

# Phase 2 – It's Me 1 2 3!

**#MathsEveryoneCan**

## Phase 2 – Book List

1 2 3 at the Zoo - Eric Carle

I'm Number One - Michael Rosen

One Bear at Bedtime - Mick Inkpen

The Little Bear and the Wish Fish - Debi Gliori

Pink Tiara Cookies for Three - Maria Dismundy

Number Farm - Stephen Holmes

Circle/Triangle - Mac Barnett and Jon Klassen

The Mr Men Stories - Roger Hargreaves

Three Little Firefighters - Stuart J Murphy

Round is the Moon Cake - Roseanne Thong

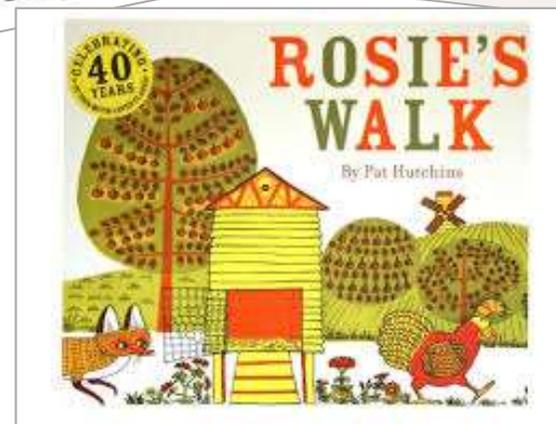
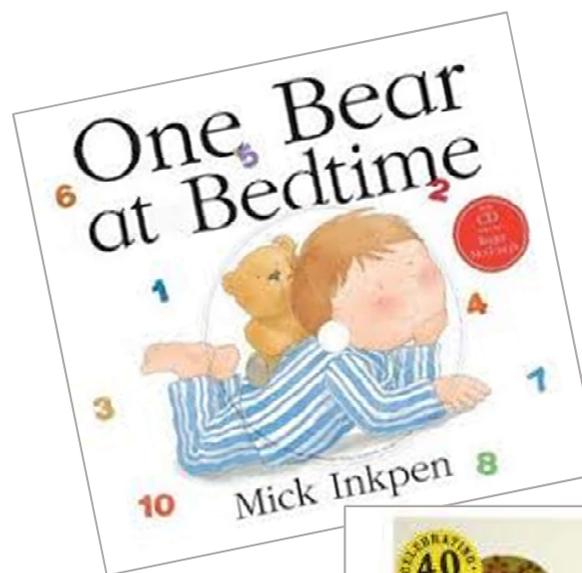
Rosie's Walk - Pat Hutchins

Mrs Wishy-Washy - Joy Cowling

Me on a Map - Joan Sweeney

Each Peach Pear Plum - Janet & Allan Ahlberg

Reading to children is an essential part of their development. Any of these books would be useful during Phase 2 alongside traditional tales such as Goldilocks and the Three bears, The Three Billy Goats Gruff and Little Red Riding Hood.



# Representing 1 2 3

## Guidance

Children identify representations of 1, 2 and 3. They subitise or count to find how many and make their own collections of 1, 2 and 3 objects. They match the number names we say to numerals and quantities.

They count up to three objects in different arrangements by touching each object as they count and recognise that the final number they say names the quantity of the set.

They use their own mark-making to represent 1, 2 and 3 for example to record their score during a game.

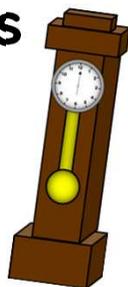
## Other Resources

Hickory Dickory Dock

1 2 3 at the Zoo - Eric Carle

I'm Number One – Michael Rosen

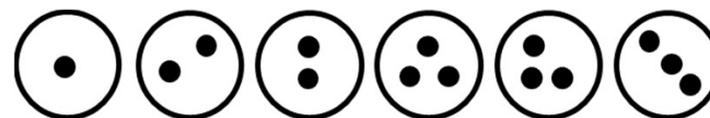
One Bear at Bedtime – Mick Inkpen



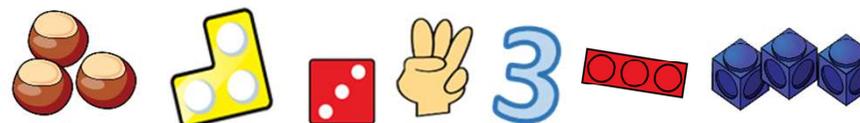
## Prompts for Learning

Prepare a set of dot plates or cards which have 1, 2 or 3 dots in different arrangements.

