

# Supporting your child at home

**Year 5**



**A guide for parents**

## Year 5

By the end of Y5, your child should be fluent in formal written methods for addition and subtraction. Using a developing knowledge of formal methods of multiplication and division, your child should be able to solve problems including properties of numbers and arithmetic

Your child should be able to:

- make connections between fractions, decimals and percentages;
- classify shapes with geometric properties and use the vocabulary needed to describe them; and
- read, spell and pronounce mathematical vocabulary correctly.
- From memory use their multiplication and division facts frequently.

### Addition and subtraction formal written methods

789 + 642 becomes

$$\begin{array}{r} 789 \\ + 642 \\ \hline 1431 \end{array}$$

Answer: 1431

874 - 523 becomes

$$\begin{array}{r} 874 \\ - 523 \\ \hline 351 \end{array}$$

Answer: 351

932 - 457 becomes

$$\begin{array}{r} 932 \\ - 457 \\ \hline 475 \end{array}$$

Answer: 475

Children still need to be able to choose the appropriate strategy for the size of calculation that they are dealing with.

**Children will be using the formal written methods of multiplication and division by the end of year 5.**

24 × 6 becomes

$$\begin{array}{r} 24 \\ \times 6 \\ \hline 144 \\ 2 \end{array}$$

342 × 7 becomes

$$\begin{array}{r} 342 \\ \times 7 \\ \hline 2394 \\ 21 \end{array}$$

## Triple Jump

To jump further than your opponents by using numbers to make a number between 7 and 9.5 The player may use any maths they know with the numbers given in this task.

You will need:

Pack of playing cards and a calculator. Remove the picture cards from the pack. In this activity an Ace counts for 1.

How to play

Decide who will go first. Player 1 takes 3 cards from the pack.

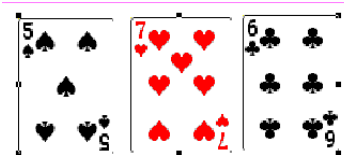
Player 1 has to use the 3 cards and any maths they know to make a number between 7 and 9.5.

If the player cannot complete the jump a “no jump” is recorded. The cards are discarded and 3 new ones are taken.

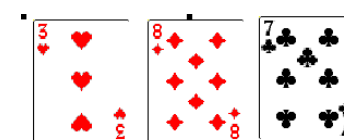
Player 2 now has their turn etc.

The player with the longest total distance after 3 rounds is the winner

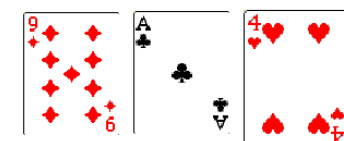
Sample play



Player 1 takes a 5, 6 and 7 and says 6  
 $6 - 5 = 1$   
 $1 + 7 = 8$  so I record a jump of 8 metres  
 (could say 5 and 6 give 56 (place value)  
 $56 / 7 = 8$ )



Player 2 takes a 3, 8 and 7 and says  
 $3/2 = 1.5$   
 $1.5 + 8 = 9.5$  (brilliant first jump)



Player 3 takes a 9, 1 and 4 and says  $1/4 = 0.25$   
 $0.25 + 9 = 9.25$  and records a jump of 9.25 metres.

Explaining your reasoning...

Solve the following calculations:

‘When working with whole numbers, if you add two 2-digit numbers together the answer cannot be a 4-digit number.’  
Do you agree?

Explain your reasoning.

Millie wanted to buy a coat that cost £80. She saw the coat on sale in one shop at 1/5 off. She saw the same coat on sale in another shop at 25% off. Which shop has the coat at a cheaper price?

Explain your reasoning.

|              | Bus Timetable |       |       |       |       |       |
|--------------|---------------|-------|-------|-------|-------|-------|
| Highway Rd   | 06:50         |       | 07:25 | 08:45 | 09:10 | 09:45 |
| Rain Rd      | 07:00         | 07:25 | 07:41 | 08:55 | 09:19 | 09:53 |
| Coldcot Rd   | 07:11         | 07:41 | 07:51 | 09:04 | 09:28 | 10:02 |
| Westland Rd  | 07:18         | 07:59 | 07:59 | 09:11 | 09:38 | 10:11 |
| Bod Rd       | 07:29         | 08:12 | 08:09 | 09:16 | 09:47 | 10:16 |
| Kingswell Rd | 07:33         | 08:15 | 08:14 | 09:20 | 09:53 | 10:21 |
| Long Rd      | 07:45         | 08:30 | 08:30 |       | 10:05 | 10:40 |

Use the bus timetable to answer the following questions:  
On the 6:50 bus how long does it take to get from Highway Rd to Westland Rd?  
Can you travel to Long Rd on the 8:45 bus?  
Which journey between Rain Rd and Kingswell Rd takes the longest time, the bus that leaves Rain Rd at 7:25 or the bus that leaves Rain Rd at 7:41?

Explain your reasoning.

I think that...because ...

I know... so that means that ...

I know... so I can work out...

I think that... but...

Use these openings to support your child in answering questions.

