Nursery Medium Term Plan	Spring 2	Theme: Journeys and Transport	Stepping Stones to Reception Maths No Problem	We Cou
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Vocabulary

Part part whole, altogether, group, set, how many, more, fewer

Day 1	Day 2	Day 3	Day 4	Day 5	Development Matters -	Nursery 3 to 4 years
	•				Number	Numerical Patterns
Sharing (small groups) Place 2 pencils on a tray and ask children how they could share the pencils between 2 teddy bears. Repeat with 3 teddy bears. Now increase the number of pencils to 4 and the teddy bears from 2 to 3, then 4. Learning Time How many pencils will each teddy bear have? Can we share the pencils between more teddy bears? Make sure that children understand that some teddy bears will sometimes have more pencils than others. Practice Time What numbers of pencils and teddy bears do we need for each teddy bear to have the same number of pencils? There is a good opportunity here to look at the concept of sharing equally and things being fair or unfair. It will depend on the number of pencils and the number of teddy bears at this stage as there is a lot to discuss and process here.	Identifying Groups (whole class) Display the Resource Sheet on screen. Talking Time What can you see in the picture? What do you think the rabbit is doing? Now tell children that you are going to describe a group of eggs and they have to tell you where that group is in the picture. For example: I am looking at a group that has 1 egg that is mostly white. Where could I be looking? Now give extra information to narrow it down to one option. This group has more than 1 egg. Where am I looking? Repeat several times and emphasise each time the 2 parts and the whole. Thinking Time Are there any different ways that we could colour the eggs? Use two-colour counters or coloured cardboard egg shapes to model the different ways. For example, in a group of 5 eggs, we could have 5 brown and 0 orange, 4 brown and 1 orange, 3 brown and 2 orange, 2 brown and 4 orange, and 0 brown and 5 orange.	Making 3 and 4 (small groups, indoors) Learning Time Show children different objects totalling 3, e.g. I have one apple and two bananas. How many fruit do I have altogether? Repeat with two apples and one pear? One banana, one apple and one pear? What do we notice? They all make three. Practice Time Repeat the activity but making 4 with children making 4 using different objects. Consolidation Give children a range of opportunities to make 4, using 2, 3 or 4 different numbers / objects.	Making 5 - Hidden Objects (partner work) Learning Time Place 4 of the objects on the table. Ask children to tell you how many objects there are. Now ask them to close their eyes whilst you grab some of the items and hide them behind your back. Talking Time How many objects are left? How many are hidden in my hand? Repeat with different combinations and then move on to 5 items. Thinking Time Children can now work in pairs with their own set of 5 objects, taking it in turns to grab and guess.	Making Number Stories (small groups) Activity Approach Show the beach picture on the resource sheet to children and discuss what you can see. Model making up some number stories for the children. For example: There are 5 spades—3 of them are in buckets and 2 of them are in the sand. Talking Time Ask children to make up their own stories. Encourage them to look for things that are the same and things that are different. How can you group the things that you see? Thinking Time Give children a copy of the resource sheet. Can you add items to the picture? For example, draw 1 more child or 1 more bucket. Where will you place the items? How will that change your number stories? Reinforce positional language, using the beach picture.	Fast recognition of up to 3 objects, without having to count them individually ('subitising'). Recite numbers past 5. Say one number for each item in order: 1,2,3,4,5. Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). Show 'finger numbers' up to 5. Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. Experiment with their own symbols and marks as well as numerals. Solve real world mathematical problems with numbers up to 5. Compare quantities using language: 'more than', 'fewer than'.	Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. Understand position through words alone – for example, "The bag is under the table," – with no pointing. Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'. Make comparisons between objects relating to size, length, weight and capacity. Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. Combine shapes to make new ones – an arch, a bigger triangle etc. Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. Extend and create ABAB patterns – stick, leaf, stick, leaf. Notice and correct an error in a repeating pattern. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then'

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Matha Na Dyahlama Caunti	Nursery	Spring 2	Theme: Transport and Jouneys	Stepping Stones to Reception	We
Maths No Problem Countil				Maths No Problem	Counting a

