

# Pasta

## Preparation:

1. Reproduce the three bar graphs (pages 43–45) for students. Three graphs are provided to give students the opportunity to sort pasta patterns by color, size, and type.
2. Reproduce the table (page 6), making three copies for each student. You may also wish to make an overhead transparency of it to model how the data is recorded for each graph activity.
3. Reproduce the small, medium, and large pasta patterns (pages 41 and 42) on green, blue, red, and yellow paper or cardstock and cut them apart. Make one set of pasta patterns for each small group or pair of students. The number of each color, size, and type of pasta can vary. Place the patterns in envelopes or reclosable plastic bags, making all of the sets exactly the same. If you prefer, students can use real pasta for these sorting activities. To change the color of real pasta, place 15 drops of food coloring and 2 tablespoons (30 mL) rubbing alcohol in a container with a lid. Shake the container. Remove the colored pasta and allow it to dry. The amount of food color affects the brightness of the color.

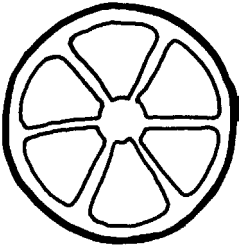
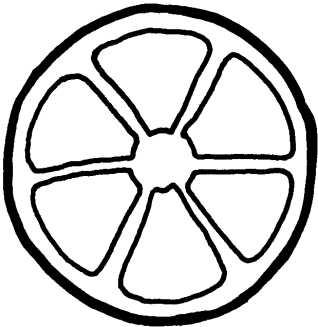
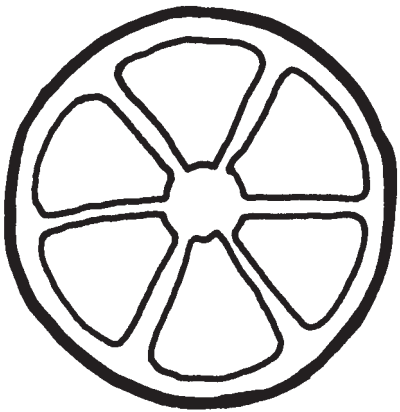
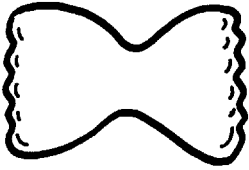
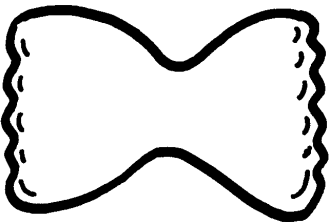
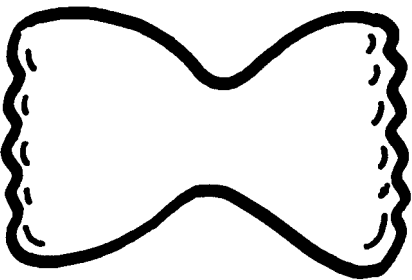
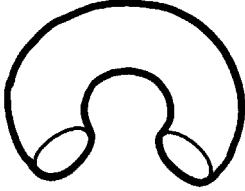
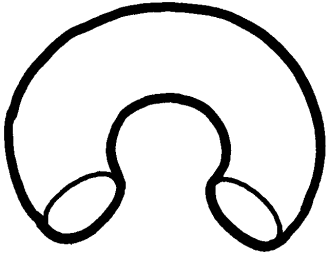
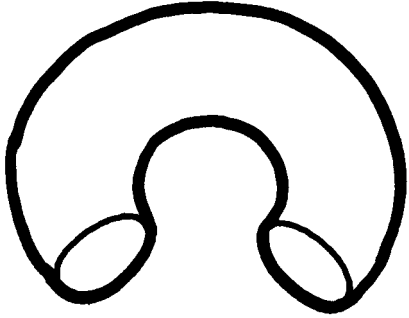
## Directions:

1. Divide the class into small groups or assign partners. First have students sort the pasta into groups by color. Ask them to count how many pasta pieces there are for each color (green, blue, red, yellow) and record the data on their tables.
2. Use the floor or wall graph to model the activity. Show students how to mark the scale along the bottom, counting by ones or twos. Help them place the bars on the graph. Then ask them to record the results on their bar graphs (page 43), using colors that match the pasta groups.
3. Next have students sort the pasta into groups by size. Ask them to count how many pasta pieces there are for each size (small, medium, large) and record the data on their tables.
4. Ask students to record the results on their bar graphs (page 44). Discuss how to mark the scale on the left-hand side, counting by ones or twos.
5. Now have students sort the pasta into groups by type. Ask them to count how many pasta pieces there are for each type and record the data on their tables.
6. Ask students to record the results on their bar graphs. Show them how to mark the scale along the bottom, counting by ones or twos.
7. Discuss the questions (pages 43–45) and ask additional ones to check students' understanding.

