

MIX IT UP

Lisa Welton, Kindergarten teacher
Madison Park Elementary
Trotwood, Ohio

Science Category

Properties of objects and materials

Topics

- mixtures
- solutions

Objective

Students observe and identify examples of mixtures and solutions

Proficiency Learning Outcome

Explain and/or predict the motion of objects and/or describe the effects of some objects on other objects (S-4-12).

Featured Fiction Book

Title: *Mouse Paint*

Author: Ellen Stoll Walsh

Illustrator: Ellen Stoll Walsh

Publisher: The Trumpet Club

ISBN: 0-440-84940-3

Summary: Three playful mice are hiding from a cat. They find three jars of paint and each mouse gets into one jar. The mice discover they can have fun in the colorful puddles left behind.

Part 1: Building Bridges

Building Student Knowledge and Motivation

Set up a classroom paint center with assorted watercolors and tempera paints. Give students opportunities to experiment with mixing colors while painting. Set up a math center with tubs of various manipulatives. Give students opportunities to sort the manipulatives into bowls.

Getting Ready to Read

As a class, discuss students' experiences with paint at the art center. Ask students what happened when they mixed different colors of paint. Show students the cover of *Mouse Paint*. Tell them to watch the mice as they play with paint. Make a chart to record student answers to the following question: What do you think will happen when the mice play in the paint?

Bridging to the Science Activity

Review prediction chart and discuss if students' predictions about the story were correct. Ask students to name colors from the story. Display a jar of Skittles. Ask students if they see any colors that were in the story. Tell students the candy is all mixed up and ask them what we could do to find out how many pieces of each color are in the jar. Allow time for

several students to respond. If students do not mention sorting and counting, lead them in that direction with further questions. Next, list the different colors of Skittles that can be seen in the jar. Ask students to estimate how many of each color are in the jar. Have students sit in a circle. On a large tray, demonstrate how to sort skittles into separate color groups. Count each group of Skittles and compare the actual number to the estimation.

Part 2: Science Activity

Materials

Per student

- 1 individual bag of Skittles
- 1 zipper-type plastic bag
- 1 sorting mat (attached)

Per class:

- food coloring (red, yellow, blue)
- 3 clear plastic cups filled with water
- 3 straws

Safety and Disposal:

Check for student allergies before allowing students to eat Skittles. Remind students that when we do science we usually never eat what we are working with. No special disposal procedures are required.

Getting Ready

1. Fill three clear plastic cups with water.
2. Copy class set of sorting mats.
3. Gather materials listed above.

Procedure

Part A: Scientific Snacking

1. Give students individual bags of Skittles and a sorting mat. Instruct students to sort the pieces of candy into color groups.
2. Pass out a zipper-type plastic bag to each student. Instruct students to place all of their purple and yellow Skittles into the bag. Ask students what they see (purple and yellow Skittles).
3. Instruct students to take the purple and yellow Skittles out of the bag and place red and yellow Skittles inside the bag. Ask students what they see (red and yellow Skittles).
4. Instruct students to take the red and yellow Skittles out of the bag and place red and green inside the bag. Ask students what they see (red and green Skittles).
5. Instruct students to place all of the Skittles inside the bag. Next have students seal the bags and shake them up. Ask students what they see (all the different colors of Skittles).
6. Explain to students that this is a mixture because we can see all the different parts (all the different colors of Skittles). Explain that in a mixture the different parts can be separated physically, like when we sorted the different colors of Skittles on our sorting mat.

7. Allow students to eat their Skittles, reminding them that it is usually not safe to eat stuff used in science.

Part B: A Scientific Solution

1. Display a clear plastic cup of water. Show students blue food coloring and ask them what will happen when we place four drops into the water. Next, show students yellow food coloring and ask them to predict what will happen when we add the yellow to the blue. Add four drops of yellow, stir with a straw and discuss what happens. Ask students if they can see the separate colors (blue and yellow). Ask students what they do see (green).
2. Repeat step one, using red and yellow food coloring.
3. Repeat step one, using red and blue food coloring.
4. Explain to students that these are special kinds of mixtures called solutions. They are called solutions because they are mixed up so well that we can't tell (see) one part from another.
5. Recall the Skittles experiment and explain that the bag of candy and the cups of water both contain mixtures. However, the cups of water contain special mixtures called solution. The solutions are mixed up so well that we can't see all the different parts.
6. Recall that in our mixture of Skittles we could see all the different parts (colors). Explain that in the solutions of colored water, although we can't see the different parts (colors), they are still there.
7. Place the cups of colored water near an open window and allow all the water to evaporate. Show students that the different colors are still there.

Science Explanation

A mixture is defined as a combination of two or more things that, when combined, can still be physically separated into its original parts. This is called a heterogeneous mixture. In a heterogeneous mixture, you can see all the separate parts.

The Skittles experiment is an example of a heterogeneous mixture because you can see the separate pieces of candy. You can separate the pieces of candy physically. A homogeneous mixture is when two or more materials mix thoroughly and evenly. In a homogeneous mixture, you cannot see the separate parts. A homogeneous mixture when it is a liquid can also be called a solution. You cannot see the separate parts. The water must evaporate out of the solution in order to see the separate colors.

