
Math activities to support pupils at home and at school



In light of World Maths Day, we would like to share with you some activities- games that can be used at home as a fun way of developing children's early mathematical understanding or/and practising their maths skills. These activities will help and develop what children need to learn in order to be confident and to succeed in and enjoy maths. We hope that you will have fun playing these games at home with your child!



Mathematics Lead: Dimitrios Doulfis
Email: Dimitrios.Doulfis@nas.org.uk

Game 1

Number Hunt in Jelly

Skill to be learnt: This sensory game is a great way of sneaking in number recognition to something fun and engaging for the children-also supports pupil's hand strengthening.

What you will need: A bowl, plastic numbers, jelly, tongs.

How to play: First, spread out some plastic numbers in jelly layers. When it's all set, give out some tongs to children and show them how to pick up the numbers from the wiggly substance (and practice their fine motor skills along the way!).

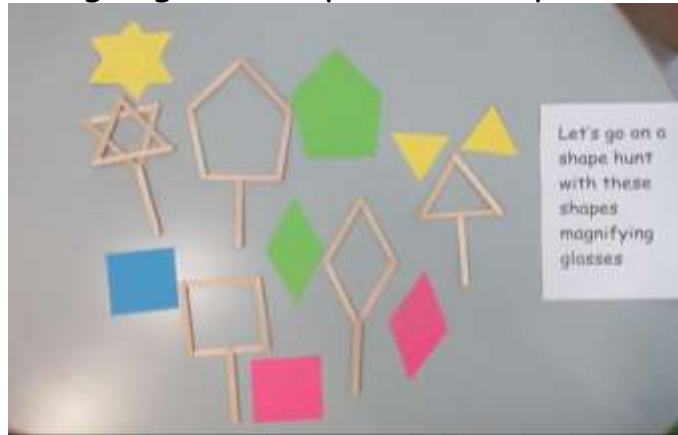
Talk points: When observing the numbers, you could encourage your child to name or repeat the number after you. Encourage them to point to the number as they say the number.



Game 2

Shape hunt

"We're going on a shape hunt. Do you see a ...?"



Skill to be learnt: When children look at shapes in a book, they learn to attach words to mathematical ideas. When they find these same shapes around them, they begin to see how math connects to their world, which is just as important as thinking critically, sorting, and naming, all skills they'll use to describe what and where the shape is.

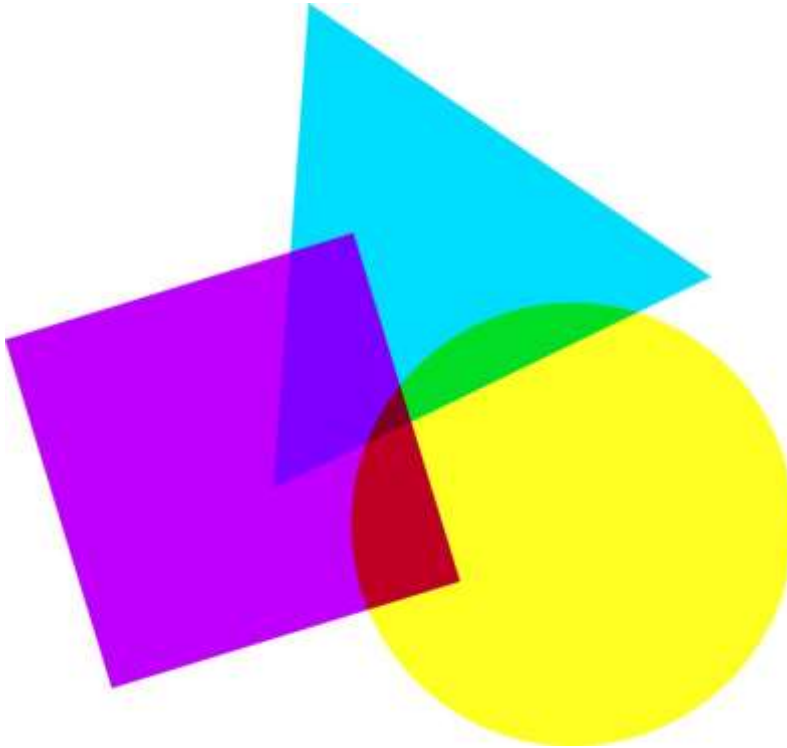
What you will need: Colour paper, glue, scissors, pop sticks (to create shape magnifying glasses)

How to play: Place around the room the shapes created and get prepared for your hunt by singing the Shape Hunt Chant, a song that lets children know what shapes they're going to be searching for. Repeat the chant for each shape, holding up the shape glasses you've prepared for the child's reference. Do the same with each new shape that you have introduced.

Talk points: Just as important, this activity will also give children a sense that they know something important, making it highly likely

that their shape-hunting skills will continue long after the game is over! When observing the shapes, you could encourage your child to name or repeat the name of the shape after you. Encourage them to point to the specific shape as they say the shape.

Extension of this game: Shapes are everywhere—from the pancakes on our breakfast plates to the street signs around town. Learning to spot them in the environment is more than just a fun game for children. It also helps them tie together different skills such as recognizing and identifying shapes and using words and pictures to describe their location. You'll be amazed at how many shapes a child can find!



