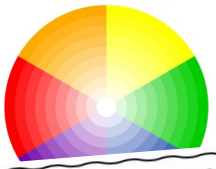
COLORS

A DAB of GLUE will do

Color Wheel

A conventional way to show the relationships of colors to another by arranging them in a circle.



imary

llow, and blue. These
made by mixing ott

Secondary

Orange, green, and purple. The
products by mixing two prir

Arch

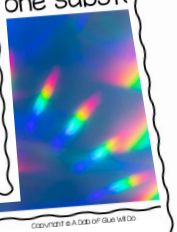
A curved symmetrical structure.

Reflection

When light bounces off the surface of something instead of passing though it.

efr

ending of li
one substr

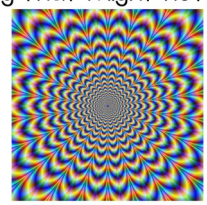


Rainbow

Arch of colors that appears i
opposite the sun.

Optical Illusion

A way of tricking the brain to see something that might not be there.



Colors

here you look in our
d you see colors.

e things
red.

Some things are blue.

Some things are orange.

e things are yellow.

e things
gray.

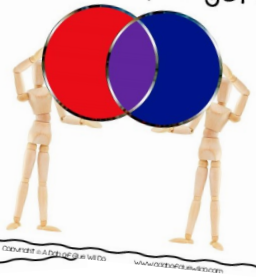
Some things are purple.

There are primary colors and secondary colors.

ry colors cannot be
by mixing other colors.
e red, yellow, and blue.

y colors ar
d mix primc
are three e

If you mix blue plus red, what color do you get?



THREE COLOR EXPERIMENTS

Walking Color

This is great way to show yc real life color wh

SUPPLIES
- Paper towels
- 6 Cups
- Food Coloring
- Water

DOING THE EXPERI

Add 20 drops of yellow Fooc cup with water. Repeat this

Fold paper towel into length wis

Place the paper towel like the so that each paper towel is su the colored water of one full end is also in the empty cup. that each cup has two paper that all jars are connected in paper towel circuit.

QUESTIONS TO

- How long does it take move from one cup t
- Why doesn't all the wa same cup?
- What other colors cou "walking" the water fro

THE SCIENCE BEH

The colored water moves towel by a process called Capillary action is the abilit flow upward, against gravi spaces. This is the same t water climb from a tree's leaves at the top.

Name: _____

Walking Water C

If we place paper towe water, I predict this wi

Draw a picture of you

Before

Name: _____

Walking Water Color Wheel

If we place paper towels in the colored water, I predict this will happen:

Show what happened to the water and

Baking Soda Co

This is one of my favorite e: do! Such a great color m

SUPPLIES
- Jars
- Fish Soap
- Vinegar
- Baking Soda
- Food Coloring
- Tray

SETTING UP

In each jar, pour ½ cup of Few drops of food coloring and blue for purple, yellow ar green. etc.)

Add a few drops of dish soap

Place the jars close together tray.

DOING THE EXPERIM

Ask the students what will hap add baking soda to the jar. Will stay the same or mix?

Add baking soda to the vinega teaspoon at a time. Watch as foams and spills out of the j

QUESTIONS TO

- What is a chemical r
- Why do baking soda What would happen if the primary colors?

THE SCIENCE BEH

Baking soda and vinegar baking soda is a base and When these two substan a chemical reaction that This gas catches the baki and soap particles and mc

When the two colors react

Name: _____

Baking Soda E

If we add baking soda predict this will happen

Draw a picture of you

Before

Name: _____

Baking Soda Explosions

If we add baking soda in each jar, I predict this will happen:

Show what happened to the colors once

Melting Ice M

This is fun and mess free wa students a great color r

SUPPLIES
- Ice Cube Tray
- Food Coloring
- Jars
- Salt

SETTING UP

Color some water re Carefully pour the c cube tray and free the colors.

DOING THE EXPERI

Place two opposite-colored jar. Add salt and a bit of wa ice cubes melt faster.

Ask the kids if they think the co separate or mix, and what color it will make.

