NS6-73: Decimal Hundredths

Fractions with denominators that are multiples of ten (tenths, hundredths) commonly appear in units of measurement.
- A millimetre is a tenth of a centimetre (10 mm = 1 cm)
- A centimetre is a tenth of a decimetre (10 cm = 1 dm)
- A decimetre is a tenth of a metre (10 dm = 1 m)
- A centimetre is a hundredth of a metre (100 cm = 1 m)

Decimals are short forms for fractions: .73 has 7 tenths (= 70 hundredths) plus 3 more hundredths.

1. Write a fraction and a decimal for each picture.
   a)  
   b)  
   c)  

2. Convert the fraction to a decimal. Then shade.
   a) \( \frac{39}{100} = \)  
   b) \( \frac{65}{100} = \)  
   c) \( \frac{7}{.100} = \)  

3. The picture shows a floor plan of a zoo. Write a fraction and a decimal for each part:

   Key:
   - reptiles
   - birds
   - amphibians
   - paths

4. Make your own floor plan for a zoo. Write a fraction and a decimal for each part:
1. Draw lines around the columns to show tenths as in a). Then, write a fraction and a decimal to represent the number of shaded squares.

a) \[
\begin{array}{c}
\text{47 hundredths = 4 tenths } 7 \text{ hundredths} \\
\frac{47}{100} = .47 \\
\end{array}
\]

b) \[
\begin{array}{c}
\text{__ hundredths = __ tenths __ hundredths} \\
\frac{100}{100} = .00 \\
\end{array}
\]

c) \[
\begin{array}{c}
\text{__ hundredths = __ tenths __ hundredths} \\
\frac{100}{100} = .00 \\
\end{array}
\]

d) \[
\begin{array}{c}
\text{__ hundredths = __ tenths __ hundredths} \\
\frac{100}{100} = .00 \\
\end{array}
\]

2. Fill in the blanks.

a) 43 hundredths = __ tenths __ hundredths \[
\frac{43}{100} = .43 \\
\]

b) 28 hundredths = __ tenths __ hundredths \[
\frac{28}{100} = .28 \\
\]

c) 66 hundredths = __ tenths __ hundredths \[
\frac{66}{100} = .66 \\
\]

d) 84 hundredths = __ tenths __ hundredths \[
\frac{84}{100} = .84 \\
\]

e) 9 hundredths = __ tenths __ hundredths \[
\frac{9}{100} = .09 \\
\]

f) 30 hundredths = __ tenths __ hundredths \[
\frac{30}{100} = .30 \\
\]

3. Describe each decimal in two ways.

a) .52 = \[
\begin{array}{c}
\text{5 tenths 2 hundredths} \\
52 \text{ hundredths} \\
\end{array}
\]

b) .55 = __ tenths __ hundredths \[
\frac{55}{100} = .55 \\
\]

c) .40 = __ tenths __ hundredths \[
\frac{40}{100} = .40 \\
\]

d) .23 = __ tenths __ hundredths \[
\frac{23}{100} = .23 \\
\]

e) .02 = __ tenths __ hundredths \[
\frac{2}{100} = .02 \\
\]

f) .18 = __ tenths __ hundredths \[
\frac{18}{100} = .18 \\
\]

Number Sense 2
1. Fill in the chart below. The first one has been done for you.

<table>
<thead>
<tr>
<th>Drawing</th>
<th>Fraction</th>
<th>Decimal</th>
<th>Equivalent Decimal</th>
<th>Equivalent Fraction</th>
<th>Drawing</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td>( \frac{4}{10} )</td>
<td>0.4</td>
<td>0.40</td>
<td>( \frac{40}{100} )</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
<td><img src="image5.png" alt="Image" /></td>
<td><img src="image6.png" alt="Image" /></td>
<td><img src="image7.png" alt="Image" /></td>
<td></td>
</tr>
<tr>
<td><img src="image8.png" alt="Image" /></td>
<td><img src="image9.png" alt="Image" /></td>
<td><img src="image10.png" alt="Image" /></td>
<td><img src="image11.png" alt="Image" /></td>
<td><img src="image12.png" alt="Image" /></td>
<td></td>
</tr>
</tbody>
</table>

2. Write a fraction for the number of hundredths. Then count the shaded columns and write a fraction for the number of tenths.

a) ![Image](image13.png) \(\frac{5}{10} = \frac{50}{100} = .05\)  
b) ![Image](image14.png) \(\frac{3}{10} = \frac{30}{100} = .30\)  
c) ![Image](image15.png) \(\frac{9}{10} = \frac{90}{100} = .90\)

d) ![Image](image16.png) \(\frac{8}{10} = \frac{80}{100} = .80\)  
e) ![Image](image17.png) \(\frac{40}{100} = .40\)  
f) ![Image](image18.png) \(\frac{70}{100} = .70\)

g) ![Image](image19.png) \(\frac{4}{10} = \frac{40}{100} = .40\)  
h) ![Image](image20.png) \(\frac{6}{10} = \frac{60}{100} = .60\)  
i) ![Image](image21.png) \(\frac{3}{10} = \frac{30}{100} = .30\)