Part 3: Lesson Extensions

Math Extension

Proficiency Outcomes: Strand VIII – Data Analysis and Probability

- M-4-24: Make or use a table to record and sort information and make identifications, comparisons, and predictions from tables, picture graphs, bar graphs, and labeled picture maps.

Give students an individual bag of Skittles. Instruct students to count the pieces of candy and sort by color. Next, provide one-inch graph paper and have students graph the Skittles by color. Students use the graph to make more, less, and equal comparisons.

Reading Extension

Proficiency Outcomes: Reading Strand I- Constructing Meaning with Fiction Selections

R-4-4: Identify and interpret vocabulary (words, phrases, or expressions) critical to the meaning of the text.

Read *Mouse Paint*. As a class, make a colors word web. Use a red marker to write the word red, a blue marker to write the word blue, etc...

Give each student a copy of a teacher-made book titled *Mice*. Students choral read each page, pointing to the words as they read.

Instruct students to read the book independently and draw a mouse on each page to match the words on the page. Remind students that they can use the colors word web to help them read the color word on each page of their book.

Multicultural Extension

Proficiency Outcomes: Citizenship Strand II

C-4-6: Identify or compare the customs, traditions, and needs of Ohio's various cultural groups.

Teach students how to sign colors in American Sign Language.

Music Extension

Play Hap Palmer's song "Colors." Give each student a circle cut out of different colors of construction paper. Students use circles as they follow the directions in the song.

Citizenship Extension

Proficiency Outcomes: Citizenship Strand II

C-4-6: Identify or compare the customs, traditions, and needs of Ohio's various cultural groups.

Read the story *Rainbow Kids*. Teach students how to say color words in Spanish.

References:

Fernandez, Mayra. *Rainbow Kids*. DDL Books, Inc., 1995.

Moore, Suzanne. "Mix Masters" *The Mailbox* June/July 2000: 38-41.

Palmer, Hap. "Colors" *Learning Basic Skills Through Music Volume 1*. Educational Activities, Inc., 1994.

Walsh, Ellen Stoll. *Mouse Paint*. New York: The Trumpet Club, 1989.

ASSESSMENT

Name: _____

Directions: Teacher reads the following questions to students. Students circle A or B.

1. Which is an example of a mixture?
 - A. Lucky Charms cereal
 - B. Water
2. Which is an example of a solution?
 - A. M&M's
 - B. Orange Kool-Aid

Mice

ILLUSTRATED BY: _____

I see a purple mouse.

I see a green mouse.

I see a yellow mouse.

I see a red mouse.

I see a blue mouse.

I see a pink mouse.

I see an orange mouse.



Red



Yellow



Purple



Green



Orange

Mouse Paint has been added to your Cart. Add gift options. Other Sellers on Amazon. In Ellen Stoll Walsh's Mouse Paint, "three white mice on a white piece of paper" enjoy a colorful romp, while in Walsh's Mouse Count a similar gaggle narrowly escapes being served for dinner (Harcourt/Red Wagon, \$6 each, 28p, ages 1-3 ISBN 0-15-200265-0; -200266-9 Sept.). Yet another mouse searches the animal kingdom for companionship and finds an unexpected respondent in Eric Carle's Do You Want to Be My Friend? See more ideas about mouse paint, mouse paint activities, preschool colors. Mouse Paint Printables. Never planned to homeschool, now wouldn't trade it for the world. 4 Year Old Activities Science Activities For Kids Kindergarten Science Teaching Science Science Projects Science Ideas Science Classroom Science Lessons Science Education. Let's paint him like a real Santa Claus! Click on the brush and move it on the color you want to choose. Then click on the spot where you want to paint! Games > Painting Games > Mouse paint. X. This website uses cookies to ensure you get the best experience using our services. See more ideas about Mouse paint, Preschool colors, Mouse paint activities. After hearing the story Mouse Paint, by Ellen Stoll Walsh, children will mix primary colors to make secondary colors with this fun science activity! Preschool Books Math Shapes Kindergarten Math Activities Shapes Preschool Preschool Art Preschool Crafts Shapes Activities Kindergarten Art. Mouse Shapes. Mouse Paint by is a fun and colorful book perfect for toddlers and preschoolers written by Ellen Stoll Walsh. It is a simple lesson in colors that follow 3 white mice through a color adventure. Here is what you will need: craft foam, various colors.

Mouse Paint has been added to your Cart. Add a gift receipt for easy returns. Share. In Ellen Stoll Walsh's Mouse Paint, "three white mice on a white piece of paper" enjoy a colorful romp, while in Walsh's Mouse Count a similar gaggle narrowly escapes being served for dinner (Harcourt/Red Wagon, \$6 each, 28p, ages 1-3 ISBN 0-15-200265-0; -200266-9 Sept.). Yet another mouse searches the animal kingdom for companionship and finds an unexpected respondent in Eric Carle's Do You Want to Be My Friend? Our Mouse Paint Printables for kids go along with the book which does such a great job of not only teaching toddlers colors, but gives a great visual illustration on how color mixing works making it a great choice for preschoolers too. Mouse Paint Worksheet. Whether you are a parent, teacher, or homeschooler you will love this super cute, free printable worksheets for learning about colors, color mixing, shapes, and so much more! Mouse Paint Coloring Page. Find mouse paint stock images in HD and millions of other royalty-free stock photos, illustrations and vectors in the Shutterstock collection. Thousands of new, high-quality pictures added every day.