Watch as the ice melts and for color. Let the kids experiment several ice cubes of varying co how many different colors th

QUESTIONS TO

- What other colors co melting ice cubes?
- Why do colors change
- Why do we see colors

THE SCIENCE BEH

The color spectrum is m and secondary colors. Th light spectrum, which is b wavelength. Primary color colors that all colors are need red, blue, and yellow paint colors. Kids can watc colors are made and have melting ice at the same tir

Name: _____

Melting Ice

If we place different c jar, I predict this will h

Draw a picture of you

Before Melting

Explain what happen once the ice melted:

Name: _____

Melting Ice Magic

If we place different colored ice in a jar, I predict this will happen:

Show what happened to the colors once the ice melted:

ACTIVITIES & WORKSHEETS

Color Padd

This is a great and mess-f students to experiment wit

SUPPLIES
- Colored cellophane
- Cardstock paper
- Glue
- Cup

DIRECTIONS

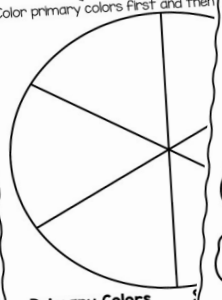
Using the ends of a cup, tra below and cut. You will need cellophane circle. Also use th and cut cellophane circles.

Glue the pieces of cellophane ins circles like the picture below.

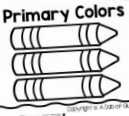
Name: _____

My Color Wh

Color primary colors first and then



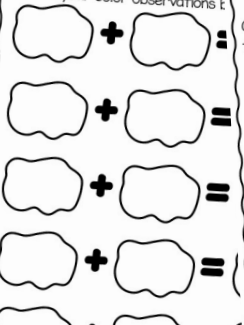
Primary Colors



Name: _____

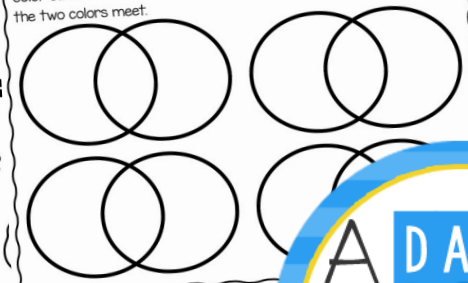
All About Co

Record your color observations t



_____'s Color Experiment

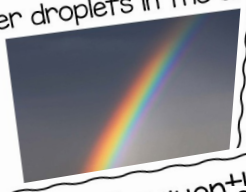
Color each circle a different color and find out what happens when the two colors meet.



Rainbows

rainbow is ar
's that form

Rainbows are created b
reflection and refractior
water droplets in the at

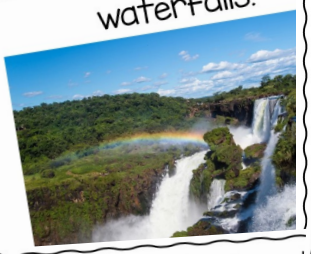


When we look at the sun, we see a white light. In reality the light from the sun is made up of the colors you see in a rainbow.

These seven colors are red, orange, yellow, green, blue, indigo, and violet.

ws can be
og, dew, c
ter drops
om behind

You see them frequent
waterfalls.



A rainbow can only be seen if you are between the sun and the rain.

A rainbow is actually a circle, but we usually can just see half of one.

s there can even be double
his happens when light bend
off the water drops in the
air twice.

eople will see
ow because
eate a differ

Let's have some fun and make our own rainbows!

Making a Rai

Students are fascinated wit
why not let them make

SUPPLIES

- CDs
- Flashlights (ideally not LE
- Piece of white paper
- Prism (not necessary, b

SETTING UP

Ideally you have sev
students can compl
groups.

DOING THE EXPERI

Have each group examine th
notice the different bands c
you tilt the CD the colors wil

Place the white paper on the
flashlight on the CD. The light
flashlight will reflect onto the
a rainbow.

Students can try this experime
prism to, allowing them to com
they notice.

QUESTIONS TO

What does the flashligh
How does changing the
flashlight change how th
What makes the light se
bounces off the CD?

THE SCIENCE BEH

Similar to when water dr
rain, the CD separates wh
the colors that actually r

White light is made up of
see in a rainbow (red, oran
blue, indigo, and violet). Whe
flashlight on the CD it sepa
light into 7 colors. The pits
also help reflect the light.

Name: _____

Flashlight I

If we shine a flashlight this will happen:

_____

_____

Draw a picture of you

Without Light

Explain what happer the flashlight on the

_____

_____

_____

Name: _____

Flashlight Magic

If we shine a flashlight on a CD, I predict this will happen:

Show what happened when you shine the flashlight on the CD :

A DAB of GLUE will do