Hold up the plates and ask the children how many dots. The children could match plates to the numerals 1, 2 and 3



Encourage the children to create their own collections of 1, 2 and 3 to create a central display.



Have a number hunt inside and out.

Where can they find 1, 2 and 3?

Do they count or subitise to find how many?

Ask the children to count out 1, 2 or 3 objects from a larger group. For example, we are going to play a game. You will each need 3 beanbags.



Don't forget to count sounds and movements too.

Use a drum to sound beats to count or ask the children to do 2 claps, 3 jumps, 1 twirl etc.

# Representing 1 2 3



## Dough

Making playdough - work with a small group of children to make the playdough. Use a recipe that involves measuring 1, 2 or 3 cups. Ask children to measure out the ingredients and count the cups.



**Enhancements to areas of learning**

## Maths Area

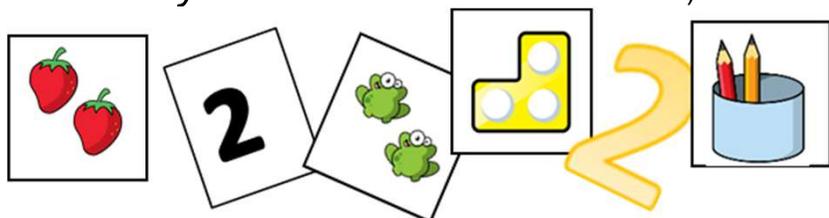
Have sets of picture cards representing 1, 2 and 3.

Ask the children to match and sort the cards.

E.g. Collect all the cards which show 2.

Which card does not show 2?

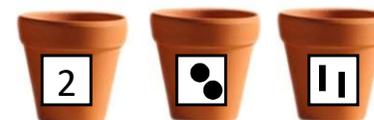
Can you make your own cards to show 1, 2 and 3?



## Loose Parts

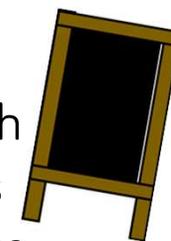
Provide a collection of various loose parts or natural objects and some small pots labelled 1, 2 and 3 for the children to fill.

Include some unlabelled pots and encourage the children to make their own labels to show how many they put inside.



## Outside

Provide a selection of equipment such as beanbags, hoops, quoits, sponges and buckets. Encourage the children to devise their own games. Provide an easel or clipboards so that they can record their scores.



# Comparing 1 2 3



## Guidance

Children begin to understand that as we count, each number is one more than the number before.

Similarly as we count back, each number is one less than the previous number.

Use a range of representations to support this understanding and encourage the children to represent the one more and one less patterns as they count. Support the children to make comparisons in different contexts as they play.

## Other Resources

The Three Bears

The Three Little Pigs



The Little Bear and the Wish Fish – Debi Gliori

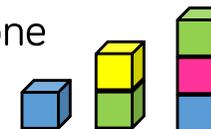
When Goldilocks Went to the House of the Bears song

Pink Tiara Cookies for Three – Maria Dismondy

## Prompts for Learning

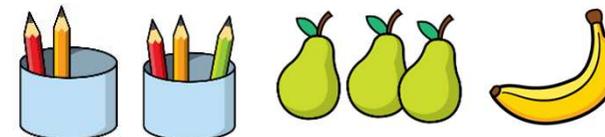
Use stories and number songs which count on and back to introduce the one more and one less patterns.

Represent the patterns using bricks or cubes to support the understanding that each number is one more/less than the number before.



Using a range of real objects in different contexts ask the children to compare sets. Which set has more? Fewer?

Can you find 2 sets with the same amount?



The dot plates can also be compared and ordered.

Ask: How many dots does this plate have?

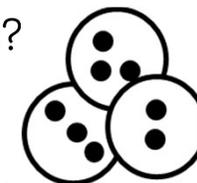
Can you find a plate with more dots?

With fewer dots?

With the same number of dots?

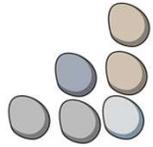
Can you put these 3 plates in order?

What would come next?



Ask the children to compare how far they can travel in 3 giant steps and in 1 or 2. In 1, 2 and 3 tiptoes.

