Year 4 Measure and Money Problems

Answers

1. How much would it cost to buy a second-hand copy of The Force Sleeps?
   £2.00

2. What would the total cost of buying Mindcraft and The Force Sleeps second hand?
   Second hand 2 games = $\frac{1}{4}$ the price.
   £4.00 + £5.00 = £9.00
   $\frac{1}{4}$ of £9.00 = £2.25

3. How much would it be to buy new versions of both Cool Duty and Toastbusters?
   £4.48 + £5.84 = £10.32

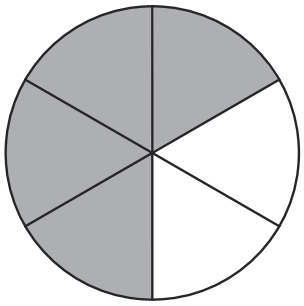
4. How much would you pay to buy second-hand copies of Wall of Spies and FOFA 16?
   $\frac{1}{4}$ of £1.80 = 45p
   $\frac{1}{4}$ of £3.96 = 99p
   Total: £1.44

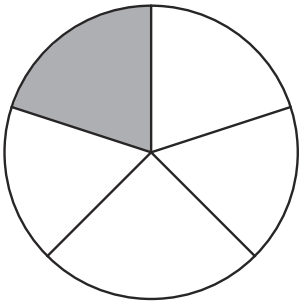
5. What would the cost be for a new copy of Toastbusters and second-hand copies of Toastbusters and The Force Sleeps?
   £5.84 + £1.46 + £1.00 = £8.30

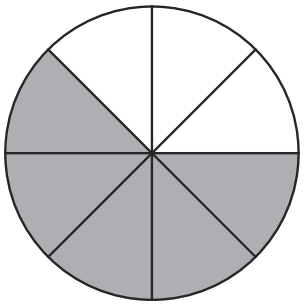
6. How much would it cost to buy all of the games brand new?
   £1.80 + £3.96 + £5.00 + £4.00 + £4.48 + £5.84 = £25.08

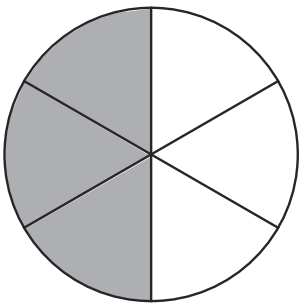
Adding and Subtracting Fractions with the Same Denominators

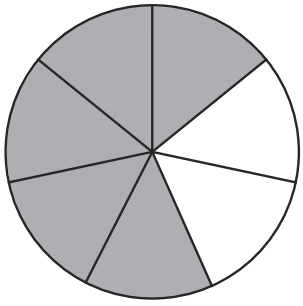
Answers

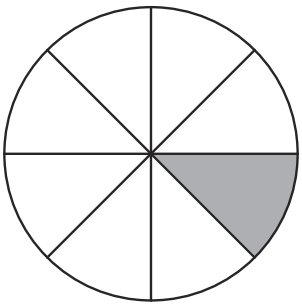
1.  $\frac{4}{6}$

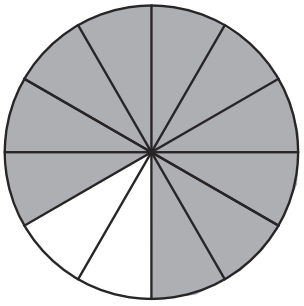
2.  $\frac{1}{5}$

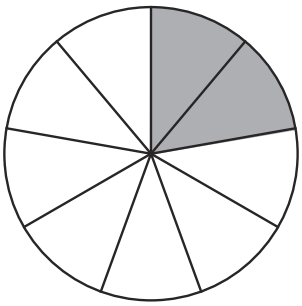
3.  $\frac{5}{8}$

4.  $\frac{3}{6}$

5.  $\frac{5}{7}$

6.  $\frac{1}{8}$

7.  $\frac{10}{12}$

8.  $\frac{2}{9}$

Counting Up and Down in Hundredths **Answers**

A. Practise counting in hundredths by filling in the blanks.

1.

$\frac{1}{100}$	$\frac{2}{100}$	$\frac{3}{100}$	$\frac{4}{100}$	$\frac{5}{100}$	$\frac{6}{100}$	$\frac{7}{100}$	$\frac{8}{100}$	$\frac{9}{100}$	$\frac{10}{100}$

2.