Vocabulary

Subitise, count, finger numbers, altogether, 1 more, 1 fewer, same, different

Day 1	Day 2	Day 3	Day 4	Day 5	Development Matters	- Nursery 3 to 4 years
					Number	Numerical Patterns
Subitising up to 3 / 5 (small groups, indoors) Fast recognition of up to 3 objects (extend to 5), without having to count them individually ('subitising'). Display images on screen e.g. one ball, two cats. 3 circles. Briefly reveal the images and ask children to show you on their fingers how many objects there are. Show 'finger numbers' up to 5. Repeat several times. Learning Time Call out a number and ask children to show you that many fingers as quickly as they can, e.g. Show me 4! Repeat for all numbers to 5. Practice Time Have a tray with objects on and a cloth covering (keep the objects the same, e.g. 3 apples, two toy cars etc.). Briefly reveal so that children can subitise and show on their fingers.	Subitising up to 3 / 5 1 more than (small groups, indoors) Consolidation Revisit the subitising activity from last lesson, up to 5, building speed and confidence. Learning Time Have a tray with objects on and a cloth covering (keep the objects the same, e.g. 3 apples, two toy cars etc.). Briefly reveal so that children can subitise and show on their fingers. Once they have said the correct number, ask them 'How many would there be if I added one more?' Children to discuss. Add one more apple / car etc. and check they are correct. Accentuate use of the language 'one more than 2 is 3'. Practice Time Children have access to counting objects and number cards to 5. They take a number card and then match that number of objects and then add one more. Compare quantities using language: 'more than', 'fewer than'.	Subitising up to 3 / 5 1 more than (small groups, indoors) Repeat of last lesson with different stimulus. Consolidation Revisit the subitising activity from last lesson, up to 5, building speed and confidence. Learning Time Have a tray with objects on and a cloth covering (keep the objects the same, e.g. 3 apples, two toy cars etc.). Briefly reveal so that children can subitise and show on their fingers. Once they have said the correct number, ask them 'How many would there be if I added one more?' Children to discuss. Add one more apple / car etc. and check they are correct. Accentuate use of the language 'one more than 3 is 4'. Practice Time Children have access to counting objects and number cards to 5. They take a number card and then match that number of objects and then add one more.	Subitising up to 3 / 5 1 fewer / less than (small groups, indoors) Consolidation Revisit the subitising activity from last lesson, up to 5, building speed and confidence. Learning Time Have a tray with objects on and a cloth covering (keep the objects the same, e.g. 3 apples, two toy cars etc.). Briefly reveal so that children can subitise and show on their fingers. Once they have said the correct number, ask them 'How many would there be if I took one away?' Children to discuss. Remove one apple / car etc. and check they are correct. Accentuate use of the language 'one fewer than 3 is 2'. Practice Time Children have access to counting objects and number cards to 5. They take a number card and then match that number of objects and then take one away. Compare quantities using language: 'more than', 'fewer than'.	Subitising up to 3 / 5 1 fewer / less than (small groups, indoors) Consolidation Revisit the subitising activity from last lesson, up to 5, building speed and confidence. Learning Time Have a tray with objects on and a cloth covering (keep the objects the same, e.g. 3 apples, two toy cars etc.). Briefly reveal so that children can subitise and show on their fingers. Once they have said the correct number, ask them 'How many would there be if I took one away?' Children to discuss. Remove one apple / car etc. and check they are correct. Accentuate use of the language 'one fewer / less than 5 is 4'. Practice Time Children have access to counting objects and number cards to 5. They take a number card and then match that number of objects and then take one away.	Past recognition of up to 3 objects, without having to count them individually ('subitising'). Recite numbers past 5. Say one number for each item in order: 1,2,3,4,5. Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). Show 'finger numbers' up to 5. Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. Experiment with their own symbols and marks as well as numerals. Solve real world mathematical problems with numbers up to 5. Compare quantities using language: 'more than', 'fewer than'.	Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. Understand position through words alone – for example, "The bag is under the table," – with no pointing. Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'. Make comparisons between objects relating to size, length, weight and capacity. Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. Combine shapes to make new ones – an arch, a bigger triangle etc. Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. Extend and create ABAB patterns – stick, leaf, stick, leaf. Notice and correct an error in a repeating pattern. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then'

