How heavy?

You will need some kitchen scales that can weigh things in kilograms.

♦ Ask your child to find something that weighs close to 1 kilogram.

♦ Can he / she find something that weighs exactly 1 kilogram?

♦ Find some things that weigh about half a kilogram.

Out and about

♦ During a week, look outside for 'thirties' numbers, such as 34 or 38, on house doors, number plates, bus stops, etc. How many can you spot? What is the biggest one you can find?

♦ Next week, look for 'fifties' numbers, or 'sixties'…

31 39 36 35 33

How much?

♦ Once a week, tip out the small change from a purse. Count it up with your child.

CLEE HILL COMMUNITY ACADEMY

Help your child with mathematics

A booklet for parents

Targets for Age Related Expectations in Year 2

To reach your age related expectation by the end of Year 2, you should be able to:

Number and Place Value

- ☐ count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
- ☐ recognise the place value of each digit in a two-digit number (tens, ones)
- ☐ identify, represent and estimate numbers using different representations, including the number line
- ☐ compare and order numbers from 0 up to 100; use <, > and = signs
- ☐ read and write numbers to at least 100 in numerals and in words
- ☐ use place value and number facts to solve problems.

Activities to support your child

- Counting forwards and backwards
- Read numbers in everyday situations – cooking, shopping
- Roll 2 dice to make a 2 digit number – How many tens how many ones/units?
- Make some cards with numbers on from 0 to 20 or 50. Deal 5 cards each and place the numbers in order from lowest to highest or highest to lowest. The person who does it the quickest wins a point.

Addition and Subtraction

- ☐ solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures
- ☐ applying their increasing knowledge of mental and written methods
- ☐ recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
- ☐ add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers
- ☐ adding three one-digit numbers
- ☐ show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
- ☐ recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

Activities to support your child

You need a 1–6 dice.

♦ Take turns. Roll the dice. See how quickly you can say the number to add to the number on the dice to make 10, e.g.

 and **6**

♦ If you are right, you score a point.

♦ The first to get 10 points wins. You can extend this activity by making the two numbers add up to 20, or 50.

Division and Multiplication

- □ recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- □ calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs
- □ show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- □ solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Activities to support your child

- Count pairs of socks or shoes.
- Use the pattern 5 on a di to count in fives – Throw 2 dice 10 times. Record how many fives you throw. How much do you have?
- Simple number problems e.g
  Ten people came to tea. They each had 2 biscuits. How many biscuits were there altogether?
  Dad bought 10 apples. He ate 2 apples a day. How many days did he eat apples for?

Fractions

- □ recognise, find, name and write fractions 3 1 , 4 1 , 4 2 and 4 3 of a length, shape, set of objects or quantity
- □ write simple fractions for example, 2 1 of 6 = 3 and recognise the equivalence of 4 2 and 2 1 .

Activities to support your child

- Measure 2 pieces of string 20cm long. Fold one in half, and cut it. Then fold the pieces in half again and cut them so you have 4 pieces. Put them against the whole piece of string. Talk about $\frac{1}{2}$ $\frac{1}{4}$, $\frac{3}{4}$. Look at $\frac{1}{2}$ being the same as 2/4.
- Make cakes or pizzas. Cut them into halves and quarters.
- Make cookies to share between 2 and 4 people. How many do they have each?

Measurement

- choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
- compare and order lengths, mass, volume/capacity and record the results using >, < and =
- recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- find different combinations of coins that equal the same amounts of money
- solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
- compare and sequence intervals of time
- tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times
- know the number of minutes in an hour and the number of hours in a day.

Activities to support your child

Straight lines
Choose 4 different lengths between 5 and 20 centimetres. Use a ruler marked in centimetres. Draw lines of each length

Geometry

- identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
- identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
- identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]
- compare and sort common 2-D and 3-D shapes and everyday objects
- order and arrange combinations of mathematical objects in patterns and sequences
- use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).