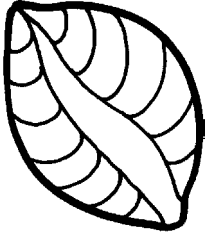
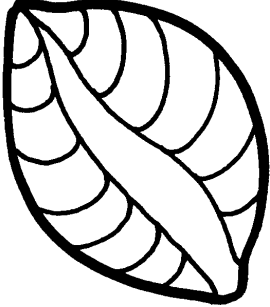
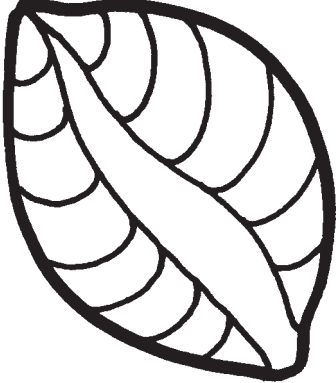
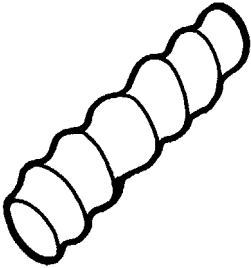
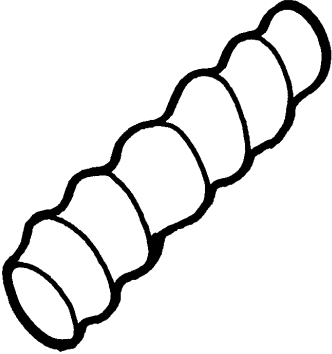
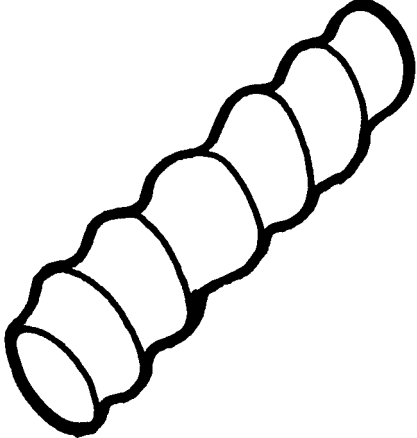
## Extension Activities:

1. Teach students about probability, using the pasta patterns. After determining the number of each color, size, and type of pasta, have students replace the patterns in the bags or envelopes. Then have students make predictions about which color, size, and/or type of pasta is most or least likely to be drawn or which ones have an equal chance.
2. Create pictographs, using the pasta patterns (pages 41 and 42).
3. Have students make pasta salad for snack. Be sure to ask parents if their children have any food allergies or dietary restrictions.

# Pasta (cont.)

|  |  |  |
|--|--|--|
|  <p>Small</p>   |  <p>Medium</p>    |  <p>Large</p>   |
|  <p>Small</p> |  <p>Medium</p> |  <p>Large</p>  |
|  <p>Small</p> |  <p>Medium</p>  |  <p>Large</p> |

