

# Measurement (mass)

## HERE'S THE MATHS

Your child is learning to use decimal notation to record mass in kilograms, to convert from kilograms to grams and vice versa, and to round masses to the nearest kilogram and to the nearest 100 g. Handle different food jars and packets, looking at the weight labels, to gain an understanding of what different masses feel like.

## ACTIVITY

6	1.4 kg	0.8 kg	4.2 kg	5.1 kg	9.6 kg	7.9 kg
5	3.5 kg	6.8 kg	9.3 kg	7.7 kg	4.9 kg	1.9 kg
4	6.4 kg	8.7 kg	5.3 kg	3.2 kg	0.9 kg	8.1 kg
3	9.1 kg	2.6 kg	7.2 kg	8.4 kg	1.8 kg	5.7 kg
2	3.2 kg	8.5 kg	6.3 kg	2.8 kg	0.7 kg	4.7 kg
1	2.1 kg	4.8 kg	2.3 kg	3.8 kg	0.5 kg	6.1 kg
	1	2	3	4	5	6

### What to do

- One person takes the role of question master.
- The other rolls the dice twice to find the coordinates of a mass.
- The question master asks questions about the chosen mass, such as:
  - What is this mass in grams?
  - What is this mass rounded to the nearest kilogram?
  - What is this mass rounded to the nearest 100 g?
  - Suggest an object that has a similar mass.
- Change roles and continue for 10 minutes.

### You will need:

- 1–6 dice

## QUESTIONS TO ASK

How many grams in  $\frac{1}{4}$  kg? ( $\frac{1}{2}$  kg,  $\frac{3}{4}$  kg)

Change 3.6 kg to grams.

How many grams in 0.2 kg (0.1 kg, 0.3 kg, etc.)?



# Year 4 Maths Newsletter 3



Date: \_\_\_\_\_

Name: \_\_\_\_\_

## MATHS TOPICS

These are the maths topics your child will be working on during the next three weeks:

- Addition and subtraction
- Decimals
- Measurement (mass)

## KEY MATHEMATICAL IDEAS

During these three weeks your child will be learning to:

- focus on mental strategies to add and subtract numbers, using jottings to help
- round decimals with one decimal place to the nearest whole number
- use decimal notation to record mass in kilograms, convert from kilograms to grams and vice versa, and round masses to the nearest kilogram and to the nearest 100 g.

## TIPS FOR GOOD HOMEWORK HABITS

- Turn off the TV and computer. Choose a quiet place, preferably sitting at a table, where your child can work comfortably without disturbance.

# Addition and subtraction

## HERE'S THE MATHS

This week the focus is on mental methods for addition, using jottings as an aide-memoire. Practise of this type helps to consolidate understanding and improve speed when using the formal written method.

## ACTIVITY

### What to do

- Ask your child to turn over four cards to make a 4-digit number. Picture cards represent zero, e.g. 3, King, 4, Ace gives the number 3041.
- Turn over two cards to make a 2-digit number.
- Add this to the 4-digit number using a number line to make jottings.
- Check with a calculator.
- Swap roles.
- Play for 10 minutes.

### You will need:

- pencil and paper
- pack of playing cards with the 10s removed
- calculator (or use mobile phone)

### Variation

- Use one card to add a 1-digit number or 3 cards to add a 3-digit number.

## QUESTIONS TO ASK

Which digits change when you add 800 to 2658?

Which digits change when you add 80 to 2658?

Which digits change when you add 8 to 2658?

Partition 5218 into thousands, hundreds, tens and ones.

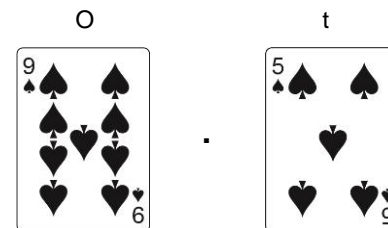
Make up a word problem where the numbers 1546 and 1454 are added together.

# Decimals

## HERE'S THE MATHS

Your child is learning to understand tenths, expressed as fractions and as decimal fractions. They put decimals with one decimal place in order and round tenths to the nearest whole number. When rounding, 0.5 or greater is rounded up, while 0.4 or less is rounded down.

## ACTIVITY



### You will need:

- pack of cards with picture cards and 10s removed

### What to do

- You both begin with ten points. Decide who will win if the number has to be rounded up and the other person will win if the number is rounded down.
- Shuffle the pack.
- Turn over the first two cards and put them in the ones and tenths places.
- Round the number to the nearest whole number.
- The winner adds one point to their total and the loser drops a point.
- Play for 5 minutes.
- Swap 'up' and 'down' and play again for 5 minutes.
- Discuss if it is better to be the 'up' or the 'down' person.

### Variation

- Change the scoring so that you win and lose according to whether the rounded number is odd or even.

## QUESTIONS TO ASK

How many tenths in a half?

Count in tenths from 0.4 to 1.4.

How many tenths in 2?

What is  $\frac{9}{10}$  as a decimal?

What is 0.3 as a fraction?