

► **2nd Grade** | Unit 7

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PHYSICAL PROPERTIES

SCIENCE 207

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LIFEPAC Test |Pull-out

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PHYSICAL PROPERTIES



God created a wonderful world! As you look around you, there are many things to see. These things have different colors. They have different shapes and sizes. They feel different. Some feel hard. Some feel soft. Yes, God has created a wonderful world with many different **physical** things.

Something that is physical can usually be seen and **touched**. For example, a table is a physical thing. You can see it and touch it. Physical things, like a table, have different **properties**. Some of these **physical properties** of things are color, shape, size, and how something feels. In this LIFEPAAC[®], you will learn more about these physical properties of things: color, shape, size, and how something feels.

Objectives

Read these objectives. They will tell what you will be able to do when you have finished this LIFEPAAC[®].

1. You will be able to name the three primary colors.

2. You will be able to tell how different colors are made from other colors.
3. You will be able to name the colors of the rainbow.
4. You will be able to describe some colors of seasons and holidays of the year.
5. You will be able to tell about the different sizes and shapes of things around you.
6. You will be able to tell how things feel.
7. You will be able to explain how some things are soft and some things are hard.
8. You will be able to link a physical property to an object.

New Words

These words will appear in **boldface** (darker print) the first time they are used.

alum (al um). A powder used to make things hard.

circle (cir cle). A round and flat shape.

clay. Sticky earth that gets hard.

clothes. Something to wear.

crayons (cray ons). Colored wax used for drawing.

fleece. The wool of sheep.

holiday (hol i day). A special day of celebration; a day off from work or school.

holly (hol ly). A green bush with prickly green leaves and red berries.

indigo (in di go). A dark shade of blue.

octagon (oc ta gon). A shape with eight equal sides and eight corners.

physical (phys i cal). Having a material existence which can be seen by the senses.

physical properties (phys i cal prop er ties). Words that tell what can be seen or touched about an object.

potter (pot ter). A person who makes things out of clay.

primary (pri ma ry). First; the one from which others are made.

properties (prop er ties). Natural qualities of something.

rainbow (rain bow). An arch of many colors that sometimes forms in the sky during or after a rain.

reason (rea son). Tell why.

rectangle (rec tan gle). A shape with four sides and four corners.

rough. A bumpy surface.

signs. Pictures or words that give directions.

smooth. Without bumps.

square. A shape with four equal sides and four corners.

thin. The sides are close together.

touch. To feel.

triangle (tri an gle). A shape with three sides and three corners.

yield. To give way to another.

1. ALL ABOUT COLORS

God made things with many pretty colors. Color is a physical property of things. People can also help make things with pretty colors.

In this section of the LIFE PAC, you will learn more about colors. You will also make some pretty colors!



Words to Study

clothes. Something to wear.

crayons (cray ons). Colored wax used for drawing.

holiday (hol i day). A special day of celebration; a day off from work or school.

holly (hol ly). A green bush with prickly green leaves and red berries.

indigo (in di go). A dark shade of blue.

physical properties (phys i cal prop er ties). Words that tell what can be seen or touched about an object.

primary (pri ma ry). First; the one from which others are made.

rainbow (rain bow). An arch of many colors that sometimes forms in the sky during or after a rain.

reason (rea son). Tell why.

Ask your teacher to say these words with you.



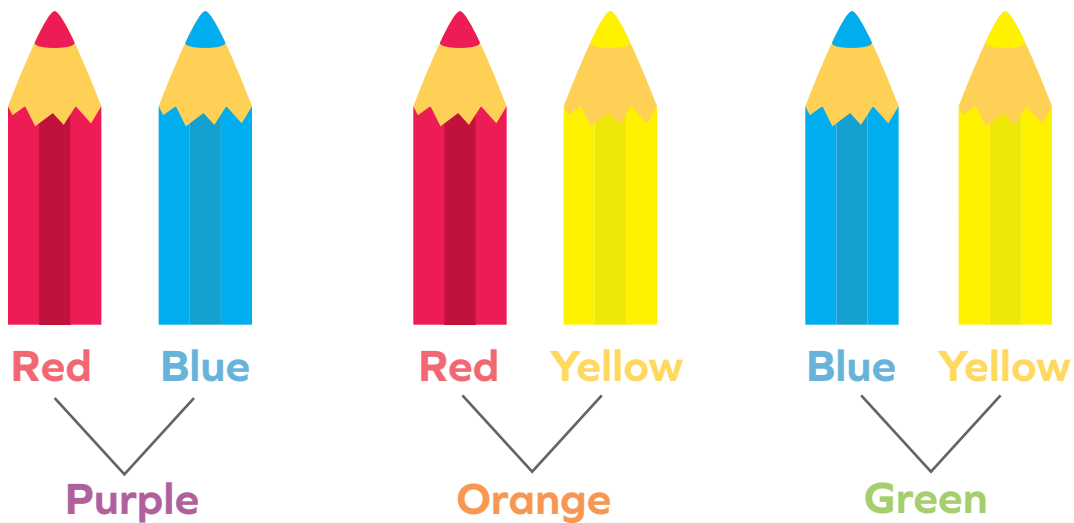
Teacher Check

Initial

Date

Primary Colors

Three of the colors that you see are called **primary** colors. The primary colors are red, yellow, and blue. You can make a great many things with these three colors. The **reason** that these colors are called primary is because you can make every color with them.



From the three primary colors, many other colors can be made. For example, if you mix red and blue colors, you will get purple. If you mix red and yellow, you will get orange. If you mix blue and yellow, you will get green.

