



Colin and Coco's Deliberate Practice

Year 3 Unit 12

Measurement: Time

Answers





Contents

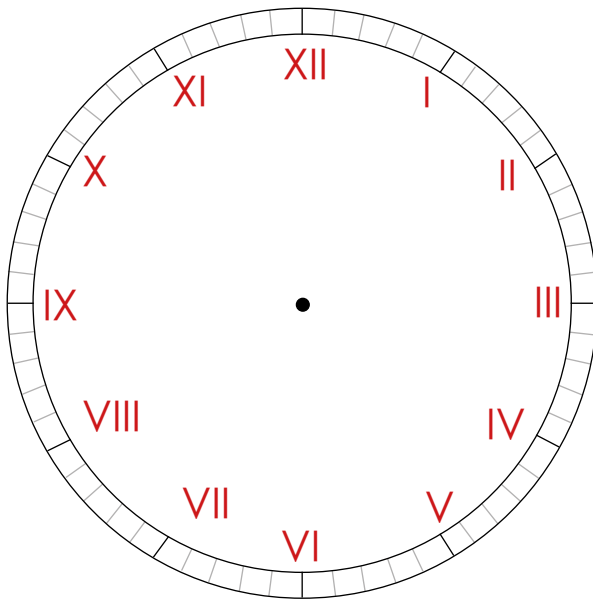
This pack of deliberate practice is designed to be used flexibly to secure the manageable steps of this unit.

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

	Do It	Challenge It	Play It
Read Roman numerals up to XII	1		1
Know the number of seconds in a minute and multiple minutes	1		
Know the number of days in each month, year and leap year		1	2
Tell the time to one minute intervals past the hour on an analogue clock	2 analogue		
Draw the hands on a clock to show one minute intervals past the hour on an analogue clock		2	
Tell the time to one minute intervals to the hour on an analogue clock	3 analogue		
Draw the hands on a clock to show one minute intervals to the hour on an analogue clock		3	
Read analogue time and record using digital format	2 & 3 digital		3
Read digital time and write using 'to' and 'past'	4		
Sequence events using a.m. and p.m.		4	
Compare times given in seconds, minutes and/or hours			4
Calculate the duration of events less than one hour	5	5	
Calculate the duration of events more than one hour		5	5



Put Roman Numerals on the clock face.



Fill in the missing numbers:

$$1 \text{ minute} = \boxed{60} \text{ seconds}$$

$$3 \text{ minutes} = \boxed{180} \text{ seconds}$$

$$5 \text{ minutes} = \boxed{300} \text{ seconds}$$

$$120 \text{ seconds} = \boxed{2} \text{ minutes}$$

$$360 \text{ seconds} = \boxed{6} \text{ minutes}$$

Coco chooses 2 months.
Colin chooses 2 different months.

The total number of days in their 4 months is 122

Find several different combinations of months they could have chosen.

Find the combination with the smallest number of letters possible.

Possible solution:
Coco - May and July
Colin - April and June



Roman Numerals Game

Play It 1

You need:
1 - 6 dice

To play:

Throw the dice three times and add the numbers together.

This is the total number of sticks to use to try to design an addition calculation using two numbers written as Roman Numerals.

The sticks are for the numerals not the addition and equals symbols.

You score the total of your calculation.

For example:

Player 1: throws 3, 4 and 1 giving a total of 8 sticks
uses 8 sticks to make Roman Numerals
 $V + VI = XI$ (2 sticks for the 5, three sticks for the 6 and
3 sticks for the 11)
scores eleven

If the player cannot design a calculation they score zero.

To win:

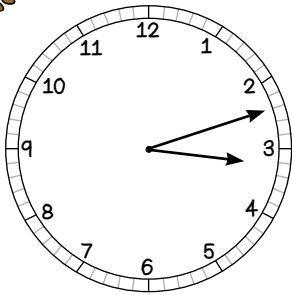
The winner is the player with the highest score after five goes each.

Play again using subtraction.

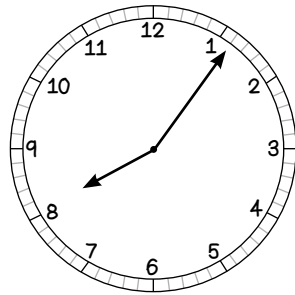


Do It 2

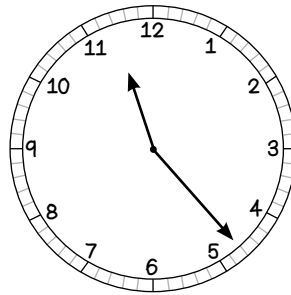
What time does each clock show?



