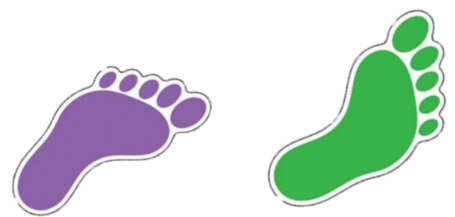


Marsh Baldon
C of E Primary School
Mathematics
Steps to Success

and



TOP TIPS



Year 1

Contents

1. Count up and down from 0—100
2. Count, read and write numbers to 100
3. Find one more or less.
4. Know number bonds to 20.
5. Count in multiples of 2, 5 and 10.
6. Count on and back in 1's from any number.
7. Understand and use words to order and compare numbers.
8. Add, take away and find the difference 0-20
9. Use doubling and halving.
10. To explain methods
11. Use everyday language compare length, mass, capacity and time.
12. Measure length, mass, capacity and time.
13. Use everyday language to describe 2D and 3D shapes.



Key Learning Objectives

1. Count up and down from 0—100

Steps to success

1. Touch one object at a time and say the number name.
2. Move the objects you have counted away from the others.

Top Tips

- Put the objects in a line before you start.

2. Count, read and write numbers up to 100

Top Tips

Read— number recognition – use flash cards etc. Link the shape of numbers to animals and familiar objects e.g. 2 is a swan, 8 is a snowman.

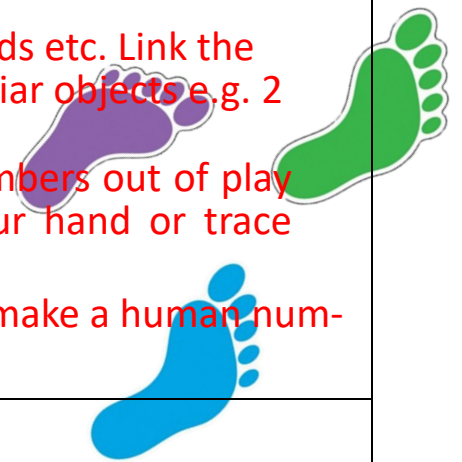
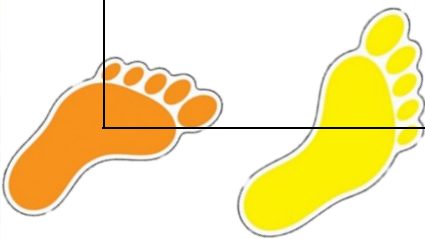
Write – draw numbers in sand, make numbers out of play dough, write number on palm of your hand or trace with your fingers on a friend's back.

Order - children hold number cards and make a human number line

3. Find one more or less

Top Tips

- Use fingers or objects to help.
- Use a number line to help.



Key Learning Objectives

4. Know number bonds to 20.

Steps To Success

1. When given a number, know what number needs to be added to make 20.
2. Know what number is left when something is taken away from 20

Top Tips

- Use apparatus such as pegs on a coat hanger.
- Encourage fast recall – memory.

5. Count, in multiples of 2, 5 and 10

Steps to Success

Using fingers to mark number of sets.
Read the multiplication facts whilst reciting.

Top Tips

- Make explicit that the multiples of 2 are EVEN numbers.
- Look at the repeated pattern of units eg, 0, 5, 0, 5 etc.
- Make explicit that the multiples of 10 end in 0 and multiples of 5 end in 5 or 0.
- Look for patterns on the 100 square

6. Count on and back in ones.

Top Tips

- Use a number line to help.
- Count down to 'blast off'.
- Clap and count forwards and backwards – one clap for each number.

Key Learning Objectives

7. Understand and use words to order and compare numbers.

Adults uses language e.g. smaller/larger/greater/less/more.
Display the written words as well.

8. Add, subtract and find the difference 0-20

Steps to Success - Adding

1. Put the biggest number in your head
2. Count **ON** from the biggest number

Top Tips

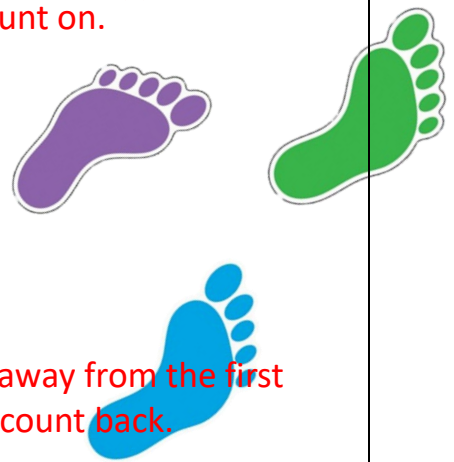
- Put up the number of fingers you want to add to the biggest number **FIRST** and then put each finger down as you count on.
- Use objects or pictures to model calculation.

