



Colin and Coco's Deliberate Practice

Year 4 Unit 14

Answers

Measurement: Time and Converting Units





Contents

This pack of deliberate practice is designed to be used flexibly to secure the manageable steps of this unit.

The table below indicates which activities are linked to which manageable steps.

	Do It	Challenge It	Play It
Convert 12-hour digital time to 24-hour time	1		
Convert between 12-hour analogue time and 24-hour time		1	1
Convert times between 24-hour time and 12-hour analogue time		1	
Convert from hours to minutes	2		
Convert from weeks to days		2	
Convert from years to months		2	2
Convert from litres to millilitres	3		
Convert from kilograms to grams		3	
Convert from kilometres to metres	3	3	3



Write the following in 24-hour time:

11:00 a.m.

11:00

9:30 a.m.

09:30

3:45 a.m.

03:45

6:00 p.m.

18:00

10:20 p.m.

22:20

11:35 p.m.

23:35

8:00 p.m.

20:00

12:27 p.m.

12:27

12:27 a.m.

00:27

Challenge It 1

Match the 24-hour time to the 12-hour analogue time.
Find the missing buddies.

05:15		7:15p.m.
19:15		12:15a.m.
17:15		5:15a.m.
00:15		1:15p.m.
15:15		5:15p.m.
13:15		12:15p.m.
07:15		3:15p.m.
03:15		7:15a.m.
12:15		3:15a.m.



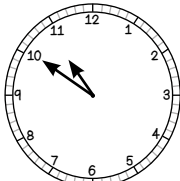
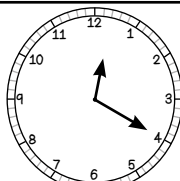
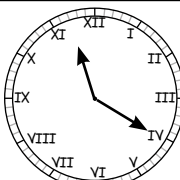
24-hour Game

Play It 1

You need:
Card set

To play: All the cards are shuffled and placed face down.
Players take turns to turn over two cards each.
If the times on the cards match, the player wins the pair of cards.
If they don't match, they turn the cards back over.

To win: The winner is the player with the highest number of cards.

Twenty past five in the morning	05:20	 morning	10:50
Twenty to five in the morning	04:40	 morning	00:20
Ten past eleven in the morning	11:10	 morning	11:20
Ten to eleven in the evening	22:50	4:40 p.m.	16:40
Twenty to eleven in the evening	22:40	11:20 p.m.	23:20
Twenty to twelve in the morning	11:40	5:20 p.m.	17:20



How many minutes?

1 hour 60 minutes

Half an hour 30 minutes

2 hours 120 minutes

Quarter of an hour 15 minutes

4 hours 240 minutes

Three quarters of an hour 45 minutes

10 hours 600 minutes

One and a half hours 90 minutes

5 hours 300 minutes

Two and a quarter hours 135 minutes

Find missing digits to solve the statement ...

Challenge It 2

7 weeks = 4 9 days

in several different ways.

Now solve the three statements together using the digits 1 - 9 once each.

Possible solution

7 weeks = 4 9 days

8 weeks = 5 6 days

3 weeks = 2 1 days



Years, Months, Weeks Game

Play It 2

You need:

Two 1 - 6 dice

To play:

Player 1 rolls one dice.

If the number on the dice is:

1, 2 or 3: The player is converting years to months

4, 5, or 6: The player is converting weeks to days

Player 1 rolls the second dice. The number on this dice is the number of years or weeks the player needs to convert.

The answer to the conversion is the number of points the player scores.

Example:

Player 1: throws 2 on dice one and 4 on dice two

2 on dice one means the player is converting years to months

4 on dice two means the player is converting 4 years to months

4 years = 48 months

The player scores 48 points.

Player 2 rolls the dice.

To win: The winner is the first player to score 500 points.



Do It 3

How many millilitres (ml)?

1 litre

1000 ml

2 litres

2000 ml

4 litres

4,000 ml

7 litres

7,000 ml

9 litres

9,000 ml

$\frac{1}{2}$ litre

500 ml

$\frac{1}{4}$ litre

250 ml

$1\frac{1}{2}$ litres

1,500 ml

2.5 litres

2,500 ml

3.5 litres

3,500 ml

Find missing digits to solve each statement
in several different ways.

Challenge It 3

Possible
solution

$$\begin{array}{l} \boxed{3} \text{ kg} = \boxed{3} \boxed{0} \boxed{0} \boxed{0} \text{ g} \\ \boxed{0} \boxed{.5} \text{ kg} = \boxed{5} \boxed{0} \boxed{0} \text{ g} \\ \boxed{1} \text{ kg} = \boxed{2} \boxed{5} \boxed{0} \text{ g} \\ \boxed{4} \end{array}$$

Solve the statements altogether
using the digits 0, 1, 2, 3, 4 and 5 at least once each.



Kilometres Game

Play It 3

You need:

Card set A

Card set B

To play: All the cards are shuffled and placed face down.

Players take turns to turn over one card from Set A and one card from Set B

The player with the longest distance wins the pair of cards.

To win: The player with the highest number of cards wins.

3km	300m	$\frac{1}{2}$ km	600m
7km	750m	$\frac{1}{4}$ km	400m
1.5km	2000m	$\frac{1}{10}$ km	10m
6km	7500m	$2\frac{1}{2}$ km	2600m
1km	100m	$1\frac{1}{2}$ km	150m
0.5m	5000m	$2\frac{1}{4}$ km	2400m