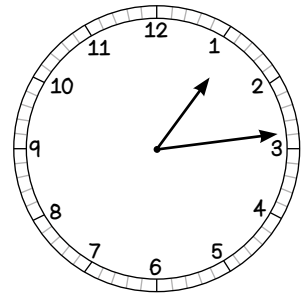
12 minutes
past 3



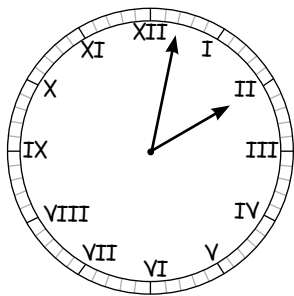
6 minutes
past 8



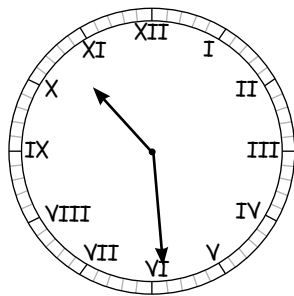
23 minutes
past 11



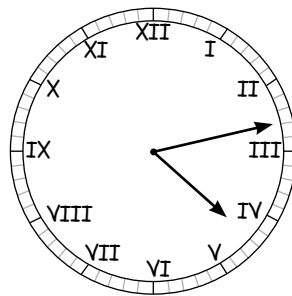
14 minutes
past 1



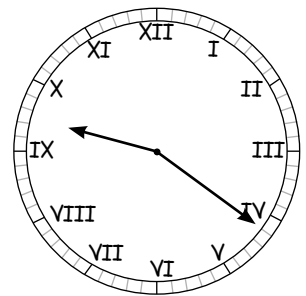
2 minutes
past 2



29 minutes
past 10



13 minutes
past 4



21 minutes
past 9



2 minutes past



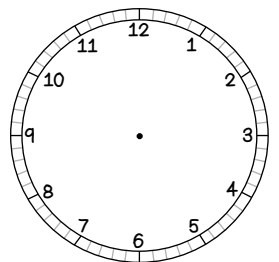
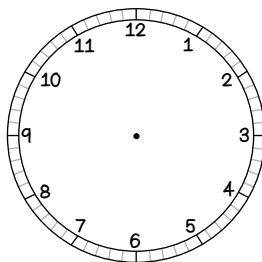
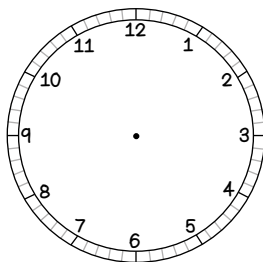
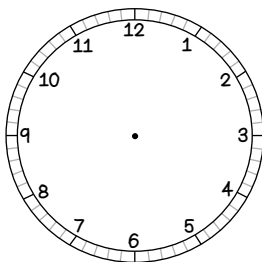
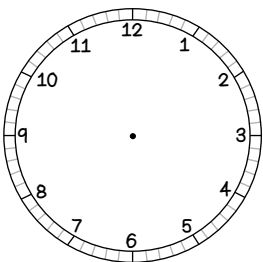
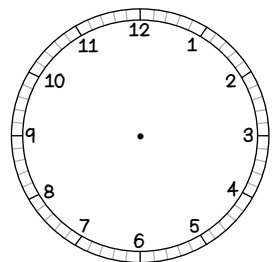
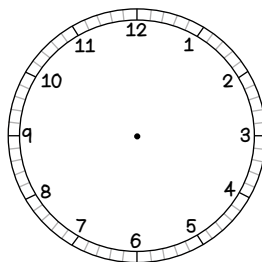
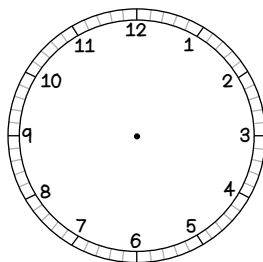
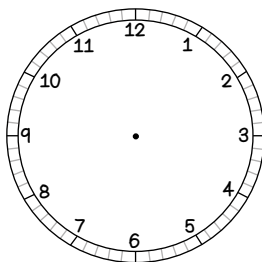
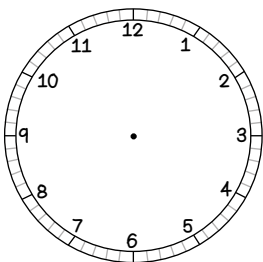
Challenge It 2

Choose from the digits 1, 2, 3, 4 and 5 to complete the statement.