$\frac{18}{100}$	$\frac{19}{100}$	$\frac{20}{100}$	$\frac{21}{100}$	$\frac{22}{100}$	$\frac{23}{100}$	$\frac{24}{100}$	$\frac{25}{100}$	$\frac{26}{100}$	$\frac{27}{100}$

3.

$\frac{28}{100}$	$\frac{29}{100}$	$\frac{30}{100}$	$\frac{31}{100}$	$\frac{32}{100}$	$\frac{33}{100}$	$\frac{34}{100}$	$\frac{35}{100}$	$\frac{36}{100}$	$\frac{37}{100}$

B. We can also apply hundredths to numbers. £1 is divided into 100 pennies, so each penny is one hundredth of a pound.

Fill in the missing numbers and the matching number of pennies.

1.

$\frac{11}{100}$	$\frac{12}{100}$	$\frac{13}{100}$	$\frac{14}{100}$	$\frac{15}{100}$	$\frac{16}{100}$	$\frac{17}{100}$	$\frac{18}{100}$	$\frac{19}{100}$	$\frac{20}{100}$
11p	**12p**	**13p**	**14p**	**15p**	**16p**	**17p**	**18p**	**19p**	**20p**

2.

$\frac{31}{100}$	$\frac{32}{100}$	$\frac{33}{100}$	$\frac{34}{100}$	$\frac{35}{100}$	$\frac{36}{100}$	$\frac{37}{100}$	$\frac{38}{100}$	$\frac{39}{100}$	$\frac{40}{100}$
31p	**32p**	**33p**	**34p**	**35p**	**36p**	**37p**	**38p**	**39p**	**40p**

3.

$\frac{75}{100}$	$\frac{76}{100}$	$\frac{77}{100}$	$\frac{78}{100}$	$\frac{79}{100}$	$\frac{80}{100}$	$\frac{81}{100}$	$\frac{82}{100}$	$\frac{83}{100}$	$\frac{84}{100}$
75p	76p	77p	78p	79p	80p	81p	82p	83p	84p

4.

$\frac{91}{100}$	$\frac{92}{100}$	$\frac{93}{100}$	$\frac{94}{100}$	$\frac{95}{100}$	$\frac{96}{100}$	$\frac{97}{100}$	$\frac{98}{100}$	$\frac{99}{100}$	$\frac{100}{100}$
91p	92p	93p	94p	95p	96p	97p	98p	99p	£1

Converting Decimal Tenths and Hundredths to Fractions

Answers

A. Write these decimals into the place value chart. Read the place value and write the decimal as a fraction. The first question has been completed for you.

Decimal	Place Value Chart			How many tenths?
0.7	Ones		tenths	**7 tenths = $\frac{7}{10}$**
	0	.	7	
0.3	Ones		tenths	**3 tenths = $\frac{3}{10}$**
		.		
zero point two	Ones		tenths	**2 tenths = $\frac{2}{10}$**
		.		
0.4	Ones		tenths	**4 tenths = $\frac{4}{10}$**
		.		
0.1	Ones		tenths	**1 tenth = $\frac{1}{10}$**
		.		
0.9	Ones		tenths	**9 tenths = $\frac{9}{10}$**
		.		
zero point eight	Ones		tenths	**8 tenths = $\frac{8}{10}$**
		.		