# Comparing 1 2 3



## Loose Parts



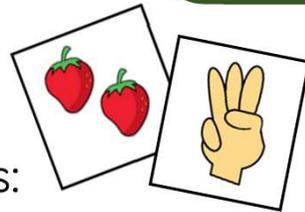
Provide an assortment of loose parts for the children to build their own one more/one less patterns. The children may like to extend these beyond 3

**Enhancements to areas of learning**

## Maths Area

Game for 2 players:

Provide picture cards showing different representations of 1, 2 and 3. Place the picture cards face down. Ask each player to pick a card and then compare to see which card has more. The player with more keeps both cards.



## Maths Area

Teach the children simple number track games and encourage them to create their own. Roll a dice and collect 1, 2 or 3 counters to fill their track. Compare – who has the most counters? How many more counters do they need to fill their track?

## Role Play



Read children the story of the 3 bears and explain that we need to set the table in the home corner ready for breakfast. Do we have enough plates, cups and spoons for all the bears? Provide small, medium and large cups, bowls and spoons to compare and match to the bears.

# Composition of 1 2 3



## Guidance

Introduce children to the idea that all numbers are made up of smaller numbers.

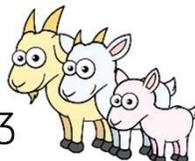
Allow them to explore and notice the different compositions of 2 and 3. For example 3 can be composed of 1 and 1 and 1 or 2 and 1 or 1 and 2. Although we are focusing here on numbers to 3 the children may choose to notice and explore the composition of larger numbers in their play. Encourage them to share what they have noticed.

## Other Resources

BBC Number blocks 1, 2 and 3

The Three Billy Goats Gruff

Number Farm - Stephen Holmes



## Prompts for Learning

Have 3 small word animals such as horses or cows and 2 fields. Ask the children how many animals could go in each field. Can they find different ways to do this?

What if they had 1 or 2 animals?

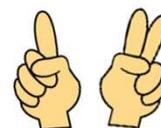


In a small group ask each child to count out 3 double-sided counters. Shake them in their hand and then drop them down. How many are red? How many are yellow?

Can they get all red? All yellow?



Use the number shapes to investigate which smaller numbers combine to make 1, 2 and 3. Check by sitting them on top of the whole number.



Play Bunny Ears

Using 2 hands to be the ears, how many ways can you show 1, 2 and 3? Can you see what number I have made? Can you make ears the same as mine? Can you make the same number in a different way?

# Composition of 1 2 3



## Game

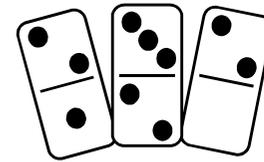
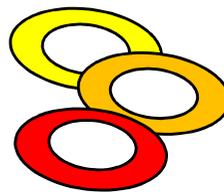
Play The 3 Billy Goats Gruff game. Set up a bridge and 2 fields. Each player builds a 1, 2 and 3 tower to represent the 3 goats. Roll a 1-3 dice and move the corresponding tower over the bridge. The winner is the first player to move all 3 ‘goats’ over the bridge. Encourage the children to notice how many goats are on each side of the bridge as they play.



## Enhancements to areas of learning

## Outside

Draw a large chalk circle on the ground. Ask the children to collect 3 quoits and to take turns to throw them into the circle.  
 How many land inside the circle?  
 How many land outside?  
 How could they record their scores?



## Maths Area

Provide a set of dominoes. Ask the children to find all the dominoes with 1, 2 or 3 spots. How many dominoes have 1, 2 and 3 spots altogether?  
 Are they all the same?  
 How many dominoes can they find with 1, 2 or 3 spots on one side.

## Outside



Fill a tuff tray with an assortment of wood, autumn leaves and seeds. Hide several ladybirds (painted pebbles) for the children to find. How many spots do the ladybirds have? Do all the ladybirds with 3 spots look the same?

# Digging Deeper

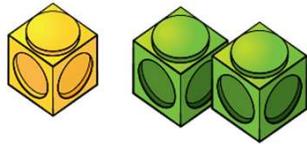


## How Many Inside?



Place 1, 2 or 3 items into a feely bag.  
 Ask the children to feel inside the bag and try to count how many there are without looking.  
 Count the items out to check.

