Overview
Students are introduced to fraction symbols.

Materials
• Fraction Circles for students and teacher
• Student Pages A – E

Teaching Actions
1. Ask students to use fraction circles to show 3-fourths. They are to show two models. For example:

   3 blues are 3-fourths of 1 black.
   3 grays are 3-fourths of 1 yellow.

2. Ask how the two models are alike.

3. Record in words fraction name: 3-fourths. Explain that there is also a symbol name for 3-fourths and it is \( \frac{3}{4} \).

4. Discuss the meaning of \( \frac{3}{4} \). Ask how many equal parts each unit is divided into? Point to the bottom of the fraction symbol and explain that this 4 tells us that. The 3 tells us that we are interested in \( \frac{3}{4} \) of these 4 equal parts. The fraction means \( \frac{1}{4} \) and \( \frac{1}{4} \) and \( \frac{1}{4} \).

Comments
1. It’s not important for students to memorize the words: numerator and denominator.
Teaching Actions

5. Write 2/3 on the board and ask students to show that fraction with the fraction circles. Have them verbalize why their model does indeed represent 2/3.

First Divide into 3 equal parts... then

```
\begin{array}{c}
\text{Br} \\
\text{Br} \\
\text{Br}
\end{array}
```

“I divided the circle into 3 equal parts to find what color is thirds. Then I only want two of them so

```
\begin{array}{c}
\text{Br} \\
\text{Br} \\
\text{Br}
\end{array}
```

shows 2 of 3 equal parts. It is 1/3 and 1/3 more.”

6. Repeat for \( \frac{3}{5}, \frac{2}{6}, \frac{4}{8}, \frac{3}{3} \).

Embed examples in context:

A spinner for a game was divided into 5 equal parts. 3/5 of the spinner was blue. Show that amount with the fraction circles.

A pizza was cut into 6 equal parts. You ate 2/6 of the pizza. Show that amount with the fraction circles.

7. Student pages that follow reinforce the meaning of the symbol. Select the most appropriate (and amount of) practice your students need.

Comments

2. It’s very important to help children verbalize the meaning of fraction symbols.

Have them talk through what they are doing with the fraction circles.

The action on the manipulative reinforces the meaning of the symbol.

3. You can also return to previous student pages and have students record answers in symbol form.
1. Write each fraction in words.
   a. \( \frac{2}{4} \) \hspace{1cm} e. \( \frac{7}{10} \)
   b. \( \frac{3}{7} \) \hspace{1cm} f. \( \frac{7}{15} \)
   c. \( \frac{6}{8} \) \hspace{1cm} g. \( \frac{3}{12} \)
   d. \( \frac{3}{11} \) \hspace{1cm} h. \( \frac{7}{9} \)

2. Write the word name and the symbol name for each fraction described.
   a. 3 of 5 equal-size parts are shaded. \hspace{1cm} \hspace{1cm}
   b. 5 of 7 equal-size parts are shaded. \hspace{1cm} \hspace{1cm}
   c. 3 of 13 equal-size parts are shaded. \hspace{1cm} \hspace{1cm}
   d. 12 of 17 equal-size parts are shaded. \hspace{1cm} \hspace{1cm}
   e. 0 of 3 equal-size parts are shaded. \hspace{1cm} \hspace{1cm}

3. Write the fraction symbol for each fraction word.
   a. 9-tenths \hspace{1cm} \hspace{1cm} e. 13-twenty-firsts \hspace{1cm} \hspace{1cm}
   b. 7-eights \hspace{1cm} \hspace{1cm} f. 17-eighteenths \hspace{1cm} \hspace{1cm}
   c. 6-sixths \hspace{1cm} \hspace{1cm} g. 0-fourths \hspace{1cm} \hspace{1cm}
   d. 15-nineteenths \hspace{1cm} \hspace{1cm}
4. Imagine a circle divided into 4 equal parts.
   Three \( \frac{1}{4} \) parts are shaded!

   What fraction tells how much is shaded in all? _______________

   Draw a picture.

5. Imagine a rectangle divided into 5 equal parts.
   Four \( \frac{1}{5} \) parts are shaded!

   What fraction tells how much is shaded in all? _______________

   Draw a picture.

6. Write the word name and the symbol name each fraction describes.

   a. A rectangle is folded into 7 equal-size parts.
      5 parts are shaded.

   b. A circle is folded into 8 equal-size parts.
      4 parts are shaded.
Directions:
Match each picture with its symbol or word name by writing the letter of the picture next to its symbol. The first one is done for you.

A. \[ \frac{1}{6} \]  F
B. 2-halves
C. \[ \frac{3}{4} \]
D. 2-thirds
E. \[ \frac{3}{3} \]
F. 1-fourth
G. \[ \frac{6}{6} \]
H. \[ \frac{1}{3} \]
I. 3-sixths
J. \[ \frac{4}{6} \]
K. 2-fourths
L. \[ \frac{1}{2} \]
Shade each circle to show the fractional amount.

\[
\begin{align*}
\frac{1}{4} & \quad 2 \quad \frac{1}{6} \\
\frac{5}{12} & \quad 0 \quad \frac{5}{6} \\
\frac{1}{3} & \quad \frac{11}{12} \quad \frac{4}{4} \\
\frac{2}{12} & \quad \frac{1}{2} \quad \frac{6}{8} \\
\frac{1}{6} & \quad 0 \quad \frac{6}{12} \\
\frac{6}{6} & \quad \frac{8}{8} \quad \text{You Decide}
\end{align*}
\]
Write the name for the shaded part of each rectangle in words and then in symbols.

<p>| | | | | | | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 - half</td>
<td>1/2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>