There is another interesting thing about colors. You can mix white with any of these colors and get light colors. For example, if you mix white with red, you get pink. If you mix white with blue, you get light blue. Mixing white with green will give a light green color. If you want darker colors, you must mix them with black. For example, mixing black with blue will give a dark blue color. What happens when you mix black and white? You get gray!



Do this activity with colors.

These supplies are needed:

- tubes or pots of finger paint in the following colors: red, yellow, blue, black, and white
- at least 6 paper plates
- an old shirt or apron to protect your clothing
- paper towels to clean your fingers and hands

Follow these steps and answer the questions. Put a check (✓) in the box when you do each step.

☐ 1. Place small and equal amounts of the red and yellow finger paints on a paper plate.

☐ 2. Mix the paints together well with your fingers.

☐ 3. Clean your hands and fingers with the paper towel.

1.1 What color did you make? _____

☐ 4. Place small and equal amounts of the red and blue finger paints on a paper plate.

☐ 5. Mix the paints together well with your fingers.

☐ 6. Clean your hands and fingers with the paper towel.

1.2 What color did you make? _____

(continued on the following page)

- ☐ 7. Place small and equal amounts of the blue and yellow finger paints on a paper plate.
- ☐ 8. Mix the paints together well with your fingers.
- ☐ 9. Clean your hands and fingers with the paper towel.

1.3 What color did you make? _____

- ☐ 10. Place small and equal amounts of the black paint and one of the other colors (red, yellow, or blue) on a paper plate.
- ☐ 11. Mix the paints together well with your fingers.
- ☐ 12. Clean your hands and fingers with the paper towel.

1.4 Is the new color lighter or darker? _____

- ☐ 13. Place small and equal amounts of white paint and one of the other colors on a paper plate.
- ☐ 14. Mix the paints together well with your fingers.
- ☐ 15. Clean your hands and fingers with the paper towel.

1.5 Is the new color lighter or darker? _____

(continued on the following page)

- ☐ 16. Place small and equal amounts of the black and white finger paints on a paper plate.
- ☐ 17. Mix the paints together well with your fingers.
- ☐ 18. Clean your hands and fingers with the paper towel.

1.6 What color did you make? _____



Teacher Check _____

Initial

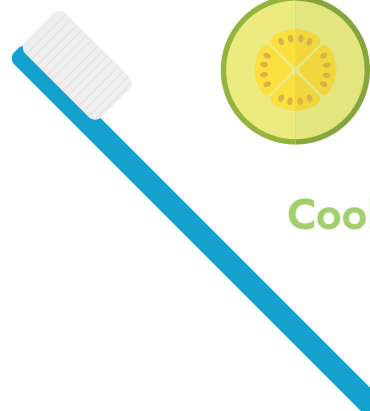
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Some colors are known as “cool” colors. Green and blue are cool colors. Some colors are “warm” colors. Red, orange, and brown are warm colors.

Everything around us is beautiful with colors. God put color all over His world. We see colors in the flowers and trees. We see colors in the **clothes** we wear. Maybe you have **crayons** with many colors. People and animals, too, have many colors. Color is everywhere.



Warm Colors



Cool Colors



Answer these questions.

1.7 What are the three primary colors?

a. _____

b. _____

c. _____

1.8 Tell what colors you get if you mix these colors:

a. red and yellow _____

b. red and blue _____

c. blue and yellow _____

d. blue and white _____

e. red and white _____

f. black and white _____

1.9 Name a cool color. _____

1.10 Name a warm color. _____



Draw lines to match.

- | | | | | |
|-------------|--------------|---|---|--------------|
| 1.11 | as red as | ▶ | ◀ | the sky |
| 1.12 | as blue as | ▶ | ◀ | a tree trunk |
| 1.13 | as green as | ▶ | ◀ | a cherry |
| 1.14 | as yellow as | ▶ | ◀ | the night |
| 1.15 | as black as | ▶ | ◀ | the grass |
| 1.16 | as brown as | ▶ | ◀ | the sun |

The Rainbow

The **rainbow** is a very special thing that God made with many colors. Have you ever seen a rainbow in the sky? It is very pretty!

A full rainbow usually has seven main colors. Can you tell what the colors are from the rainbow shown in the picture?



SELF TEST 1

Each answer = 1 point

List the colors.

1.01 List the three primary colors.

a. _____

b. _____

c. _____

1.02 List the seven colors of the rainbow.

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

g. _____

Circle the correct answer.

- 1.03** When yellow and red are mixed, you get _____.
blue orange
- 1.04** When blue and white are mixed, you get _____.
light blue gray
- 1.05** When blue and yellow are mixed, you get _____.
green purple
- 1.06** To make a color lighter, you add _____ to it.
black white
- 1.07** When black and white are mixed, you get _____.
violet gray
- 1.08** Circle the letters of the two correct answers to tell what God promised Noah that the rainbow would show.
- a. The rainbow would show which way was north.
 - b. The rainbow would be a sign of God's promise not to cause another great Flood over the whole earth.
 - c. The rainbow would make it rain.
 - d. The rainbow would show God's love toward all people and creatures.

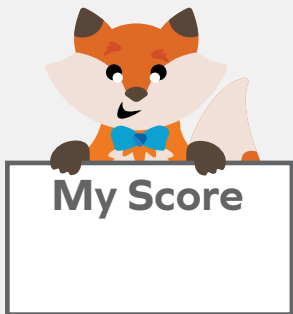
Draw lines to match the season or holiday with the special colors seen or used during that time.

1.09	fall	▶	◀	red, white, blue
1.010	Fourth of July	▶	◀	green
1.011	Valentine's Day	▶	◀	yellow, white
1.012	St. Patrick's Day	▶	◀	orange, brown
1.013	Easter	▶	◀	red, green
1.014	Christmas	▶	◀	red



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