

Estimating

Can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate. **MNU 1-01a**

Estimate how many stairs, how many steps, how many cars?

When out and about find everyday objects in the environment to estimate and count. How many steps to the local shop? Estimate and count using a step counter/phone or google maps. Plan, estimate and count steps for routes to the local park, library or supermarket.

Collecting and Displaying Information

I have used a range of ways to collect information and can sort it in a logical, organised and imaginative way using my own and others' criteria. **MNU 1-20b**

Using technology and other methods, I can display data simply, clearly and accurately by creating tables, charts and diagrams, using simple labelling and scale. **MTH 1-21a**

How many cars can you see and how many of each type?

Create a tally chart and decide what the criteria for your search will be, e.g. colour of vehicle, type of car or type of vehicle. Use tally marks to keep track of what you see.

Alternatively choose something from nature to record, e.g. types of leaves, animals or birds.

How can you display your information?

Make a graph on the ground using leaves or stones to represent each item being counted.

Place Value

I have investigated how whole numbers are constructed, can understand the importance of zero within the system and can use my knowledge to explain the link between a digit, its place and its value. **MNU 1-02a**

How high can you count to?

Jump on the pavement slabs or on and off a kerb counting in 2's, 5's and 10's. Bang a fence or the ground with a stick as you walk, count in your chosen multiple at the same time. Count forwards and backwards and start from numbers other than 0.

Number Processes

I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed. **MNU 1-03a**

Make a variety of equal groups.

How many groups have you made, how many are in the group, how many altogether?

Use objects from nature to make the groups, items such as pebbles, pinecones, leaves etc. Take a photograph of your groups or record on paper.

Arrays are rows and columns of objects. They are all around us. On walls, windows fences etc.

What array patterns can you find around your local area?

Look for array patterns, make your own arrays using your toys or stones or items from the garden/park.

How many bundles of ten do you have?

Collect sticks or twigs and put them in bundles of ten. How many bundles do you have and how many sticks altogether? Use the bundles of ten to help you work out your ten times table.

What is 100 take away 40?

Use your bundles of ten sticks to add and subtract multiples of ten, think of questions and answers e.g. what is 30 add 20, 80 take away 40 etc. use the sticks to help you work out the answers.

Measure

Can estimate how long or heavy an object is, or what amount it holds, using everyday things as a guide, then measure or weigh it using appropriate instruments and units. **MNU 1-11a**

What is the longest/shortest?

Gather a variety of sticks, as you gather them estimate if they are longer/shorter than the previous one. Lay them out in order from shortest to longest.

How much does it hold? In the garden gather a variety of containers. Use a litre bottle as your measure. Estimate and fill other bottles to see how much they hold. Sort the containers into groups: less than a litre, about a litre more than a litre. Repeat with a half-litre measure and other containers.

I can estimate the area of a shape by counting squares or other methods. **MNU 1-11b**

Build a den in the garden or park. Use sheets of newspaper to measure the base of the den.

How many sheets of newspaper does it take to cover the floor of the den? If you don't have newspaper use pages from a magazine.

Outdoor Learning Numeracy and Mathematics First Level

This is a planner for practitioners to use when planning Home Learning. There is a corresponding planner for parents/carers and pupils.

Practitioners may choose to use the whole planner and learners tick off when they have completed an activity or alternatively choose a specific activity for Home Learning.



On A Walk

Symmetry

I have explored symmetry in my own and the wider environment and can create and recognise symmetrical pictures, patterns and shapes.

MTH 1-19a

Can you make a symmetrical picture?

Use natural objects to create a symmetrical picture, you could use a stick to show the line of symmetry. Challenge yourself and make a picture with 2 lines of symmetry.

*“Learning outdoors can be enjoyable, creative, challenging and adventurous and helps children and young people learn by experience and grow as confident and responsible citizens who value and appreciate the spectacular landscapes, natural heritage and culture of Scotland.”
(Curriculum for Excellence through Outdoor Learning)*

Shape

Have explored simple 3D objects and 2D shapes and can identify, name and describe their features using appropriate vocabulary. **MTH 1-16a**

Shape Hunt – What shapes can you see?

Explore your local area and look for different shapes, name the shapes and identify how many edges and how many corners?

The local play park is a good place to start.

What shapes can you make? Collect sticks in the park and make 2D shapes on the grass Use string or wool with the sticks and challenge yourself to make 3D shapes, how many edges, and how many corners?

Pattern

I can continue and devise more involved repeating patterns or designs, using a variety of media. **MTH 1-13a**

What kind of repeating patterns can you make?

Choose natural objects from the garden or park. Create a pattern using two or 3 items, can you repeat your pattern. Make your pattern more complicated by using more objects.

What patterns can you see around the environment? Look at leaves, animals and insects, what patterns can you see?

Developed by SAC Numeracy Team and COACH

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