

## Money Maths Project

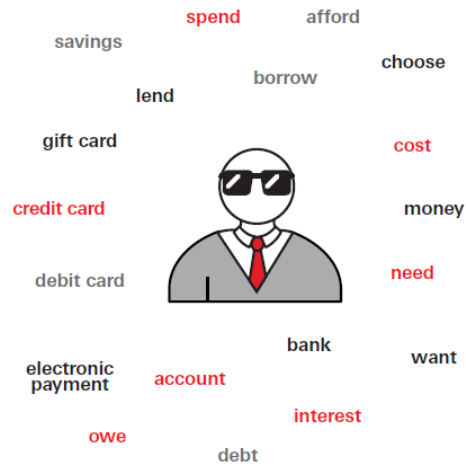
Choose one of these two projects to research and produce an A4 poster or information sheet to bring with you to your first Maths lesson.

### Ways to Pay

Task 1: Find the definitions for each of the words in the picture.

Task 2: How do we pay for things? Research different payment methods, their similarities, differences and the pro's and con's of each.

Task 3: Billy wants to decorate his bedroom with characters from his favourite films and TV programmes. It will cost £100. He doesn't have a gift card, he has £25 in cash and £50 in his bank account. He has a debit card and a credit card. What should Billy do?

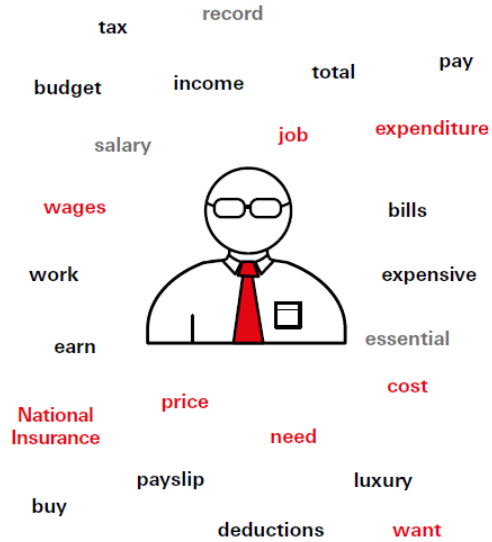


### Household budgeting

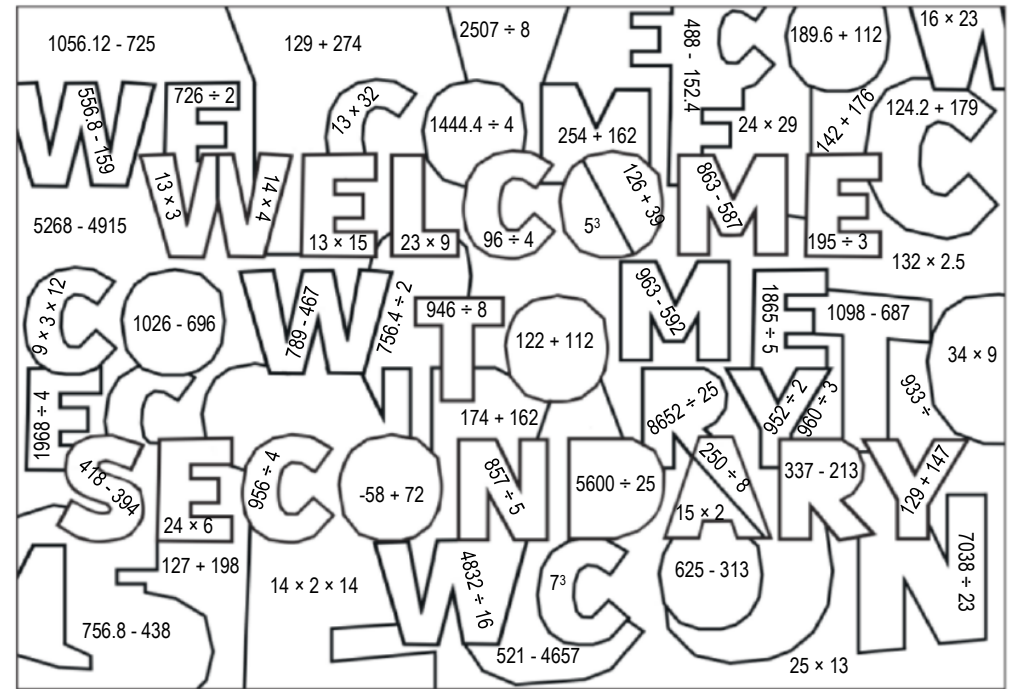
Task 1: Find the definitions for each of the words in the picture.

Task 2: What bills do we have in our house? Find out what we have to pay for and think of ways that we can reduce our household costs.