B. Complete the table.

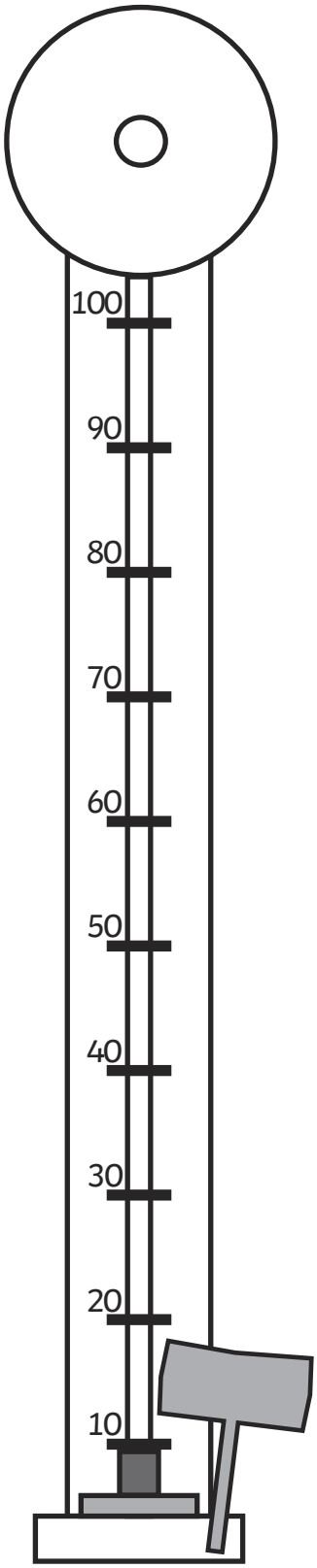
Decimal	Place Value Chart				How many tenths?
0.73	Ones		tenths	hundredths	**73 hundredths = $\frac{73}{100}$**
	0	.	7	3	
0.20	Ones		tenths	hundredths	**20 hundredths = $\frac{20}{100}$ or $\frac{20}{10}$**
	0	.			
zero point four six	Ones		tenths	hundredths	**46 hundredths = $\frac{46}{100}$**
	0	.			
nought point nought 4	Ones		tenths	hundredths	**4 hundredths = $\frac{4}{100}$**
	0	.			
0.42	Ones		tenths	hundredths	**42 hundredths = $\frac{42}{100}$**
	0	.			
0.66	Ones		tenths	hundredths	**66 hundredths = $\frac{66}{100}$**
	0	.			
0.99	Ones		tenths	hundredths	**99 hundredths = $\frac{99}{100}$**
	0	.			

C. What do you think this decimal is as a fraction?

O		t	h	th
0	.	0	0	7

7 thousandths = 7/1000

Test of Strength **Answers**

Superhuman		**24**
Super Strong heavyweight		$\frac{1}{4}$
Strong Heavyweight		**48**
Heavyweight		$\frac{2}{7}$ **of £84 = £24**
Super Strong		$\frac{1}{2}$ **of 28 = 14** $\frac{1}{4}$ **of 48 = 12** $\frac{1}{2}$ **of 28 is bigger.**
Powerful		$\frac{20}{30} = \frac{2}{3}$
Muscly		$\frac{1}{10}$
Strong		**15**

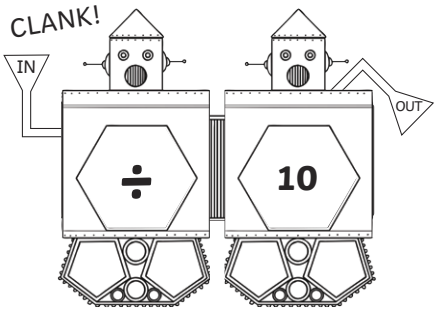
Shrinking Machine **Answers**

Recognise that hundredths arise when dividing an object by 100.

The shrinking machine makes numbers 10 or 100 times smaller. Can you write the shrunken numbers in the new table? Add some sound effects to the machine too!

Make the numbers 10 times smaller.

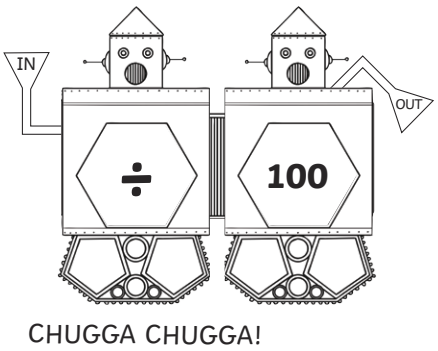
O Ones		t tenths	h hundredths
3	•	0	
7	•	0	
8	•	0	
9	•	0	
5	•	0	
2	•	0	



O Ones		t tenths	h hundredths
0	•	**3**	
0	•	**7**	
0	•	**8**	
0	•	**9**	
0	•	**5**	
0	•	**2**	

Make the numbers a hundred times smaller.

T tens	O ones		t tenths	h hundredths
3	6	•		
4	9	•		
1	8	•		
7	2	•		
	8	•		
	1	•		



T tens	O ones		t tenths	h hundredths
	0	•	**3**	**6**
	0	•	**4**	**9**
	0	•	**1**	**8**
	0	•	**7**	**2**
	0	•	**0**	**8**
	0	•	**0**	**1**