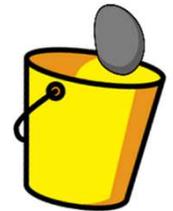
## Hidden Objects



With the children count out 1, 2 or 3 items and then use a cloth or a bowl to hide them. Can the children use their fingers to show you how many are hidden?  
 Ask the children to watch as you add one more item to the hidden group. How many will be hidden now? What if you take one out?

These tasks challenges the children to count unseen objects and to visualise one more and one less within 3. The children may use their fingers to help them predict what one more or one less will be. They could also use their own mark-making to represent the hidden objects.

You could vary the task by dropping pebbles into a bucket or pennies into a cup.  
 Encourage the children to count the sounds.  
 Ask them to predict how many there will be if you take one out or add one more and then count together to check.



## Key Questions

- How many objects can you feel in the bag?
- How many pebbles did I put in?
- If I add one more how many will there be?
- If I take one out how many will there be?
- How many are in the bag/bucket now?
- How do you know? How can we check?

# Circles and Triangles

## Guidance

Children learn that circles have one curved side and triangles have 3 straight sides. They begin to recognise these shapes on everyday items in the classroom and outside. Encourage the children to build their own circles and triangles.

It is important to show a variety of different sized circles and triangles in different orientations and with sides of different lengths.

## Other Resources

Circle - Mac Barnett and Jon Klassen

Triangle - Mac Barnett and Jon Klassen

The Mr Men Books – Roger Hargreaves

Three Little Firefighters – Stuart J Murphy

Round is the Moon Cake – Roseanne Thong

My Hat, It has 3 Corners song

## Prompts for Learning

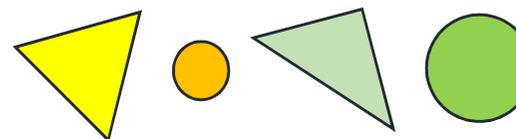
Show the children a variety of circles and triangles in different sizes and orientations.

Choose one of the shapes. Ask the children to tell you what they notice. Are the sides straight or curved?

Can they see another shape like this?

What if we turn it around, is it still the same shape?

Can they find a different shape? Why is it different?



Show the children a picture which has been made of different shapes. E.g. a boat, a rocket, a house.

What shapes can you see in the picture?

How many triangles can you count?

Can you make your own picture using the shapes?



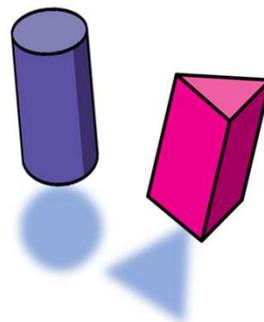
Go on a shape hunt. Where can you see circles and triangles on the surface of everyday objects?

Look at shapes in art such as Kadinsky's Concentric Circles or Stained in Triangle. Ask the children to discuss the images. How many shapes can they see?

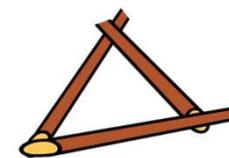
# Circles and Triangles

## Printing

Ask the children to print with the flat faces of the 3-D shapes.  
Which 3-D shapes will print a triangle?  
Which will print a circle?  
Can they print a pattern using circles and triangles?  
Ask them to describe their patterns.



**Enhancements to areas of learning**



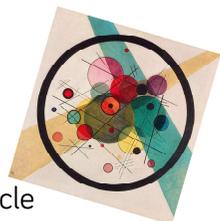
## Outdoors

Use planks, sticks or ropes to create large circles and triangles.  
Can they make stick triangles?  
How many sticks did they use for each?  
Is it possible to make a circle using sticks?  
What would be better for making a circle?

## Dough



Provide a range of items such as cups, bottle tops, jam jar lids, beads, cubes, etc  
Ask the children to press the items into the dough. Which make circle shapes and which don't? Which objects make the best circles? What else could you use to make circles? Can you make a pattern? Can you find any items which will leave a triangular shape?



Kadinsky  
Circles in a Circle

## Art



Kadinsky  
Stained in triangle

Display works of art featuring circles and triangles to inspire the children. Ask the children to make their own art using a variety of media such as paint, collage or transient art using loose parts.

# Spatial Awareness

## Guidance

Children hear and begin to use positional language to describe how items are positioned in relation to other items.

They build life-sized journeys outdoors and travel through them, exploring them from different perspectives.

