessel at the bottom
	+ A room which has curtains or blinds, so that the room can be turned completely dark (or as dark as possible)
* **Figure 1: The Set Up**



* **Procedure**

Place the glass vessel filled with water on a table and put the mirror inside it so that the mirror is placed at an angle to the vertical side of the vessel. Take a close look at Figure 1 (above) to understand how the arrangement should look. It is a very simple computer generated diagram and the various parts are labeled on the diagram itself.

WHAT MAKES A RAINBOW?

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What makes a rainbow? Write your prediction:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Materials needed:

1. Glass container with water
2. Mirror
3. Flashlight or sunlight
4. White paper

Test it:

Fill glass container with water. Place on table near sunny window or use flashlight. Place mirror inside container on an angle. Shine light onto container toward mirror.

Record. What did you see?

A rainbow is made the same way. Light from the Sun reflects off of objects through the rain.

Was your prediction correct?

NO YES

Draw a picture of a rainbow!

COLOR JARS

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How do you make different colors? Write your prediction:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Materials Needed:

1. 6-8 Clear containers
2. Water
3. Red, Yellow and Blue food coloring
4. Spoon or stirring stick

Experiment:

Fill each container with water. In one put 2 drops of Red. Stir. In another, put 2 drops of Blue. Stir. Repeat with yellow. In another jar, mix red and blue. In another, mix red and yellow. In another, mix blue and yellow. If there are others, let child experiment.

Record:

 \*Red \*Yellow \*Blue \*Red & Yellow \*Red & Blue \*Blue & Yellow \*Other

We see colors because different objects reflect one color of light. A green leaf only reflects green light, and so that is what we see.

Was your prediction correct?

NO YES

This idea came from a book titled, “Steven Caney’s TOY BOOK.” 1975.

WATER CYCLE

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What makes it rain? Write your prediction:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Materials Needed:

1. Ziploc sandwich bag
2. Tape
3. Window
4. Water

Experiment:

Fill the baggy with about 1 in. of water. Seal it. Tape it in a sunny window. Leave it for a while. Check on it throughout the day. You should see condensation (water droplets) forming inside the bag toward the top.

Record what you see.

How it works:

When the Sun heats up the ground, the water on earth evaporates and rises into the air. This water collects together and forms clouds. The clouds get really heavy. If the air is warm, the clouds release the water. This is called rain. The rain goes back to the earth and repeats the same cycle. This is called the water cycle.

Was your prediction correct?

NO YES

WATER CYCLE

Use stencils to draw parts of cycle. I made mine with my cricut. The objects were cut at 1.75” tall.

Evaporation

Drainage

Collection

Precipitation

Condensation

I left these blank so your child could trace the stencil shapes onto the correct page. I would recommend printing this on a grey or light blue cardstock. Cut out and staple at top.

Then it condenses and forms clouds.

The water evaporates into the air.

The sun heats up the water on the earth.

THE

WATER

CYCLE

Water in the ground drains to the ocean through rivers. Then the cycle starts all over!

The clouds get very heavy. When they cannot hold any more water, they release it. This is called precipitation.

Precipitation can be rain or snow. The rain falls to the earth and collects in the ground.

R IS FOR RAINBOW SEARCH

My child loves to play Hide and Seek and look for objects. She calls this game, “Going on a Search” (lol). Look for the objects below around your home. These may be found in a book, as a toy, on the tv, etc. Be creative!

Rabbit Reef

Rug Ribbon

Rat Rose

Rainbow Robe

Rock Road

Rag Remote

Raindrop

Red

Robot

Railroad

Roll

Rope

Ruffle

Radio

Rhubarb

Reindeer

R is for RAINBOW

LETTER R SCRATCHBOARD ART

1) Make a stencil of the letter R. I used my cricut and cut it out at 3 inches. I made a capital R with the Lyrical Letters cartridge. This allowed me to have an R with the middle piece still attached. I also cut a lowercase r out.

2) Cut a piece of white cardstock in half. This will give you two boards.

3) Have your child draw all over the white paper heavily with an assortment of crayons. Or, you can do this beforehand.

4) Using a dry rag, wipe surface to gently buff the paper.

5) Coat the paper with black acrylic paint and let dry. Once again, you may do this beforehand.

6) Using the stencil as a guide, have your child scratch the black paint off to reveal the colors underneath.

\*Note: With the other board, she may want to use the water cycle stencils.

NURSERY RHYMES

**RAIN FINGERPLAY**
Rain on the green grass.
(Flutter fingers down to ground.)
And rain on the tree.
(Flutter fingers up over head.)
Rain on the housetop,
(Make upside down "V" with hand and arms.)
But not on me!
(Circle arms over head to make umbrella.) Source for fingerplay: http://www.alinasadventuresinhomemaking.com/2012/12/29/index.html

**IT’S RAINING, IT’S POURING**

It’s raining, it’s pouring,

The old man’s snoring;

He got into bed

And bumped his head

And couldn’t get up in the morning.