# Pasta (cont.)

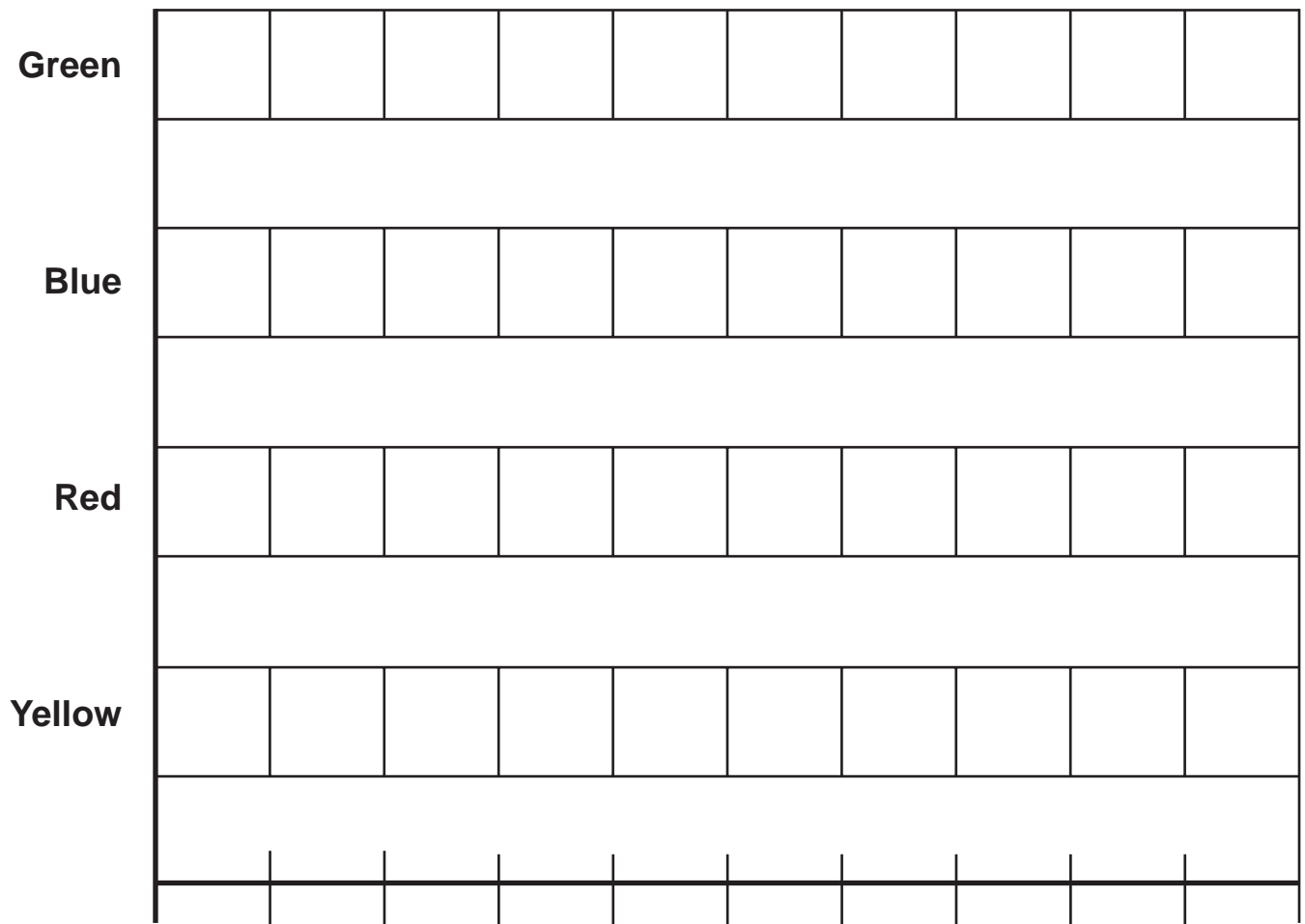
|  |   |  |
|--|---|--|
|  <p>Small</p>   |  <p>Medium</p>   |  <p>Large</p>   |
|  <p>Small</p> |  <p>Medium</p> |  <p>Large</p> |

