



## Motivating Maths Menu

### Introduction

The activities in this handout teach mathematical concepts through play and motivating activities. This approach will support engagement and understanding by applying abstract concepts to real life situations.

### Number

Make playdough birthday cakes and add some candle. Count the number of candles on the cake.



Use egg boxes to count different objects- number will always be 6.



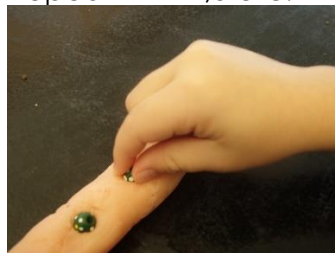
Ask the child to choose a soft animal/teddy and a brush. Count the brush strokes "1,2,3!"



Play skittles and count how many are knocked down each time (Can be made with plastic bottles with sand in the bottom so that they don't fall over too easily).



Roll out a thick piece of play dough. Encourage the child to make 1 hole in the dough with their finger and choose an object to put in the hole- "Is it too big?". Count this object "1". Repeat with 2,3 etc.



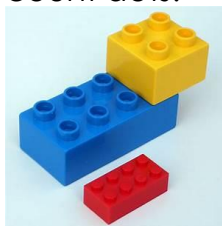
Make sets of props for simple counting songs: 5 frogs on a log; 5 little ducks; 5 little men in a flying saucer and encourage the child to move these appropriately as the song is sung.



Make a dice with 1,2 and 3 spots. Roll the dice and count out the correct number of bricks to build a tower. Take turns until all the bricks are used then find out who has the biggest/smallest tower.



Building with Duplo and counting bumps- start with using bricks all of one type and counting bumps, print with same brick several times and count dots.



Games using dice



Games using dominoes



Set up real life/role play table/picnic/activity for set number of people or characters.



Make a set of story props for known stories such as The 3 Billy Goats Gruff; The 3 Bears; The 3 Little Pigs using puppets or toy/plastic animals. Count out objects or pictures of objects from the story for the characters e.g. "Can we give 3 bowls/spoons/chairs to the bears?"; "The 3 billy goats gruff need 3 pieces of grass to eat"; "Can you give the 3 little pigs a bag each to carry on their journey?" Each time count out "1,2,3".

Make a sensory tray and fill with rice/lentils/sand. Hide pairs of objects in the tray and encourage the child to find those that are the same and count them "1,2". This can be themed e.g. pirate hat, telescope and coloured jewels; magnifying glass and pictures of different insects.



Peg pairs of socks onto a washing line. Find those that match, talking about colour and pattern. Count them onto the line "1,2."



Play a pairs game turning over cards and keeping those that match. Model the language of "the same" and count each pair of cards "1,2". At the end, say who has more/less to find out who is the winner.



## Geometry (shape and space)

Use cardboard and paint to make a large square, triangle and circle shape monster. Cut a slot for the mouth in each shape, stick on 2 eyes. Cut out sets of different sized squares, triangles, circles. Feed these to the shape monsters by matching, naming shapes, describing shapes.



Hide shapes in the sensory tray filled with rice/lentils/sand and sort them as they are found by name/properties.



Use a set of 3d shapes and trays of paint to print 2d shapes. Encourage the child to describe the shapes- "pointy, round, straight" as well as naming them. Ask them "can you find a shape that we can use to print a circle/triangle/square?"



Encourage the child to tidy up an area of the classroom/workstation/outside area, using language such as "the books go *in* the basket"; "the box goes *under* the table".



Encourage the child to choose different shapes from a collection of boxes. Encourage them to use tape to stick together, talking about the shapes, properties and positions of the boxes "You are putting the round tube on top of the pointy box".



Use threads and beads/milk bottle lids with holes in/pom poms to make caterpillars. Count the beads; describe their shapes. Make another caterpillar alongside the child and talk about longer/shorter (measures). Make a repeating pattern caterpillar for the child to copy.



## Measures

Print the child's hand/feet using paint. Help them to cut them out when dry. Choose enough to make a line long enough to measure a book/table/scooter etc. and count how many were used.



Make playdough with the child. Encourage them to count ingredients "Put in 1 cup of salt, 2 cups of flour" etc.



Make a car park for a range of different sized toy vehicles with rectangles of different sizes. Encourage the child to park the vehicles in a space that fits the vehicle, talking about "big/small; bigger/smaller".