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Nursery

Vocabulary

Container, empty, full, half full, nearly full, nearly empty, liquid, capacity, space

Day 1	Day 2	Day 3	Day 4	Day 5	Development Matters	- Nursery 3 to 4 years
					Number	Numerical Patterns
Empty and Full (whole class and partner work) Learning Time Show children a box full of toys. Tell them that your friend said that the box was empty. Is this true? Ask children to describe what they see. Can we put any more toys in the box? Once you establish that we can't put anymore toys in the box, ask if anyone knows how we could describe the box. If it is not empty it is? Give children, working with partners, their own boxes and enough materials to fill the boxes. Ask them to show you the box empty, then full and so on. Keep the order random so they need to listen out for the keywords 'empty' and 'full'. Periodically, ask children how they know if their box is empty or full. How do they know if another pair's box is empty or full? Talking Time How do we know if something is full? How do we know if something is empty? Can we make something empty, full? Can we make something full, empty? Children need to be able to describe using informal language when something is full (there is no space left) and empty (there is a lot of space/there is nothing inside it)	Empty, Full and Half-Full Learning Time For the beginning of this lesson, use identical bottles. Show children a bottle filled with water. Children should respond that the bottle is full. Show children an empty bottle. Ask them if there are any words that they learnt yesterday that we could use to describe the amount of water in the bottle. Children should respond that the bottle is empty. Now show them a bottle that is half full. Give them time to talk to each other to see if they can describe the capacity of the bottle. Is the bottle full? Is the bottle empty? If the bottle is not full but it is not empty either, what is it? Children may start to use phrases such as, it's a bit full, it's nearly empty and possibly, it's half full. Tell children that the bottle is half full. Give children the containers and toys from Activity 1. Ask them to show you the box full, then empty and then half full. Talking Time How do you know when something is filled halfway? Children to explore different containers (buckets, sand, water, boxes etc.)	Full, Empty and Half Full Ordering (small groups, indoors and outdoors) Learning Time Line the bottles up in a random order. Tell children that you are going to put them in order but you are not sure how to do it. Ask children what they notice about the bottles. Can anyone describe how full any of the bottles are? Ask them to talk to each other and see if they can think of how the bottles can be arranged. Children may suggest that they are arranged from empty to full or full to empty. At this point either go outside or to wet play area and ask children to show you a full bottle. At this point, ask them to pour some water out. How would they describe the amount of water left in the bottle? Repeat the activity but prompt children to fill the bottle a certain amount. Fill the bottle so it is half full. Pour enough water out of the bottle to show it is half empty. Talking Time Can you describe each of the bottles when they are in order? Children should be increasingly fluent using 'empty', 'full' and 'half full' by this stage. Thinking Time Which bottle is full? Which bottle is full?	Consolidation - Full, Empty and Half Full Ordering (small groups, indoors and outdoors) Review Time Line the bottles up in a random order. Tell children that you are going to put them in order but you are not sure how to do it. Ask children what they notice about the bottles. Can anyone describe how full any of the bottles are? Ask them to talk to each other and see if they can think of how the bottles can be arranged. Children may suggest that they are arranged from empty to full or full to empty. At this point either go outside or to wet play area and ask children to show you a full bottle. At this point, ask them to pour some water out. How would they describe the amount of water left in the bottle? Repeat the activity but prompt children to fill the bottle a certain amount. Fill the bottle so it is half full. Pour enough water out of the bottle to show it is half empty. Talking Time Can you describe each of the bottles when they are in order? Children should be increasingly fluent using 'empty', 'full' and 'half full' by this stage. Thinking Time Which bottle is full? Which bottle is full?	Comparing Capacity (whole class) Learning Time Show children two containers of different sizes. Show them a pile of items next to the boxes. Which box will hold the most / least? Fill the container, counting the items as they go into the container until it is full. Ask if they can guess whether we will need fewer items, more items or the same number of items to fill the larger container. Count the items into the container. Give children an opportunity to take 2 different containers and to guess if they will need more or fewer items to fill each container. Talking Time Do you think you know which container will hold more / less items? Do you think you can prove that one container holds more items than another container? At this stage, before standard units of measurements are introduced, children should be told that it is not the number of items but how much space is filled in the container that will show them how full a container is. Thinking Time Which container will hold more? Which container will hold more?	Fast recognition of up to 3 objects, without having to count them individually ('subitising'). Recite numbers past 5. Say one number for each item in order: 1,2,3,4,5. Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). Show 'finger numbers' up to 5. Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. Experiment with their own symbols and marks as well as numerals. Solve real world mathematical problems with numbers up to 5. Compare quantities using language: 'more than', 'fewer than'.	Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. Understand position through words alone – for example, "The bag is under the table," – with no pointing. Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'. Make comparisons between objects relating to size, length, weight and capacity. Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. Combine shapes to make new ones – an arch, a bigger triangle etc. Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. Extend and create ABAB patterns – stick, leaf, stick, leaf. Notice and correct an error in a repeating pattern. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then'