Game 3

LEGO patterns

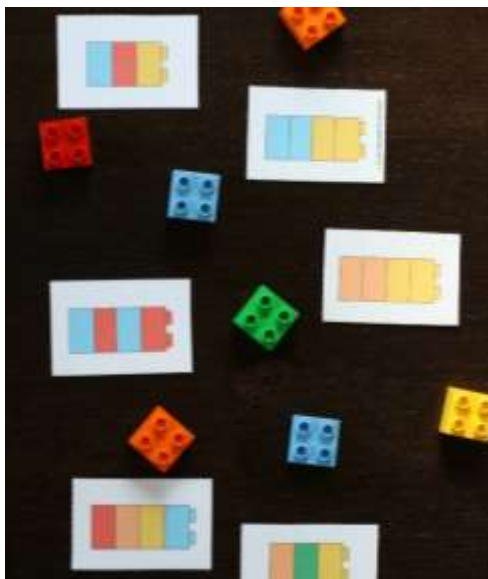
Skill to be learnt: This sensory play is a great way of sneaking in number recognition to something fun and engaging for the children.

What you will need: Paper, coloured pencils, LEGO Blocks

How to play: First, use the paper to make colourful blocks on them and let kids discover colour patterns and reproduce them with LEGO blocks. Consider leaving the colouring part to your little learners to include some Expressive Art and Design in the mix too.

Talk points: When observing the paper pattern, you could encourage your child to follow the same pattern with LEGO. Encourage them to point to the same paper colour before they will start looking to find the right colour LEGO.

Extension of this game: You can add a number next to the colour paper pattern.



Game 4

Dice game

Skill to be learnt: Number concept. This game combine a mathematical skill or concept with elements of problem solving, reasoning and communicating and are engaging for children.

What you will need: Paper, paper dice numbers dots 1-6, scissors, glue, dice

How to play: We start with creating two sets of all dice dots in the pieces of the paper (numbers 1-6). We have to create dots identical with the dice. Then we cut them nicely in squared shapes and we place the first set in a poster paper. We keep the second set of dots to match them later on with the dice game. The child rolls the dice and observes the number. The aim is to try to find the same number card of dots and match it with the same card on the board.

Extension of this game: To give to the child a specific number card from 1-6 and for the child to try to roll the dice as many times as needed till he/she finds the same number with the number card given.



Game 5

Match the numbers-Missing numbers

Skill to be learnt: The kids use their fine motor skills and clip the clothing pins on sticks.

What you will need: Paper, felt pens, clothes pins

How to play: Write number sequences on craft sticks made from paper. Next, you write the numbers on a bunch of clothes pins and give them out to your children. Children have to match the numbers from the stick with the relevant clothes pins.

Extension of this game: Write number sequences on craft sticks made from paper and remember to leave some blanks in between. Next, you write the missing numbers on a bunch of clothes pins and give them out to your children.



Game 6

Count'em

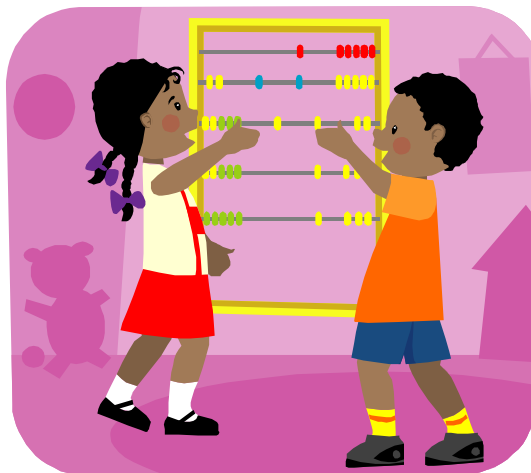
Skill to be learnt: To count reliably up to 20 objects (recognizing that when rearranged the number of objects stays the same).

What you will need: A box of things to count (household items, cars, buttons etc.)

How to play: Players take it in turns to grab a 'handful of things', count them and record the number. Each player must try and get each number from 10 - 20. The first person to do so is the winner.

Talk points: When counting the objects, you could encourage your child to line up the objects to help with counting. Encourage them to point to the object as they say the number, taking time to count each item carefully.

Extension of this game: To develop skills in estimating (having a good guess) talk to your child about how many objects they think they might have taken out of the box before they count them.



Game 7

Snakes and Ladders

Skill to be learnt: Snakes and Ladders is brilliant for numeral identification, with boards containing numerals from 1 to 100 in order. Use knowledge of place value (number size).

What you will need:

papers, a pencil, scissors, a black pen, color pencils, markers, glue stick, a ruler.

How to create/how to play: The first step is making a squared paper. After, you will need a ruler and a pencil. First measure any side of your squared paper using your ruler. you have to divide the side length by 10, since you want to draw 100 squares. Use your black pen to number the squares. Use your creativity to sketch the snakes and ladders. Draw the snakes and ladders wherever you want.



The final step is bringing a dice and marker lids to indicate the person who is playing.



Sit with your children and let each one chooses a colored marker lid. Roll the dice and see which one can reach 100 first. If any player

gets a ladder, then they move up to the end of the ladder. However, if any player gets a snake, they move down to the tail of it.



Remember that you can buy or print easily the board in case you are finding difficulties in creating this on your own. Enjoy!



Game 8

Matching Pairs

Skill to be learnt: The aim of this game is to match pairs of cards.

What you will need: 2 sets of 5 cards/these cards can represent numbers or objects or animals.

How to play: Spread out two sets of cards face down on the table. Players take it in turns to reveal 2 cards. If the 2 cards are the same you can keep the pair, otherwise turn them back over. The player who collects the most pairs is the winner.

The game ends when all the cards have been matched in pairs.

Extension of this game: Use number cards up to 10 and use questions such as 'What is the total?', 'What do these two number add up to?' when revealing the cards. As your child becomes more confident in their knowledge of pairs that make 10 you could encourage them to tell you which number they are looking for after they have revealed the first number.



Game 9

Order!

Skill to be learnt: To order one-digit numbers and position them on a number line; use the greater than (>) or less than (<) signs.

What you will need: 2 sets of 0-9 cards and 'order boards'.

How to play: Players take it in turns to turn over a card and choose where to write it on their board.

Extension of this game: Extend to larger numbers.