Task 3: Emma earns £975 per month. She owns a car that she bought from her savings which she used to travel to work 5 miles away. It cost her £77 per month to run the car. Her rent is £325 and bills £150. She has a magazine subscription for £15, and a gym membership for £28. Emma wants to go on holiday in the summer. How could she change her spending habits to be able to afford it?



Remember to put your name on your poster or information sheet and bring it with you on your first day. We're looking forward to meeting you and seeing what you have produced!



Calculate each answer then colour each part: 0-100 Blue 101-200 Green 201-300 Yellow 301+ Red

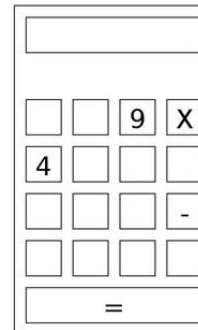
# Mathematics

Hello Year 7,

We know it is going to be a big challenge coming to secondary school, but we are sure you will settle in just fine! Normally you would get to meet us before you arrive, so instead we have made you a booklet to get you started. We would love to see what you come up with for the final project when you arrive in September.

We look forward to meeting you all,

The Maths Department



### Broken calculator

Some of the keys are missing on this calculator. Can you still make all of the numbers from 1 to 20?

For example:

$$4 \times 4 = 16$$

$$9 - 4 - 4 = 1$$

Think! Is your calculation mathematically correct?

**The value of words**

Use the key to calculate the value of each word, in pounds.

Which method can you use to help you?

A	B	C	D	E	F	G	H	I	J	K	L	M
50p	£1.03	£0.62	£0.15	10p	72p	22p	£0.15	£0.08	£1.21	£2.50	£1.08	42p
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
£0.78	£0.05	£1.65	£3.00	45p	68p	£0.18	95p	£0.27	£1.11	£1.85	£2.05	£2.88

NUMBER                      £0.78 + 95p + 42p + £1.03 + 10p + 45p = £3.73

MONEY

DIVIDE

ADDITION

SUBTRACT

MULTIPLICATION

**Long multiplication number search**

Work out each multiplication then circle the answer in the grid. Answers can be vertical, horizontal, diagonal or backwards!

- 1) 1196 x 4 =            11) 218.5 x 24 =
- 2) 33.81 x 200 =    12) 552.25 x 16 =
- 3) 243 x 30 =            13) 50 x 59.8 =
- 4) 40 x 152 =            14) 29 x 94 =
- 5) 101 x 21 =            15) 25 x 215.8 =
- 6) 401 x 15 =            16) 1670 x 5.5 =
- 7) 15 x 505 =            17) 16 x 69.75 =
- 8) 296 x 26 =            18) 24 x 416.375 =
- 9) 18 x 351 =            19) 229 x 15 =
- 10) 50 x 100.2 =    20) 780.24 x 50 =

8	9	8	2	6	7	6	6	2	5
4	3	2	9	9	0	9	0	7	2
7	8	9	0	8	0	6	1	2	4
8	9	7	1	3	1	7	5	6	4
8	2	8	4	8	3	4	3	0	5
3	2	7	5	7	5	9	9	9	3
6	1	6	8	9	3	5	8	3	4
2	2	1	3	2	2	1	0	9	3
1	1	5	1	5	9	1	2	1	7
8	1	3	6	6	2	7	2	9	0

**Negative dice**

I have two identical dice with faces -1, 2, -3, 4, -5 and 6.

I roll the two dice and work out the total score.

Which of these scores cannot be achieved?

- A) 3                      B) 7                      C) 8



**The Kangaroo Subtraction Problem**

In this calculation each of the letters K A N G R and O represent a different digit. What is the largest possible value of the number 'KAN'?

$$\begin{array}{r}
 K \ A \ N \\
 G \ A \ R \ - \\
 \hline
 O \ O
 \end{array}$$

**Who owes who?**

Tony owes Tina 40p. Then Tina borrows 50p from Tony. Later, Tony gives Tina 60p.

Who has to pay what to whom to square things up?

**P's and Q's**

If P is a positive integer and Q is a negative integer, which of these is the greatest?

- A) P - Q
- B) Q - P
- C) P + Q
- D) -P - Q

Do you have enough information to find out?

**The Jam and Egg Sandwich Problem**

Each different letter in the multiplication stands for a different digit. Identical letters stand for the same digit. Work out the value of each letter.

$$\begin{array}{r}
 E \ G \ G \\
 \phantom{E} \phantom{G} \times \\
 \hline
 J \ A \ M
 \end{array}$$

**A different multiplication grid**

The digits 1 to 9 can be placed in the grid so that every row and every column multiply to give the answer on the outside. Each number can only be used once. Can you place the numbers correctly to make it work?

Do you have enough information, too much or too little to solve the problem?

			24
			40
			378
60	21	288	