They begin to represent real places they have visited or places in stories with their models, drawings or maps.

## Other Resources

We're Going on a Bear Hunt - Michael Rosen

Rosie's Walk - Pat Hutchins

Little Red Riding Hood - Traditional Tale

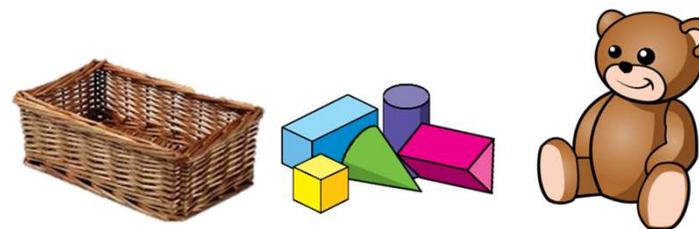
Mrs Wishy-Washy - Joy Cowling

Me on a Map - Joan Sweeney

Song: In and Out the Dusty Bluebells

## Prompts for Learning

Positional language can be modelled and practised on a daily basis with the children through their play. Tidy-up time in particular is full of opportunities to use positional language for a real purpose. E.g. Put the bricks **into** the basket. Sit teddy **on** the shelf **next to** the books.



Many stories focus on positional language or journeys. Encourage the children to use actions to represent the language such as over, under, around, through as you read. Children could also build models of the story journeys and real life journeys they have made to include the places passed or visited along the way.



Outside the children can build large-scale representations of places and journeys.

# Spatial Awareness

## Small World

Modelling and encouraging positional language as the children play in the small world. E.g. 'Where shall we put the horse?' 'We'll put it in the field behind the tree.' 'Where is the frog?' 'The frog is on the chair beside the window.'



**Enhancements to areas of learning**

## Outdoors

Set up your own bear hunt by hiding bears around the outdoor area. Ask the children to describe where they could look and where each bear was found.

You could extend this into everyday practice by having a bear which 'hides' in a different place in the classroom every night for the children to find.



## Outdoors

Set up an obstacle course around the outdoor area.

Ask the children to work in pairs – one giving directions to their partner.

E.g. 'Go over the bridge, through the tunnel, around the cones, between the bricks...'

Encourage the children to create their own obstacle courses.

## Reading

As you read together, take the opportunity to build in positional language. Many stories (Janet & Allan Ahlberg - Each Peach Pear Plum, Quentin Blake - Cockatoos) involve pictorial hide and seek. Ask the children to find the hidden objects and to describe where they are.

# Digging Deeper

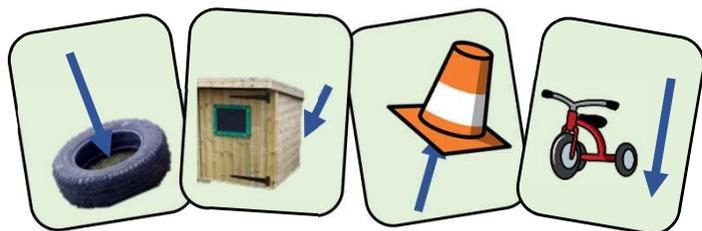
## Treasure Hunt

Set up a treasure hunt in your outdoor space by providing a series of pictorial clues.

As the children go to each place in the pictures, they can hunt for the next clue.

Prompt them to use positional language to explain where they need to go.

Hide some ‘treasure’ in the last place – this could be a special snack, a new story to read or resource for the classroom.



The children might like to continue this by designing their own treasure hunts and hiding pictorial clues for their friends to follow.

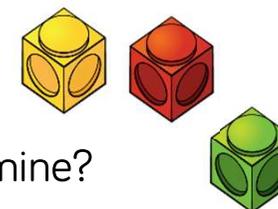
## Make My Match

Provide each child with a set of identical items such as 3 cubes of different colours.

Hide your cubes from the children using a barrier and describe how you arrange your set. For example put the green cube under the red cube. Put the yellow cube on top of the red cube. Now check. Does your tower match mine? Extend the use of language to include next to, beside, between, above, below.

Encourage the children to take turns in leading the game and continue the game in provision. This could be extended by adding 1 or 2 more cubes.

## Key Questions



Does your tower look just like mine?

Where should this cube be?

Which cube is between the green and the yellow?

Can you find more than one way to tell me where the green cube is?