The time must be before half past the hour.

Complete the statement in several different ways..

Draw each time on a clock.



Now solve it if the digits i) are the same ii) are odd numbers



Days in Months Game

Play It 2

You need:

1 - 6 dice

To play:

Take turns to throw the dice twice.

Add the two numbers to get a total.

Your total is the position of the month in the year.

You score the number of days in that month.

For example:

Player 1: throws 3 and 4 to make 7

7th Month is July

scores 31, because July has 31 days

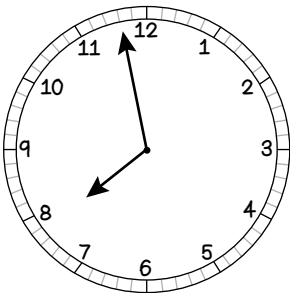
To win:

The winner is the first player to score a total of more than 365 days.

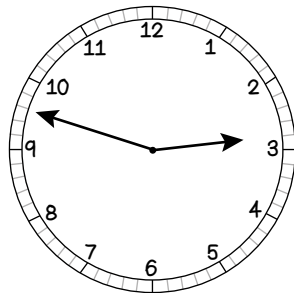


Do It 3

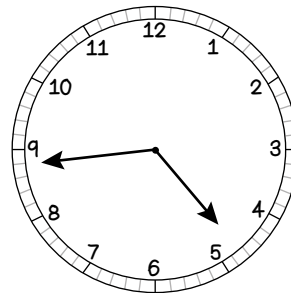
What time does each clock show?



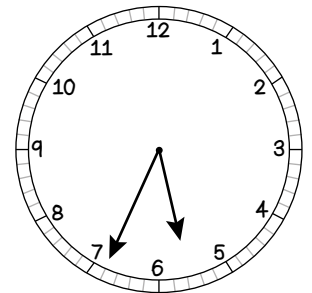
2 minutes
to 8



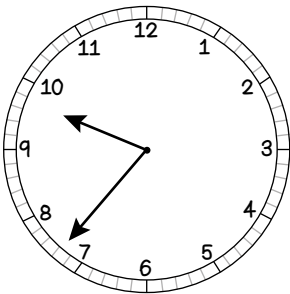
12 minutes
to 3



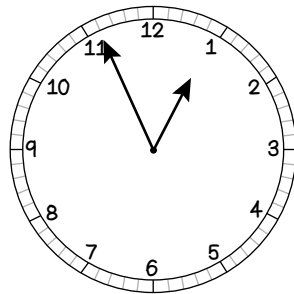
16 minutes
to 5



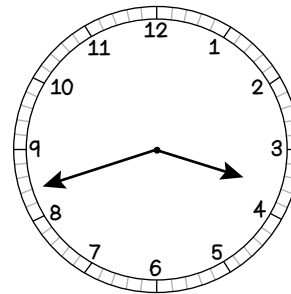
26 minutes
to 6



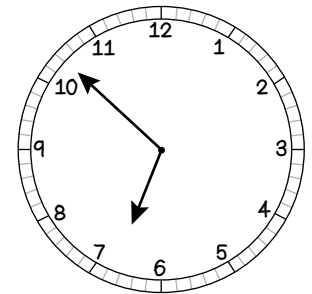
23 minutes
to 10



4 minutes
to 1



18 minutes
to 4



8 minutes
to 7

Challenge It 3

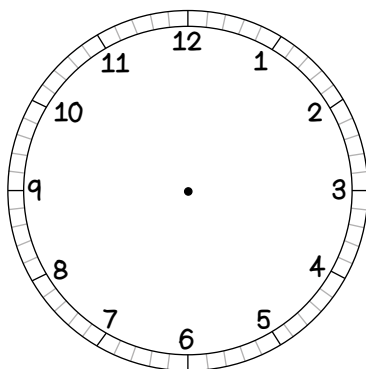
Colin enters the room at time A then leaves 7 minutes later at time B.