Week 3 Counting

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Theme: Transport and Journeys

Vocabulary

Triangle, square, rectangle, circle, side, straight, curved, round, corner

Day 1	Day 2	Day 3	Day 4	Day 5	Development Matters	- Nursery 3 to 4 years
					Number	Numerical Patterns
Shape func (whole Class or group work) Talking Time Sing a shape song. Have a selection of 2D shapes (circle, square, rectangle and triangle) in a feely bag. Pass the bag around for the children to choose a shape. Can children describe or name their shape? Learning Time Discuss the shape names and basic properties, e.g. This is a triangle how do we know? Count sides and describe using straight, same, different, longer, shorter etc. curved Practice Time Children to go on a shape hunt in the environment, locating, naming and describing 2D shapes.	Shape Pictures (whole class) Planning Time Explain that we will be making shape pictures. Can they make a transport picture from 2D shapes? Make a list of transport (car, train, lorry, bike, boat, plane, hot-air balloon). Discuss why some shapes would be better than others to make the picture. Children complete their task. Talking Time What transport have you made? What shapes did you use? Can you describe your vehicle? Thinking Time Can children copy another child's transport picture? What shapes have you used and why? Why would a circle be good for a train wheel, but not a square?	stimulus Tell children that you have a mystery shape inside your feely bag. You could display a visual of the possible shapes in the bag to give children some support (e.g. a square, triangle, rectangle and circle). You are going to give them some clues. Can they guess what the mystery shape is? Talking Time After each clue, ask children to make a guess. Can you guess the shape? Can you explain why you made that guess? Start off with general clues. For example: 'I can feel there is a straight side.' The children can ask you questions, such as 'How many straight sides?' Keep giving clues and guessing until they are correct. Thinking Time Go deeper with the questioning. For example: 'A rectangle and a square both have 4 corners and 4 sides. So, what is the same in each of the shapes and what is different?' Repeat for the other 2D shapes. Now ask children to play this game in pairs with each other. If they guess the shape correctly, they can keep it. The first person to have 3 shapes is the winner.	 Make my Shape (small groups) Have a selection of 2D shapes (squares, rectangles, triangles and semi-circles). Tell children that we are going to use the shapes to make other shapes. Talking Time What shapes can you see? Thinking Time Now we are going to look at using one shape to make another. What happens if I join two squares together? (rectangle) Can we make a square from two triangles / rectangles? Can we use 4 small squares to make one big square? Include two semi-circles to make a circle. Children explore paper shapes to make a square? Can we make a triangle? At this stage, children may only use 1 type of shape—e.g. 2 rectangles to make a square. 	Jescribing Shapes (small groups) In this activity, you are going to describe the shapes and orientations needed to make a figure. Have a prepared figure that uses a variety of shapes—for example, a figure of a rocket or a train. Don't let children see it but give them all the shapes that they need. To make this activity easier, only give them the exact shapes that they need. Talking Time Describe each shape, by colour, shape, size and orientation and where to put it on the table. Can you find the shape I am describing? What shape is it? Where does it go? What does your figure look like? Thinking Time Compare the finished figures. Are your figures exactly the same as mine? What is the same? What is different? Ask children to now work in pairs and to repeat this activity. Can they take turns making their own figures and describing them to a partner?	Past recognition of up to 3 objects, without having to count them individually ('subitising'). Recite numbers past 5. Say one number for each item in order: 1,2,3,4,5. Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). Show 'finger numbers' up to 5. Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. Experiment with their own symbols and marks as well as numerals. Solve real world mathematical problems with numbers up to 5. Compare quantities using language: 'more than', 'fewer than'.	and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. Understand position through words alone – for example, "The bag is under the table," – with no pointing. Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'. Make comparisons between objects relating to size, length, weight and capacity. 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Week 4 2D Shapes

