

# Mathematics Workbook

Valid from February 2011 to August 2011

Functional Skills Qualification in Mathematics at Entry 3

Learner name

Learner signature and date

Work through the whole book.

- Answer every question.
- You can write or draw to show your answers in the workbook.
- You can use a calculator.

Your tutor may read the questions to you.

Ask your tutor if you do not understand any words.

**You have up to 1 hour 30 minutes to complete the workbook.**

Your tutor may give you objects to help you with the questions.

You will need:

- Pencil
- Ruler
- Rubber

Turn over ►

## A day out

### Section 1: Planning a day out

You are planning a day out for yourself and 2 friends.

You want to choose a day in July.

You and your two friends all work every day from Monday to Friday.

You and your two friends also work on the first and third Saturday in every month.

Here is a calendar for July:

## JULY 2011

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Which days could you choose for your day out?

Mark the days on the calendar.

(2)

You want to go to a theme park.  
You need to decide how to get to and from the theme park.  
You have a choice of two ways to travel:

<b>Offers on day trips to theme park - option 1</b>	<b>Offers on day trips to theme park - option 2</b>
<p><b>Coach travel</b> Manchester to theme park</p> <p>£12.10 single</p>	<p><b>Train</b> Manchester to Stoke-on-Trent £17.60 return</p> <p><b>Bus</b> Stoke-on-Trent to theme park £5 return</p>

Work out the total cost of travelling by train and bus.

Is this total cost cheaper than coach travel?

Show your working in the box below.

(2)

You also want to work out how long it takes to travel to the theme park using the two different ways to travel.

**Manchester to theme park  
- option 1**

**Coach travel**  
Time taken is  $1\frac{1}{2}$  hours

**Offers on day trips to  
theme park - option 2**

**Train**  
Manchester to Stoke-on- Trent  
Time for journey  
30 minutes

**Bus**  
Stoke-on-Trent to theme park  
Time for journey  
45 minutes

**Work out the total time taken to travel to the theme park by train and bus.**

**Is this total time less than the time taken for coach travel?**

Show your working in the box below.

(2)

You need to decide which way to travel to the theme park.  
Use your answers about the total costs and the total time.

Which way would you choose to travel to the theme park?  
Why have you decided on this way to travel?

Write your answer in the box below.

(1)

You and your 2 friends buy entry tickets for the theme park on the internet.

The table shows the prices at the theme park and the prices on the internet:

	<b>Entry Ticket at the Park</b>	<b>Internet Price</b>
<b>Adult (over 11)</b>	£38	£30.40
<b>Child (4-11)</b>	£28	£23.20
<b>Senior (over 65)</b>	£18	£15.20
<b>Child (under 4)</b>	Free	Free

**How much do you save by buying your ticket on the internet?**

Show your working in the box below.

(2)

Write a calculation you can do to check how much you save.

Show your working in the box below.



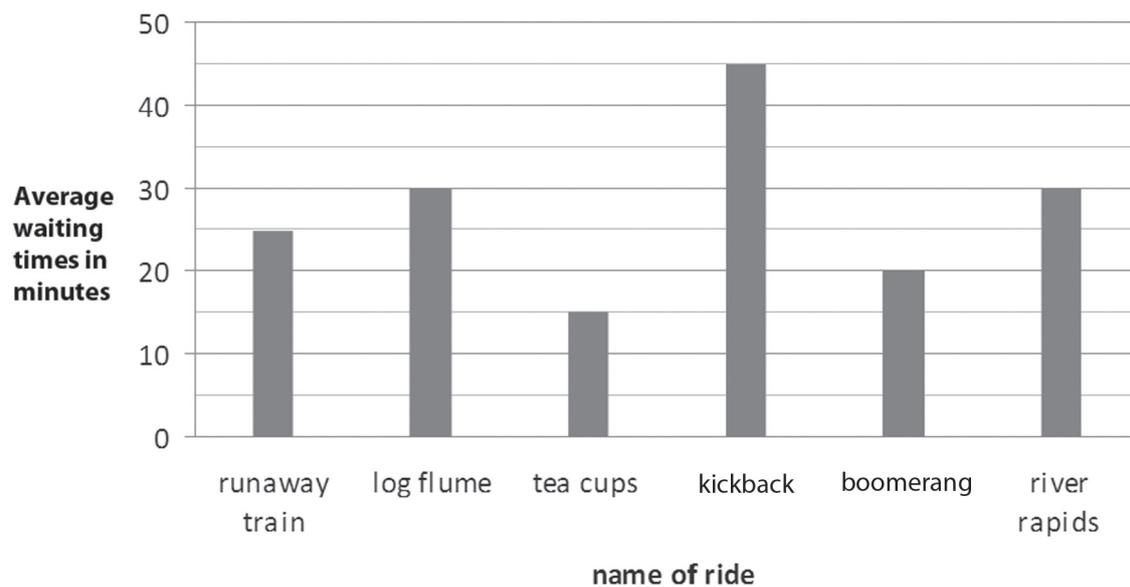
(1)

## 2: At the theme park

You are at the theme park.

You see a bar chart which shows the average waiting times for some of the rides.

The chart is shown below:



**Which ride has the least average waiting time?**

**What is the average waiting time for this ride?**

Write your answers in the box below.

(2)

How much longer would you expect to wait to ride on kickback than boomerang?

(2)

The theme park has opened a new ride called void.  
You queue for 53 minutes to ride on void.

**What is 53 rounded to the nearest 10?**

Write your answer in the box below.

(1)

You and your 2 friends take a 2 litre bottle of water with you to drink on your day out.  
You also take some plastic cups. The plastic cups hold 200ml when they are full.

The picture shows the bottle of water and some cups.



**2 litres**



**200ml**



**200ml**



**200ml**

**How many full cups can you pour from the 2 litre bottle of water?**

Show your working in the box below.

(2)

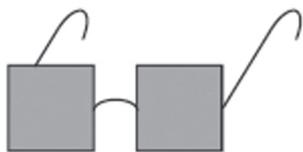
You want to share the water equally between yourself and your 2 friends.

**How many full cups of water can you each have?**

Show your working in the box below.

(2)

You see a 3-D film at the theme park.  
You wear 3-D glasses to watch the film.  
The glasses are different shapes.



**Which shapes contain right angles?**

Tick the shapes which contain right angles.

(1)