Steps to Success – Take away

1. Put the first number in your head
2. Count **BACK** from that number.

Top Tips

- Put up the number of fingers you want to take away from the first number and then put each finger down as you count back.
- Use objects or pictures to model calculation.
- Practice counting back taking it in turns with others.
- Model finding the difference using 2 towers of cubes - ask how can we make both towers the same? Snap off the difference.
- It's easier to count on from the smallest number to the largest when finding the difference.



Key Learning Objectives

9. Use doubling and halving.

Top Tips

- Using fingers
- Encourage fast recall – memory.
- Use spots in butterfly wings to illustrate.

10. To explain methods.

Top Tips

- Ask children to explain to a teddy or puppet who is struggling.

11. Use everyday language compare length, mass, capacity and time.

Length

- Measure two objects by direct comparison.
- Use a non-standard measure such as hand spans to estimate and measure the length of an object.
- Understand and use in practical contexts the vocabulary of estimation
- Such as *almost, close to, nearly*.

Mass

- Use direct comparison to compare the mass of two different objects.
- Use non-standard units to measure how much an object weighs.
- Understand and use in practical contexts language such as
- *weight, heavy, light, balances*.

Capacity

- Use direct comparison to compare the capacities of two different containers.
- Use non-standard units to measure how much a container will hold.

Time

- Use language such as quicker, slower, fastest, slowest, earlier and later.

Key Learning Objectives

Measure length, mass, capacity and time.

Top Tips

- Demonstrate that a metre = 100cm, a kg = 1000g and a litre = 1000ml. Show a metre stick, feel a kg weight and look at a litre measure. Discuss the importance of standard units.
- Make direct comparisons by finding or suggesting things e.g. Find objects that are longer/shorter than 1m/10cm/1cm
- Use a balance to find out which objects are heavier/lighter than 1kg,
- Investigate which containers contain more/less than 1 litre
- Compare two objects and say which is longer, heavier, holds more by measuring using standard units.

Use everyday language to describe 2D shapes.

Top Tips

Use language: **shape, flat, straight, curved, round, corner, side, edge, sort, circle, triangle, rectangle, square.**

Identify circles, squares, triangles and rectangles.

Find shapes on faces of objects

Make shape pictures/patterns on paper and in the sand – names the shapes and describe the patterns.

Refer to the properties of shapes such as the number of corners and sides

Choose a flat shape that matches the properties described by the teacher E.g.:

Has four sides of the same length

Have four corners and two short sides and two long sides.

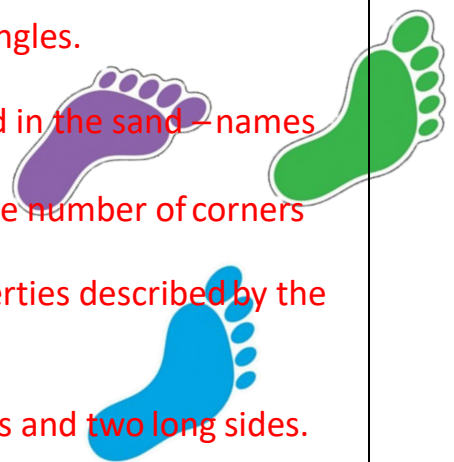
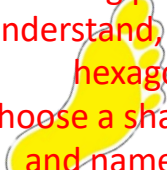
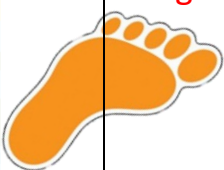
Feel a shape in a bag and name it.

Talk about the shapes and patterns in their environment and take digital photos

Higher attaining pupils will also be able to:

Understand, use and begin to read the vocabulary: pentagon, hexagon, octagon

Choose a shape to match the properties described by the teacher and name it e.g. Find a shape that has five corners and five sides. (pentagon)



Key Learning Objectives

Use everyday language to describe 3D shapes.

- Understand use in a practical context: *shape, solid, hollow, edge, face, straight, curved, point, corner*
- Recognise and name the following shapes: Cube, Cuboid, Sphere, Cylinder, Cone
- Identify shapes in the classroom or at home: for example, find a cuboid (box) Cylinder (baked beans tin).
- Choose a 3-D shape from a collection and describe its properties such as:
 - This shape has six faces and each face is a rectangle
 - The cube has 12 edges.
- Make 3-D shapes using constructions kits, straws, clay, plasticine, everyday materials etc
- Begin to relate 3-D shapes to pictures of them e.g. match solids to pictures of them, use bricks to build models from pictures.