Activities to support your child
Guess my shape
♦ Think of a 2-D shape (triangle, circle, rectangle, square, pentagon or hexagon). Ask your child to ask questions to try and guess what it is.
♦ You can only answer Yes or No. For example, your child could ask: Does it have 3 sides? or: Are its sides straight?
♦ See if he can guess your shape using fewer than five questions.
♦ Now ask them to choose a shape so you can ask questions
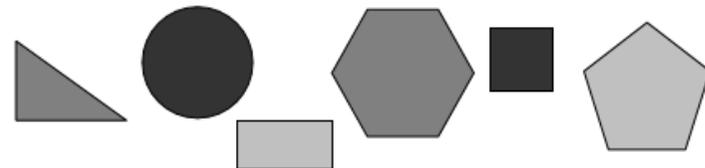
Statistics

- ☐ interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- ☐ ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
- ☐ ask and answer questions about totalling and comparing categorical data.

Activities to support your child
- Make a collection of objects. Sort them into colours or what they are made out of. Create towers with them or tallies.
- You can do this with favourite food.
- Ask questions like – How many altogether? How many more? Which has the most/fewest?

Speedy pairs to 10

Make a set of 12 cards showing the numbers 0 to 10, but with two 5s. If you wish, you could use playing cards.

♦ Shuffle the cards and give them to your child.
♦ Time how long it takes to find all the pairs to 10.

0	10		2	8		4	6
1	9		3	7		5	5
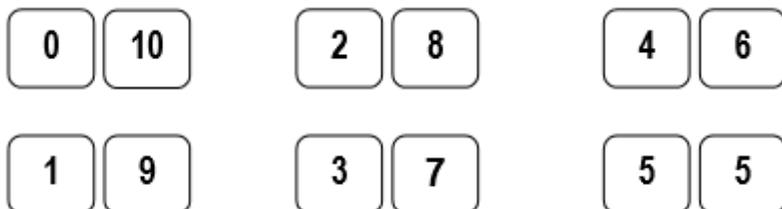
Repeat later in the week. See if your child can beat his / her time

Circle trios

Draw four circles each on your piece of paper. Write four numbers between 3 and 18, one in each circle.

| 12 | 16 | 8 | 17 |
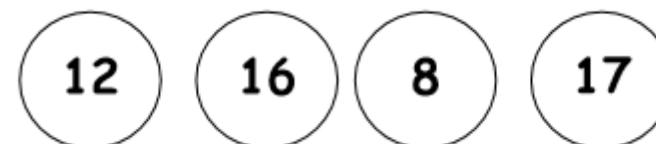
♦ Take turns to roll a dice three times and add the three numbers.
♦ If the total is one of the numbers in your circles then you may cross it out.
♦ The first to cross out all four circles wins

Car numbers

♦ Each person chooses a target number, e.g. 15.
♦ How many car numbers can you spot with 3 digits adding up to your target number, e.g. K456 XWL.
♦ So 4 + 5 + 6 = 15, bingo!

Shopping maths

After you have been shopping, choose 6 different items each costing less than £1. Make a price label for each one, e.g. 39p, 78p. Shuffle the labels. Then ask your child to do one or more of these.

♦ Place the labels in order, starting with the lowest.
♦ Say which price is an odd number and which is an even number.
♦ Add 9p to each price in their head.
♦ Take 20p from each price in their head.
♦ Say which coins to use to pay exactly for each item.
♦ Choose any two of the items, and find their total cost. ♦ Work out the change from £1 for each item.

68p

Bean subtraction

For this game you need a dice and some dried beans or buttons.
♦ Start with a pile of beans in the middle. Count them.
♦ Throw a dice. Say how many beans will be left if you subtract that number.
♦ Then take the beans away and check if you were right! ♦ Keep playing.
♦ The person to take the last bean wins!

Board games

Make a board like this.

The numbers are arranged differently from usual, but the games will still work if you use a normal snakes and ladders board.
♦ Roll a dice twice. Add the two numbers.
♦ Move along that number of spaces. Before you move, you must work out what number you will land on.
♦ If you are wrong, you don't move!
♦ The first to the end of the board wins. For a change, you could roll the dice and move backwards. Or you could roll the dice once, then move the number that goes with your dice number to make 10, e.g. throw a 3, move 7.