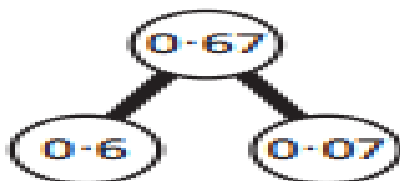


## Lesson 8: Hundredths (3)

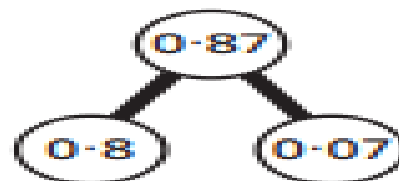
→ pages 141–143

1. a) The 3 tenth counters represent 0.3.  
The 5 hundredth counters represent 0.05.  
3 tenths and 5 hundredths make 0.35.
- b) The 5 tenth counters represent 0.5.  
The 3 hundredth counters represent 0.03.  
5 tenths and 3 hundredths make 0.53.
- c) The 4 tenth counters represent 0.4.  
The 5 hundredth counters represent 0.05.  
4 tenths and 5 hundredths make 0.45.

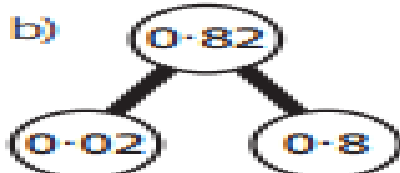
2. a)



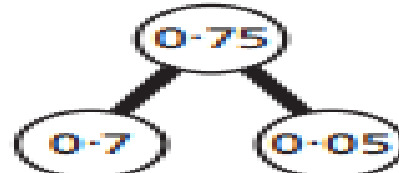
c)



b)



d)



3. Missing numbers:

- |       |       |
|-------|-------|
| a) 7  | c) 27 |
| b) 17 | d) 37 |

4. a)  $0.47 = 0.4$  and  $0.07$
- b)  $0.3$  and  $0.05 = 0.35$
- c)  $0.4$  and  $0.06 = 0.46$
- d)  $0.51 = 0.5$  and  $0.01$
- e)  $0.09$  and  $0.3 = 0.39$
- f)  $0.37 = 0.3$  and  $0.07$

5. Disagree. Luis has six 0.01 (hundredths) counters and three 0.1 (tenths) counters. This makes 0.36.
6. 0.1, 0.2, 0.3, 0.31, 0.32, 0.42, 0.43, 0.44, 0.45, 0.46, 0.47, 0.48, 0.58, 0.59, 0.6

### Reflect

Explanations may vary; for example:

Since 10 hundredths are equal to 1 tenth, 57 hundredths can be represented by:

5 tenths and 7 hundredths; 4 tenths and 17 hundredths; 3 tenths and 27 hundredths; 2 tenths and 37 hundredths; 1 tenth and 47 hundredths.

# Lesson 9: Dividing by 100

→ pages 144–146

- a) 5 ones = 500 hundredths  
 $500 \text{ hundredths} \div 100 = 5 \text{ hundredths}$   
So,  $5 \div 100 = 0.05$

b) 10 squares split into 10 parts means there are 100 tenths.  
 $100 \text{ tenths} \div 100 = 1 \text{ tenth}$   
1 square split into 100 pieces means there are 100 hundredths.  
 $100 \text{ hundredths} \div 100 = 1 \text{ hundredth}$   
 $11 \div 100 = 0.11$
- The digits move 2 columns to the right; for example:  
 $15 \div 100 = 0.15$
- a) 0.08                      c) 0.14                      e) 0.55  
b) 0.09                      d) 0.15                      f) 0.65
- False  
False  
True  
True
- a) 0.54                      d) 0.32                      g) 50  
b) 63                      e) 0.35                      h) 0.23  
c) 5                      f) 36
- a) The value of the digit 5 in the answer is  $\frac{5}{100}$  (5 hundredths).  
b) The value of the digit 9 in the answer is  $\frac{9}{100}$  (9 hundredths).

## Reflect

Explanations may vary; for example:

$\frac{12}{100}$  is the same as  $12 \div 100$ , so if you know that  $\frac{12}{100} = 0.12$  then you know  $12 \div 100 = 0.12$ .

# Lesson 10: Dividing by 10 and 100

→ pages 147–149

- The mass of each box is 4.5 kg.
  - The mass of each bowl is 0.3 kg.
- $83 \div 10 = 8.3$
- Circled: 3 hundredths
- 5.6, 0.56
  - 34, 34
  - 7.2, 0.72
  - 10, 100
- 6.8
  - 0.46
  - 0.18
  - 10
  - 97
  - 0
- Danny would get the answer 0.96.  
 $96 \div 10 = 9.6$  so Danny started with the number 96.  
 $96 \div 100 = 0.96$
  - Bella would get the answer 0.7.  
 $7 \div 100 = 0.07$  so Bella started with the number 7.  
 $7 \div 10 = 0.7$
- $\frac{1}{10}$  of 7 is 0.7  
 $\frac{1}{100}$  of 70 is 0.7  
So  $\frac{1}{10}$  of 7 is equal to  $\frac{1}{100}$  of 70.

## Reflect

Explanations may vary; for example:

The values of the digits change but the order of the digits remains the same. The digits move one column to the right when dividing by 10 and 2 columns to the right when dividing by 100.

So, (answer when you divide a number by 100) =  
(answer when you divide a number by 10)  $\div$  10

# End of unit check

→ pages 150–151

## My journal

1. 1·34, 1·43, 3·14, 3·41, 4·13, 4·31, 13·4, 14·3, 31·4, 34·1, 41·3, 43·1
2. Different answers possible. Look for children confidently identifying the values of the digits. Pictorial representations could include place value grids, hundredths grids and part-whole models.

## Power play

Check that children can understand the game and play it correctly.

## Unit II: Decimals (2)

### Lesson I: Making a whole

→ pages 6–8

- a)  $0.2 + 0.8 = 1$       c)  $0.48 + 0.52 = 1$   
 b)  $0.9 + 0.1 = 1$       d)  $0.07 + 0.93 = 1$
- a) 0.61      b) 0.87
- a)  $0.3 + 0.7 = 1$ ; missing part is seven 0.1 counters  
 b)  $0.1 + 0.5 + 0.4 = 1$ ; missing part is five 0.1 counters  
 c) Different answers possible but two missing numbers must total 0.8; for example:  $0.1 + 0.2 + 0.7$ ; missing parts to show numbers chosen (using 0.1 counters)
- a) 0.4      c) 0.68  
 b) 0.16      d) 0.91
- a)  $0.23 + 0.77 = 1$   
 b)  $1 = 0.11 + 0.89$   
 c) Different answers possible but two missing digits must total 10; for example:  
 $1 - 0.61 = 0.39$   
 d) Different answers possible but two missing digits must total 9; for example:  
 $0.86 = 1 - 0.14$
- a) Different arrangements are possible but 0.3 must be in the centre; 0.5 and 0.2 complete a row/column; 0.6 and 0.1 complete a column/row; for example:

	0.6	
0.5	0.3	0.2
	0.1	

- b) Different arrangements are possible but 0.48 must be centre number; 0.2 and 0.32 complete a row/column; 0.23 and 0.29 complete a column/row; for example:

	0.23	
0.32	0.48	0.2
	0.29	

### Reflect

Possible calculations:  $0.1 + 0.9 = 1$ ,  $0.2 + 0.8 = 1$ ,  $0.3 + 0.7 = 1$  ...  $0.9 + 0.1 = 1$  (some children may include  $0 + 1 = 1$  and  $1 + 0 = 1$ )

Using number bonds to 10 and dividing each number by 10 would give these calculations.

