

# Year 6

## Recipes

Find a recipe for 4 people and rewrite it for 8 people, e.g.

4 people	8 people
125g flour	250g flour
50g butter	100g butter
75g sugar	150g sugar
30ml treacle	60ml treacle
1 teaspoon ginger	2 teaspoons ginger

Can you rewrite it for 3 or 6 people? Or 25 people? Can you convert it into ounces?

## Fours

- ◆ Use exactly four 4s each time.
- ◆ You can add, subtract, multiply or divide them.
- ◆ Can you make each number from 1 to 100?
- ◆ Here are some ways of making the first two numbers.

$$1 = (4 + 4)/(4 + 4)$$

$$2 = 4/4 + 4/4$$

## Journeys

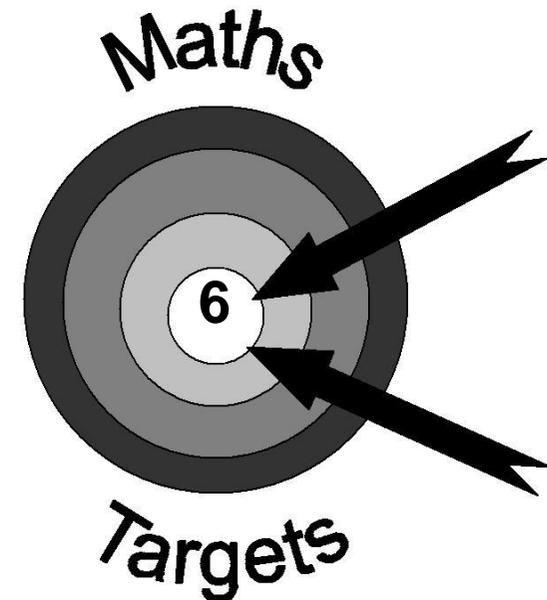
Use the chart in the front of a road atlas that tells you the distance between places.

- ◆ Find the nearest place to you.
- ◆ Ask your child to work out how long it would take to travel to some places in England if you travelled at an average of 60 miles per hour, i.e. 1 mile per minute, e.g.

York to Preston: 90 miles 1 hour 30 minutes

York to Dover: 280 miles 4 hours 40 minutes

How many km is it away from home? Convert from miles to km.



**A booklet for parents**

Help your child with mathematics

**BATHWICK ST. MARY SCHOOL**

## Targets – Year 6

**By the end of Year 6, most children should be able to...**

- ❖ Read, write, order and compare numbers to at least 10 million
- ❖ Interpret negative numbers in context and calculate intervals across zero
- ❖ Round any number to the required degree of accuracy
- ❖ Use long multiplication to multiply 4 digit numbers by 2 digit numbers.
- ❖ Use long division to divide larger numbers
- ❖ Identify common factors, multiples and prime numbers
- ❖ Solve addition and subtraction multi step problems
- ❖ Simplify fractions
- ❖ Add and subtract fractions with different denominators
- ❖ Multiply fractions

## Activities to do at home

### **One million pounds**

Assume you have £1 000 000 to spend or give away.

Plan with your child what to do with it, down to the last penny

### **Favourite food**

- ◆ Ask your child the cost of a favourite item of food.

Ask them to work out what 17 of them would cost, or 28, or 59.

How much change would there be from £50 or £500

- ◆ Repeat with his / her least favourite food.

What is the difference in cost between the two?

### **Sale of the century**

- ◆ When you go shopping, or see a shop with a sale on, ask your child to work out what some items would cost with:

50% off

25% off

10% off

5% off

15% off

- ◆ Ask your child to explain how he/she worked it out.

### **TV addicts**

Ask your child to keep a record of how long he / she watches TV each day for a week. Then ask him / her to do this.

- ◆ Work out the total watching time for the week.

- ◆ Work out the average watching time for a day

Instead of watching TV, you could ask them to keep a record of time spent eating meals, or playing outdoors, or anything else they do each day. Then work out the daily average.

**Questions you could ask your child as they are doing  
their Mathematics.**

- What is the same or different about these numbers, sums, processes?
- How could you organise your learning?
- Can you show me an example?
- What are the connections between...?
- What do you notice?
- When is it not true?
- Can you find another example?
- Can you find an example that does not work?
- How can you be sure?
- What question can you ask next?
- Can you explain why that happens?
- Can you describe...?
- Can you do this mentally?

- ❖ Multiply and divide decimals
- ❖ Use equivalences between percentages, fractions and decimals
- ❖ Construct and interpret pie charts
- ❖ Calculate the mean as an average
- ❖ Make nets of 2-d shapes
- ❖ Illustrate and name parts of circles including radius, diameter and circumference
- ❖ Use coordinates in all 4 quadrants
- ❖ Draw, translate and reflect shapes in different axes
- ❖ Convert miles and km
- ❖ Calculate the area of parallelograms and triangles
- ❖ Calculate the volume of cubes and cuboids
- ❖ Express missing number problems algebraically.

**These are examples of some of the mathematical targets your child is working towards this year.**

## STRATEGIES

### ADDITION

column addition above and beyond 4 digits and including decimals.

e.g.

$$\begin{array}{r} 83 \\ + 42 \\ \hline 120 \\ \underline{5} \\ 125 \end{array}$$
$$\begin{array}{r} 54.6 \\ + 25.9 \\ \hline 80.5 \\ \underline{11} \end{array}$$
$$\begin{array}{r} 4321 \\ + 3959 \\ \hline 8280 \\ \underline{11} \end{array}$$

### SUBTRACTION

column subtraction above and beyond 4 digits and including decimals.

e.g.

$$\begin{array}{r} 4.9 \\ - 1.7 \\ \hline 3.2 \end{array}$$
$$\begin{array}{r} 1.2 \\ - 1.1 \\ \hline 74 \end{array}$$
$$\begin{array}{r} 47 \\ 65182 \\ - 4836 \\ \hline 60346 \end{array}$$

### MULTIPLICATION

1) short multiplication methods

e.g.

$$\begin{array}{r} 49 \\ \times 2 \\ \hline 18 \\ 80 \\ \hline 98 \end{array}$$
$$\begin{array}{r} 49 \\ \times 2 \\ \hline 98 \\ 1 \end{array}$$
$$\begin{array}{r} 345 \\ \times 5 \\ \hline 1725 \\ 22 \end{array}$$

2) Long multiplication method

e.g.

$$\begin{array}{r} 345 \\ \times 53 \\ \hline 1035 \\ \underline{17250} \\ 18285 \end{array}$$

(345x3)

(345 x50)

### DIVISION

1) short division

e.g.  $\begin{array}{r} 26 \\ 7 \overline{)184} \end{array}$

2) short division with remainders

e.g.

$$\begin{array}{r} 56 \text{ r } 5 \\ 8 \overline{)453} \end{array}$$

or  $56 \frac{5}{8}$

3) Long division

$$\begin{array}{r} 28 \text{ r } 12 \\ 15 \overline{)432} \\ \underline{300} \\ 132 \\ \underline{120} \\ 12 \end{array}$$
$$\begin{array}{r} 28 \text{ r } 12 \\ 15 \overline{)432} \\ \underline{30} \downarrow \\ 132 \\ \underline{120} \\ 12 \end{array}$$