Nursery	Spring 2	Theme: Transport and Journeys	Stepping Stones to Reception	We
			Maths No Problem	3D S

Vocabulary

Round, ball, sphere, cube, cuboid, pyramid, cylinder, curve

Day 1	Day 2	Day 3	Day 4	Day 5	Development Matters	- Nursery 3 to 4 years
					Number	Numerical Patterns
Give children some cubes and some paint. They are going to make prints from the cubes. Ask them to dip one face of the cube into the paint and make some prints. Talking Time What do you notice about the shapes of the prints that you have made? Do you remember what this shape is called? What is special about this shape? Now take another cube and count the faces by sticking the numbers 1 to 6 on each face. How many squares can you see? Do you know what this shape is called? Can you find any other cubes in the classroom? Thinking Time Are cubes a good shape for building? Give them opportunity to explore the cubes.	Repeat Activity 1, but explain that now you are going to make footprints in playdough. Talking Time What shapes do you think we will see in the playdough? Will they be squares again? How many different shapes do you think we will see? Encourage children to make 6 footprints—1 from each face of the cuboid. Thinking Time Depending on the cuboids chosen, children may have 3 pairs of different rectangles, or they may have a pair of squares in there as well. Discuss the shapes that they have found and explore the similarities and differences between a cube and a cuboid. Do you think a cuboid would be a good shape for building? What shape are house bricks? Can you find examples of cuboids that have been used to build the school?	Cylinder (small groups) Place 3D shapes on a tray for the children to explore. It is important that the only shapes with a curved surface are the cylinders. Talking Time Which shapes in the box have something that the other shapes don't have? Encourage children to describe the properties of the cylinders. What shapes can you see at each end of the cylinders? Do you think this shape will roll? Why do you think that? Thinking Time Do you think it is possible to get make a print of a circle from a cylinder with paint? Do you think it is possible to make a print of a rectangle from a cylinder? What shape do you think we would get if we flattened out the cylinder in the paint and them print on paper. What shape can you see?	Sphere (small groups, outdoors) Take the children outside with bubble tubes and circular bubble wands. Give them time to explore the bubbles. Talking Time What shape are all the bubbles? Do you know the name of this shape? Why do you think that the bubbles are all the same shape? Show the children how to make their own bubble wands, using pipe cleaners in different shapes (squares, rectangles, triangles). What shape will the bubbles be? Thinking Time What other objects are spheres? Why do you think spheres make good balls for kicking and catching? Are spheres good for building? If not, why not? Can we make a tower out of spheres?	Creating 3D Constructions (small groups) Activity Approach Split children into teams of 3 or 4 and tell them that they are going to try to build the tallest tower they can. Give teams a range of resources. Foam blocks, sponge bricks, plastic 3D shapes, Large foam shapes, junk modelling etc. Talking Time Can you make a tower that is taller a teddy? Can you make one that is taller than you? What materials will you choose? What would make a tall tower? How can you make sure that your tower doesn't topple over? Thinking Time Compare the completed towers. Whose was the tallest? Was the tallest tower also the strongest? What shapes can we put on the top that wouldn't go beneath? (E.g. cones and pyramids) What shapes were useful in making the towers?	Past recognition of up to 3 objects, without having to count them individually ('subitising'). Recite numbers past 5. Say one number for each item in order: 1,2,3,4,5. Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). Show 'finger numbers' up to 5. Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. Experiment with their own symbols and marks as well as numerals. Solve real world mathematical problems with numbers up to 5. Compare quantities using language: 'more than', 'fewer than'.	 Taik about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. Understand position through words alone – for example, "The bag is under the table," – with no pointing. Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'. Make comparisons between objects relating to size, length, weight and capacity. 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Adapted from Maths - No Problem! Foundations by Andrew Neale-Crane (Assistant Head Teacher) December 2022.

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