At least one of the times has a 3 in the minutes.

The time he enters the room is after half past 3 and before 4 o'clock.

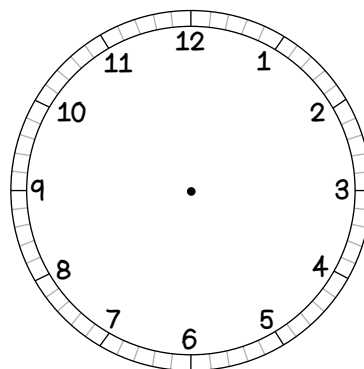
Draw hands on clocks to show both time A and time B.

Time A: enters at



minutes to

Time B: leaves at



minutes

Investigate all the possibilities.



Matching Times Game

You need:
Time cards

To play:
Shuffle the cards and place them face down.
Player 1 turns over two cards.
If the times match they keep the pair of cards.
If the cards do not match they replace them face down.
Then player 2 turns over two cards.

Play continues until all the cards have been matched.

To win:
The winner is the player with the most cards.



Time Cards

10 to 8

7:50

20 to 4

3:40

10 past 7

7:10

20 past 3

3:20

10 to 7

6:50

quarter
to 4

3:45

25 to 8

7:35

5 to 8

7:55



Write each of the digital times using 'past' or 'to'.

10:30

Half past 10

10:45

Quarter to 11

11:15

Quarter past 11

11:50

Ten to 12

9:20

Twenty past 9

9:40

Twenty to 10

7:10

Ten past 7

7:35

Twenty-five to 8

8:25

Twenty-five past 8

8:55

Five to 9

6:05

Five past 6

6:45

Quarter to 7

Match the times.

Find the missing buddies.

Put them in order from earliest to latest.

Challenge It 4

10 past 2 in the afternoon	2:10a.m.	1st
20 past 4 in the morning	3:40p.m.	2nd
10 past 2 in the morning	2:10p.m.	3rd
half past 2 in the morning	4:20a.m.	4th
20 to 4 in the afternoon	1:50a.m.	5th
10 to 2 in the morning	1:50p.m.	6th
20 to 4 in the morning	4:20p.m.	7th
20 past 4 in the afternoon	2:30a.m.	8th
10 to 2 in the afternoon	3:40a.m.	9th



Longer Time Game

Play It 4

You need:

1 - 6 and 0 - 9 dice

To play:

Player 1 throws the 1 - 6 dice twice and adds the numbers together.

This is their number of hours.

Player 2 throws the 0 - 9 dice three times to make a three-digit number.

This is their number of minutes.

The player with the longest time scores a point.

For the next turn, swap roles.

To win:

The winner is the first player to score 10 points.

Play again using seconds and minutes.



Calculate the duration between the two times.

From 10:30 a.m. to 11:50 a.m.

1 hour and 20 minutes

From 9:15 a.m. to 11:10 a.m.

1 hour and 55 minutes

From 7:20 p.m. to 10:30 p.m.

3 hours and 10 minutes

From 10 past 3 in the morning to
25 to 9 in the morning.

5 hours and 25 minutes

From 5 to 4 in the afternoon to
quarter past 8 in the evening.

4 hours and 20 minutes

From 10:55 a.m. to 3:20 p.m.

4 hours and 25 minutes

Match the times to the duration.
Find the missing buddies

Challenge It 5

2:15p.m. to 2:55p.m.	35 mins
3:40p.m. to 5:10p.m.	1 hour 35 mins
5:30a.m. to 6:05a.m.	40 mins
8:20a.m. to 9:15a.m.	1 hour 30 mins
7:50p.m. to 9:25p.m.	1 hour 55 mins
1:25p.m. to 3:20p.m.	45 mins
4:45p.m. to 5:10p.m.	1 hour 5 mins
6:10a.m. to 7:15a.m.	55 mins
9:05p.m. to 9:50p.m.	25 mins



Duration Game

Play It 5

You need:

1 - 6 dice

To play:

When it is your turn, throw the dice three times to make a time.

For example, if you throw 4, 5 and 1 you could make 14 minutes past 5 or 1:45 or 14 minutes to 5 and so on.

Throw the dice three more times to make another time.

Calculate the duration from your first time to your second time.

Players take turns to calculate a duration.

The player with the longest duration scores a point.

To win:

The winner is the first player to score 5 points.