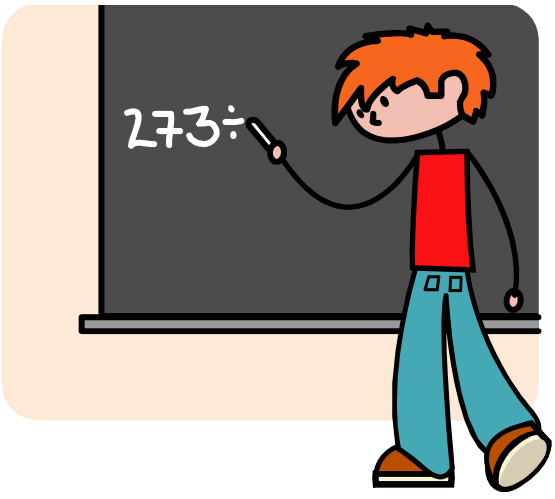
Supporting your child at home

Evenlode Primary School

Year 6



Mathematics

A booklet for parents

About the statements

These statements show some of the things most children should be able to do by the end of Year 6.

Some statements may be more complex than they seem, e.g. children may know how to work out sums on paper but need to see when it is quicker to work them out in their heads.

(See Calculation Methodology Guidelines)

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

- express one quantity as a percentage of another (e.g express £400 as a percentage of £1000); find equivalent percentages, decimals and fractions
- add and subtract fractions finding common denominators
- work out ratio and percentages of number
- use knowledge of place value and multiplication facts to 10 x 10 to derive related multiplication and division facts involving decimals (e.g. 0.8 x 7, 4.8 ÷ 6)
- use efficient written methods to add and subtract integers and decimals, to multiply and divide integers and decimals by a one-digit integer, and to multiply two-digit and three-digit integers by a two digit integer
- extend written methods to column algorithms
- visualise and draw on grids of different types where a shape will be after reflection, after translations, or after rotation through 90° or 180° about its centre or one of its vertices
- select and use standard metric units of measure and convert between units of measure using decimals to two places (e.g. change 2.75 litres to 2750 ml or vice versa) extend to imperial and metric conversions
- calculate area and perimeter
- understand basic financial literacy, exchange rates and convert currencies
- solve problems by collecting, selecting, processing, presenting and interpreting data, extract data and represent as a variety of graphs, using ICT where appropriate; draw conclusions and identify further questions to ask

Alongside all of these statements children need to be continuously learning and applying their skills in solving problems and become confident when faced with challenges.

Fun activities to do at home

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 people? Or 5 people?

Favourite Food

Ask your child the cost of a favourite item of food.
Ask them to work out what 7 of them would cost, or 8, or 9.
How much change would there be from £50?

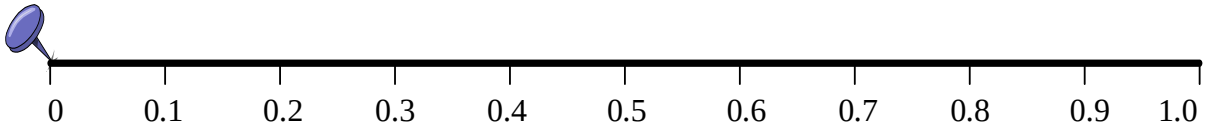
What is the difference in cost between the two?

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

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

Three in a row
For this game you need a calculator.
Draw a line like this:



- Take it in turns to choose a fraction, say 2/5. Use the calculator to convert it to a decimal (i.e. 2 ÷ 5 = 0.4) and mark your initials at this point on the line.
- The aim of the game is to get 3 crosses in a row without any of the other player's marks in between.
- Some fractions are harder to place than others, e.g. ninths.

Animals

♦ Take turns to think of an animal.

Use an alphabet code, A = 1, B = 2, C = 3... up to Z = 26.
♦ Find the numbers for the first and last letters of your animal, e.g. for a TIGER, T = 20, and I = 9,
♦ Multiply the two numbers together, e.g. 20 x 9 = 180.
♦ The person with the biggest answer scores a point.
♦ The winner is the first to get 5 points.
When you play again you could think of names, food, countries etc.

Card Game

Use a pack of playing cards.
Take out the jacks, queens and kings.

- Take turns
- Take a card and roll a dice
- Multiply the two numbers
- Write down the answer. Keep a running total
- The first to go over 301 wins!

Remainders

Draw a 6 x 6 grid like this and fill with numbers under 100.

82	33	60	11	73	22
65	12	74	28	93	51
37	94	57	13	66	38
19	67	76	41	75	85
86	29	68	58	20	46
50	69	30	78	59	10

Choose the 7, 8 or 9 times table.

- Take turns.
- Roll a dice.
- Choose a number on the board, e.g. 59. Divide it by the tables number, e.g. 7. If the remainder for 59 ÷ 7 is the same as the dice number, you can cover the board number with a counter or coin.
- The first to get three of their counters in a straight line wins!

One million pounds

£1,000,000

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.

Doubles and trebles

♦ Roll two dice.
♦ Multiply the two numbers to get your score.
♦ Roll one of the dice again. If it is an even number, double your score. If it is an odd number, treble your score.
♦ Keep a running total of your score.
♦ The first to get over 301 wins.

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 from this place to some other 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
Encourage your child to count in 60s to work out the answers mentally.
Extend this by asking questions like "What if you travelled at 30 mph? What if we started at London?

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