RAIN ON THE GREEN GRASS JUMPING ACTIVITY

Prep: Draw and/or cut out some green grass on green cardstock. Draw a tree on a piece of white paper. Draw a house on another piece of paper. You could also find a coloring page of each.

Activity: Lay out the pictures vertically in order with the grass closest to you, followed by the tree, then the house. As you recite the nursery rhyme, hop next to the pictures. When you say, “But not on me,” jump and touch both thumbs to your chest. This will help your child learn the nursery rhyme faster and have more fun!

IT’S RAINING, IT’S POURING DRAMA PLAY

Who doesn’t remember acting out this nursery rhyme? It is very simple. You can use a bed or not. Let your child do her own actions.

OTHER ACTIVITIES

Hidden Pictures:

I have several “Turtle” Magazines and there is a hidden pictures page in the March/April 2005 edition. It is called, “Puddle Jumpers.” I found one online here: <http://www.netplaces.com/kids-hidden-pictures/>. It’s called Rain Dance.

Dot-To-Dot:

I printed a cute Barney with an umbrella dot-to-dot. I googled “rain dot to dot.” The URL is <http://www.preschoollearningonline.com/Coloringpages/Coloringpages2/Barney_dot.gif>.

RAINBOW WORD SEARCH

R A I N B O W

E D R A I N R

D R I B B O N

W A T E R A T

R O P E Q P R

U N S R O A D

G R A B B I T

Circle these words:

RAINBOW RAIN RIBBON RAT

ROPE ROAD RABBIT RED

RUG

Note: This is a very simple crossword. All the words are found left to right or top to bottom to make it easier for young children to find these. If you need to simplify it more, just have your child find all of the R’s.

HANDWRITING PRACTICE

BUILD A RAINBOW GAME

There are two rainbow sets on this page. Cut out on cardstock and color.

BUILD A RAINBOW GAME

Use these cutouts if you don’t want to color your own. Cut out on cardstock. This page makes 2 sets.

**Build a Rainbow**

start

BUILD A RAINBOW GAME

You will need:

* 1 board game (previous page). You may want to print this out on cardstock or glue to a file folder.
* One dice. You can use a dice that has 1-6 or a dice that has 1-3 depending on your child’s development. To make a simpler (1-3) dice, print one off the web. There are lots of free blank dice/cube templates. Put 1 dot on 2 sides; 2 dots on 2 sides; and 3 dots on the remaining 2 sides.
* Objects for playing pieces. I use fun foam shapes.
* Rainbow cutouts (black and white that you color and cut out before or the colored ones.) I recommend you print these on cardstock.

INSTRUCTIONS:

Place a playing piece for each player on start.

The first player rolls the dice and moves accordingly. If you land on a rainbow, you may choose a piece for your rainbow. If you land on a cloud, you must go back 2 spaces. If you land on a sun, you may move ahead 1 space.

The object of the game is to be the first person to complete your rainbow with all 7 pieces. Play continues around the board until someone has completed his rainbow. You may choose to allow all players to finish.

COLOR BY NUMBER

KEY:

1 = BLUE 2 = RED 3 = ORANGE 4 = YELLOW

5 = GREEN 6 = PURPLE 7 = GREY

2

2

5

6

1

4

5

1

7

7

7

7

7

7

7

7

7

3

3

3

3

3

3

3

3

4

BEGINNING PHONICS PUZZLES

This is a first, but an idea I have wanted to incorporate into my child’s schooling. It is simple enough. There are pictures that correspond to letter cards. The goal is to sound out the words and match them to the pictures. As the child progresses, he can look at the picture and then sound out the word and spell it with the cards. I recommend printing this out on cardstock.

o

ck

t

a

r

r

r

u

g

d

e

r

COLOR COUNTING CARDS

Slip this sheet into a sheet protector and let your child use a dry erase marker to circle the correct number. Or, you could copy onto cardstock, cut out and laminate. This would allow you to have your child put them in order after she has correctly identified them.

1

2

3

4

1

2

3

4

1

2

3

4

5

6

7

8

5

6

7

8

1

2

3

4

6

7

8

9

5

6

7

8

6

7

8

9

STENCIL PATTERNS

Using the stencils made for the water cycle, have your child trace (or draw) a picture in the correct box. I would recommend the sun, rain, and cloud. You can emphasize beginning word sounds with these.

Rain

Sun

Sun

Rain

Sun

Sun

Sun

Sun

Sun

Cloud

Cloud

Cloud

Rain

Rain

Rain

Cloud

Rain

Rain

Rain

Cloud