## At home...

### Statistics

Look at the weather page in a local newspaper or website and find out what all the different sets of numbers/pieces of information mean.

Look at the league table for the football – what does this tell you?

Take it in turns to talk about the table for a minute? What do you notice? What patterns can you see?

Swap over the second person talks about the same table but they must not hesitate, repeat or deviate off topic!

### Shopping and Eating

Look at the offers in the supermarket, for example, “3 for the price of 2”, “Buy 1 get 1 free”, “Two for £2”, “Buy one get one half price”. Work out together which is the cheapest or best value.

Adapt recipe amounts for different numbers of people.

Play the ‘estimate the size of the shopping bill’ game, that is, round every item to the nearest 50p and see how the estimated bill compares to the actual cost.

Investigate your favourite place to eat out – what is the cost of a meal for your family? Can you find out about the nutritional information?

To the cinema...how much would it cost for your family to go?

### In the garden

What is the perimeter of your garden? What is the area of your garden? If you wanted to plant 10 trees down one side of your garden, equally spaced, how far apart would they need to be?

#### Short division

$98 \div 7$  becomes

$$\begin{array}{r} 14 \\ 7 \overline{) 98} \\ \underline{7} \phantom{0} \\ 28 \\ \underline{28} \\ 0 \end{array}$$

Answer: 14

$432 \div 5$  becomes

$$\begin{array}{r} 86 \text{ r } 2 \\ 5 \overline{) 432} \\ \underline{40} \phantom{0} \\ 32 \\ \underline{30} \\ 2 \end{array}$$

Answer: 86 remainder 2

$496 \div 11$  becomes

$$\begin{array}{r} 45 \text{ r } 1 \\ 11 \overline{) 496} \\ \underline{44} \phantom{0} \\ 56 \\ \underline{55} \\ 1 \end{array}$$

Answer:  $45 \frac{1}{11}$

#### Long division

$432 \div 15$  becomes

$$\begin{array}{r} 28 \text{ r } 12 \\ 15 \overline{) 432} \\ \underline{30} \phantom{0} \\ 130 \\ \underline{120} \\ 100 \\ \underline{90} \\ 100 \\ \underline{90} \\ 10 \end{array}$$

Answer: 28 remainder 12

$432 \div 15$  becomes

$$\begin{array}{r} 28 \\ 15 \overline{) 432} \\ \underline{30} \phantom{0} \\ 130 \\ \underline{120} \\ 100 \\ \underline{90} \\ 100 \\ \underline{90} \\ 10 \end{array}$$

$$\frac{12}{15} = \frac{4}{5}$$

Answer:  $28 \frac{4}{5}$

Calculate  $14\,136 + 3258 + 487$  or  $23\,185 - 2078$

$$6432 + \square = 8025$$

13502 people were at the match last week and there are 2483 more this week, how many more people need to attend to bring the total to the club's target of 20 000 people?

Egg boxes hold 6 eggs. A farmer collects 439 eggs. How many boxes can he fill?

Egg boxes hold 6 eggs. How many boxes must a restaurant buy to have 200 eggs?

|    |    |    |    |    |    |    |    |    |     |
|----|----|----|----|----|----|----|----|----|-----|
| 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 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40  |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50  |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60  |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70  |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80  |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90  |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

| <b>x</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> | <b>8</b> | <b>9</b> | <b>10</b> | <b>11</b> | <b>12</b> |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
| <b>1</b>  | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10        | 11        | 12        |
| <b>2</b>  | 2        | 4        | 6        | 8        | 10       | 12       | 14       | 16       | 18       | 20        | 22        | 24        |
| <b>3</b>  | 3        | 6        | 9        | 12       | 15       | 18       | 21       | 24       | 27       | 30        | 33        | 36        |
| <b>4</b>  | 4        | 8        | 12       | 16       | 20       | 24       | 28       | 32       | 36       | 40        | 44        | 48        |
| <b>5</b>  | 5        | 10       | 15       | 20       | 25       | 30       | 35       | 40       | 45       | 50        | 55        | 60        |
| <b>6</b>  | 6        | 12       | 18       | 24       | 30       | 36       | 42       | 48       | 54       | 60        | 66        | 72        |
| <b>7</b>  | 7        | 14       | 21       | 28       | 35       | 42       | 49       | 56       | 63       | 70        | 77        | 84        |
| <b>8</b>  | 8        | 16       | 24       | 32       | 40       | 48       | 56       | 64       | 72       | 80        | 88        | 96        |
| <b>9</b>  | 9        | 18       | 27       | 36       | 45       | 54       | 63       | 72       | 81       | 90        | 99        | 108       |
| <b>10</b> | 10       | 20       | 30       | 40       | 50       | 60       | 70       | 80       | 90       | 100       | 110       | 120       |
| <b>11</b> | 11       | 22       | 33       | 44       | 55       | 66       | 77       | 88       | 99       | 110       | 121       | 132       |
| <b>12</b> | 12       | 24       | 36       | 48       | 60       | 72       | 84       | 96       | 108      | 120       | 132       | 144       |