Number of Buttons

# Pasta (cont.)

## PASTA COLORS

Number of Buttons

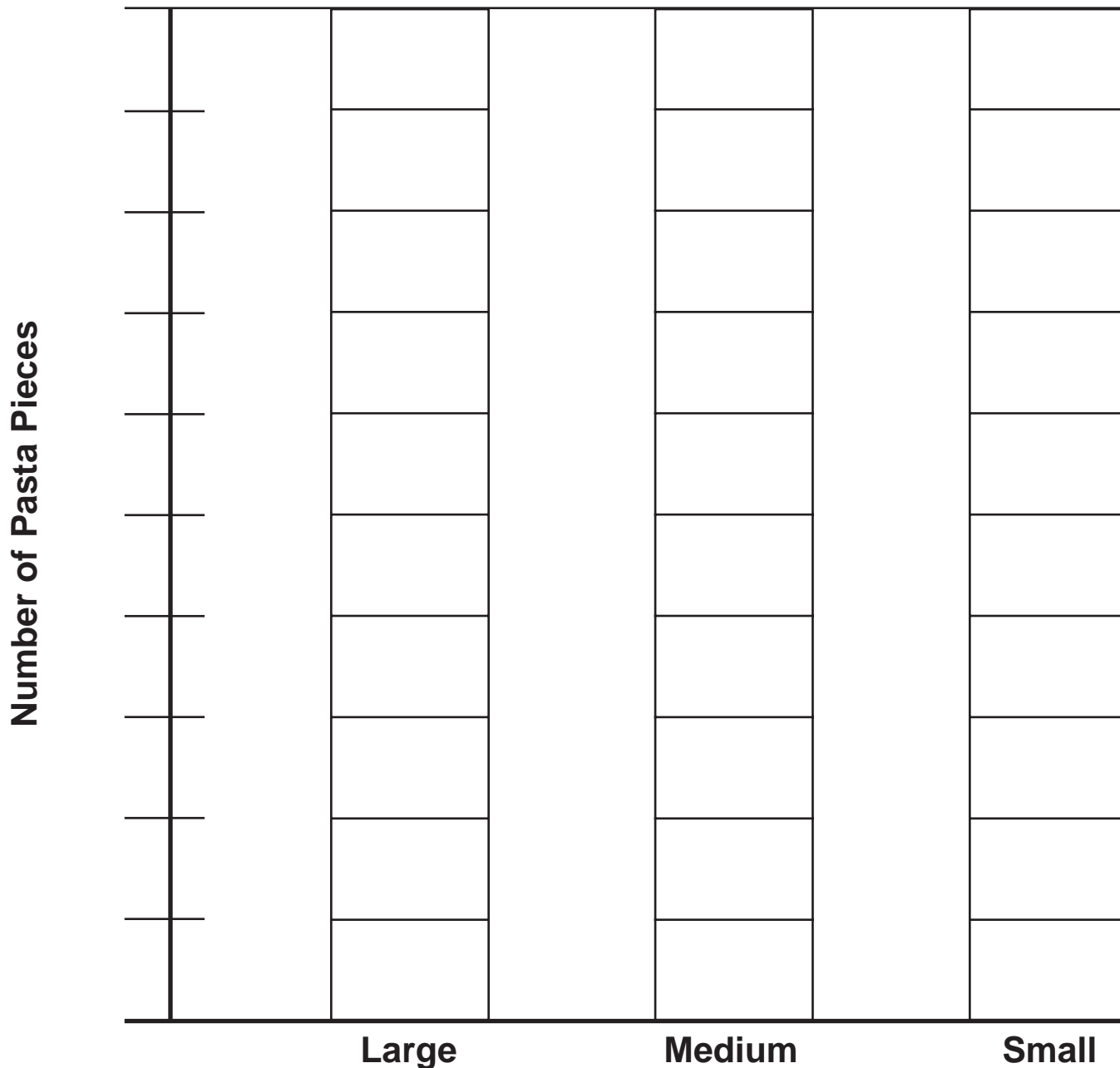


### Number of Pasta Pieces

1. How did you sort the pastas into groups? \_\_\_\_\_
2. How many green pastas are there? \_\_\_\_\_ blue? \_\_\_\_\_  
red? \_\_\_\_\_ yellow? \_\_\_\_\_
3. Which color of pasta has the most? \_\_\_\_\_ Which color has the least? \_\_\_\_\_
4. Is the number of green pastas greater than, less than, or equal to the number of red pastas? \_\_\_\_\_
5. Is the number of yellow pastas greater than, less than, or equal to the number of blue pastas? \_\_\_\_\_

