Supporting your child at home

Year 5

Maths

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

* count forwards and backwards in steps of powers of 10 for any given number up to 1,000,000.
* recognise and use thousandths and relate then to tenths, hundredths and decimals equivalents.
* recognise mixed numbers and improper fractions and can convert from one to the other.
* read and write decimal numbers as fractions.
* recognise the % symbol and understand percent relates to a number of parts per hundred.
* write percentages as a fraction with denominator hundred and as a decimal fraction.
* compare and add fractions whose denominators are all multiples of the same number.
* multiply and divide numbers mentally drawing on known facts up to 12 x 12.
* round decimals with 2dp to the nearest whole number and to 1dp. I recognise and use square numbers and cube numbers; and can use the notation 2 and 3.
* multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. I
* multiply numbers up to 4-digit by a 1 or 2-digit number using formal written methods, including long multiplication for a 2-digit number.
* divide numbers up to 4-digits by a 1-digit number. I
* solve problems involving multiplication and division where large numbers are used by decomposing them into factors.
* solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why.
* solve problems involving numbers up to 3 decimal places.
* know that angles are measured in degrees.
* estimate and compare acute, obtuse and reflex angles.
* draw given angles and measure them in degrees.
* convert between different units of metric measures and estimate volume and capacity.
* measure and calculate the perimeter of composite rectilinear shapes in cm and m.
* calculate and compare the areas of squares and rectangles including using standards units (cm2 and m2).
* solve comparison, sum and difference problems using information presented in a line graph.

**Battleships**

Draw two grids like this



* Choose ships of various lengths (use between 2 and 4 squares)
* Hide your grid from your partner
* Take it in turns to guess the co-ordinates of your opponents ships.
* Respond with “hit” or “miss”
* The winner is the person to sink all their opponents ships

**How much?**

While shopping, point out an item costing less than £1.

* Ask your child to work out in their head the cost of 3 items.
* Ask them to guess first. See how close they come.
* If you see any items labelled, for example, ‘2 for £3.50’, ask them to work out the cost of 1 item for you, and to explain how they got the answer.

**Times tables**

* Say together the six times table forwards, then backwards.
* Ask your child questions, such as: Nine sixes? How many sixes in 42? Six times four? Forty-eight divided by six? Three multiplied by six? Six times what equals sixty?
* Repeat with the seven, eight and nine times tables.

**Times table grid**

Make a times-table grid like this.

 

* Shade in all the tables facts that your child knows, probably the 1s, 2s, 3s, 4s, 5s and 10s.
* Some facts appear twice, e.g. 7 x 3 and 3 x 7, so cross out one of each.
* Are you surprised how few facts are left?
* There might only be 10 facts to learn. So take one fact a day and make up a silly rhyme together to help your child to learn it, e.g. nine sevens are sixty-three, let's have lots of chips for tea!

**Target 1000**

* Roll a dice 6 times.
* Use the six digits to make two three-digit numbers.
* Add the two numbers together.
* How close to 1000 can you get?

**Finding areas and perimeters**

Perimeter = distance around the edge of a shape

Area of a rectangle = length x breadth (width)

* Collect 5 or 6 used envelopes of different sizes.
* Ask your child to estimate the perimeter of each one to the nearest centimetre. Write the estimate on the back.
* Now measure. Write the estimate next to the measurement.
* How close did your child get?
* Now choose 5 or 6 adverts from newspapers or magazines.

 You could do something similar using an old newspaper, e.g. ask your child to estimate the area of each advert to the nearest centimetre squared – write these down. Now measure and calculate. How close did your child get?

**Telephone challenges**

* Challenge your child to find numbers in the telephone directory where the digits add up to 42.
* Find as many as possible in 10 minutes.
* On another day, see if they can beat their previous total

Telephone: 01264 738 281 = 0 + 1 + 2 + 6 + 4 + 7 + 3 + 8 + 2 + 8 + 1 = 42

**Dicey subtractions**

* Take turns to roll a dice twice.
* Fill in the missing boxes.
* E.g. 400□ - 399□

 4002 – 3994

* Count on from the smaller to the larger number, e.g 3995, 3996, 3997, 3998, 3999, 4000, 4001, 4002.
* You counted on 8, so you score 8 points.
* Keep a running total of your score .
* The first to get 50 or more points wins.

**Dicey division**

For this game you need a 1–100 board (a snakes and ladders board will do), a dice and 20 coins or counters.

* Take turns.
* Choose a two-digit number. Roll a dice. If you roll 1, roll again.
* If your two-digit number divides exactly by the dice number, put a coin on your chosen two-digit number. Otherwise, miss that turn.
* The first to get 10 counters on the board wins.

**Line it up**

You need a ruler marked in centimetres and millimetres.

* Use the ruler to draw 10 different straight lines on a piece of paper.
* Ask your child to estimate the length of each line and write the estimate on the line.
* Now give them the ruler and ask them to measure each line to the nearest millimetre.
* Ask them to write the measurement next to the estimate, and work out the difference.
* A difference of 5 millimetres or less scores 10 points. A difference of 1 centimetre or less scores 5 points.
* How close to 100 points can your child get?

**Decimal number plates**

* Choose 2 digits from a car registration plate.

 FD56 UPN

* Make the smallest and largest numbers you can, each with 1 decimal place, e.g. 5.6 and 6.5.
* Now find the difference between the two decimal numbers, e.g. 6.5 – 5.6 = 0.9.
* Whoever makes the biggest difference scores 10 points.
* The person with the most points wins.
* Play the game again, but this time score 10 points for the smallest difference, or 10 points for the biggest total.(If you add the numbers)

**Guess my number**

* Choose a number between 0 and 1 with one decimal place, e.g. 0.6.
* Challenge your child to ask you questions to guess your number. You may only answer ‘Yes’ or ‘No’. For example, he could ask questions like ‘Is it less than a half?’
* See if he can guess your number in fewer than 5 questions.
* Now let your child choose a mystery number for you to guess. Extend the game by choosing a number with one decimal place between 1 and 10, e.g. 3.6. You may need more questions