# Pasta (cont.)

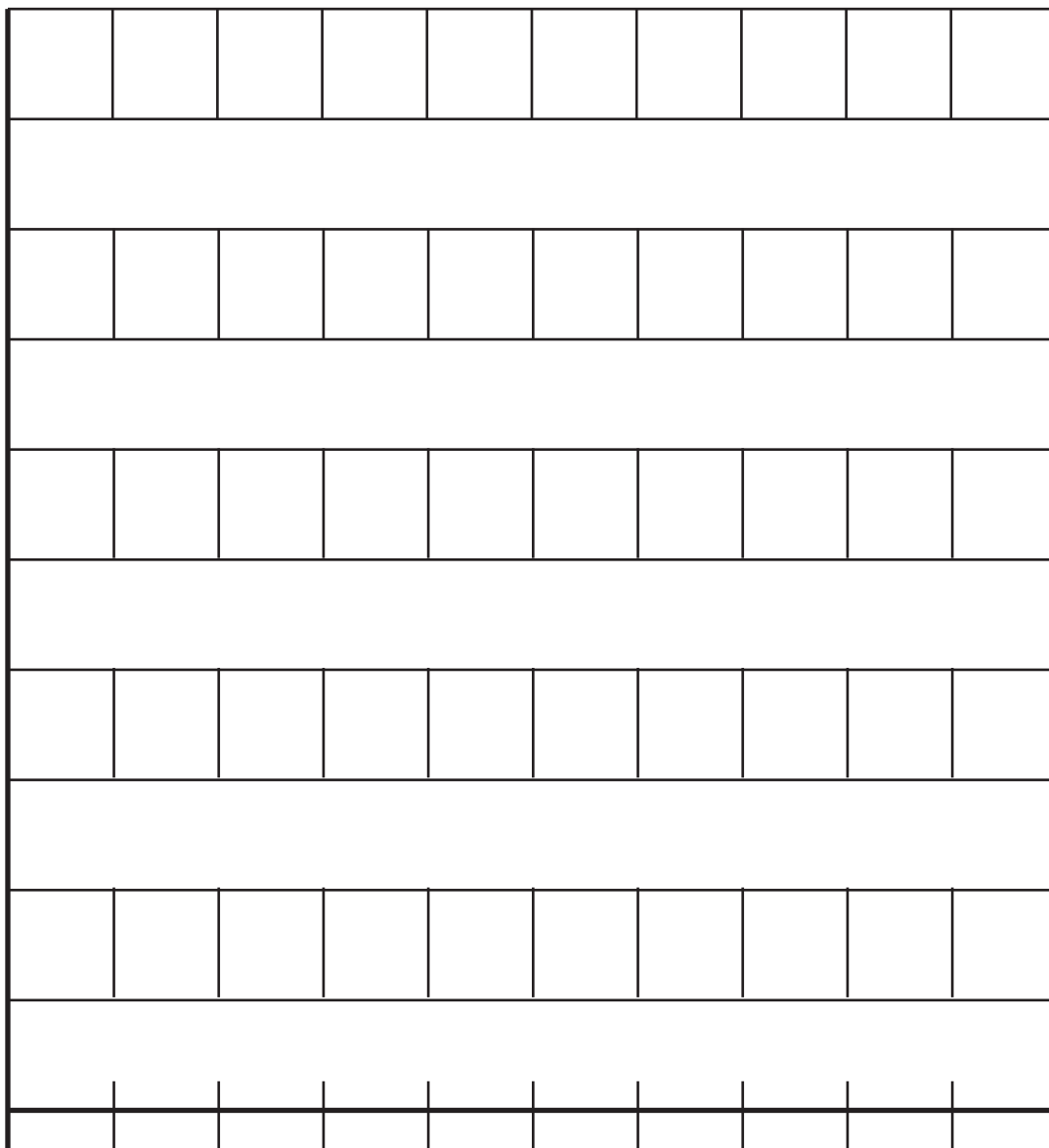
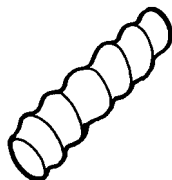
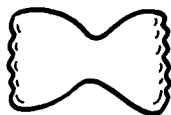
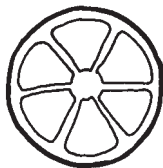
## PASTA SIZES



1. How did you sort the pastas into groups? \_\_\_\_\_
2. How many large pastas are there? \_\_\_\_\_  
medium? \_\_\_\_\_ small? \_\_\_\_\_
3. Which size pasta has the most? \_\_\_\_\_ Which size has the least? \_\_\_\_\_
4. How many pieces of large and medium pastas are there all together? \_\_\_\_\_
5. Would you have to add or subtract to make the number of small pastas equal to the number of large pastas? \_\_\_\_\_

# Pasta *(cont.)*

## TYPES OF PASTA



**Number of Pasta Pieces**

1. How did you sort the pastas into groups? \_\_\_\_\_
2. How many groups of pasta are there? \_\_\_\_\_
3. How many pieces are in the largest group of pasta? \_\_\_\_\_
4. How many pieces are in the smallest group of pasta? \_\_\_\_\_
5. If you combine the largest group and the smallest group of pasta, how many pieces will you have? \_\_\_\_\_

# Table

| <b>Title:</b> |  |
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