EARLY FOUNDATIONS

CUSPA

CURRICULUM WITH UNITY SCHOOLS PARTNERSHIP

MATHS

Age 4 – 5

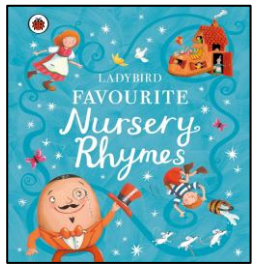
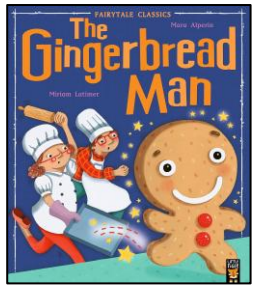
Autumn Block 1

Counting 0 – 3

Learning Sequence: Age 4 – 5 Block 1 Counting

Foundational knowledge	Develop stable order principle; count items touching 1:1; recognise numerals to 3; subitise to 3 and match numerals with a number of items to 3.	
Key mathematical language (essential vocabulary)	**Threshold vocabulary** zero, one, two, three, count	**Clarification vocabulary** numeral
Sentence stems	How many? How do you see it? Can you see it another way?	
Resources required	number track (0 – 5) numerals to 3 (in different representations, including handwritten) a range of objects to count paper plates with dot arrangements counting objects pupils – tens frame and double-sided counters	
At the end of this unit, pupils will …	**Know** • the counting sequence is always the same (stable order principle) • you can count things of different sizes and things that cannot be seen (sounds and actions) • the last number counted gives the total so far • the number of objects remains the same even if the arrangement changes (conservation of number).	**Be able to** • count to three in sequence • count objects of different sizes, count actions and sounds, count objects that cannot be moved (e.g. images) • count the number of objects and know that the stopping number gives the value • identify groups of one, two and three within larger arrangements • match a numeral with the number of objects.
Prompting questions for thinking hard	What is one more than ____? What is the same and what is different between _____? Can you show me this number in another way (e.g. tens frame, number track, group with different organisation)? Is this the right order? Is this still the same number if I move the dots around?	

Learning Sequence: Age 4 – 5 Block 1 Counting

Opportunities and experiences	Outdoors	Role-play	Water tray
 Many nursery rhymes involve counting, a key concept. Rhyme-based counting provides repetition, reinforcing the stable order principle or number sequencing.  Encourage counting when sharing a story. How many buttons does the gingerbread man have? Let's count the milk churns. How many chickens are outside the barn?	Create an alien face by drawing chalk circles. Pupils take cards showing facial features (i.e. eyes, ears, nose, lips with numerals written on them) and they then draw these on their chalk face. Have recipe cards that include zero, one, two and three in the mud kitchen. Have a numeral hunt by hiding images of tens frames and pupils going on a scavenger hunt.	Set the table for a family of three. How many cups, plates, knives and forks are needed? Make play-dough cakes for a birthday party. Add the correct number of candles to each cake. Can you find the right birthday card for someone who is 1? 2? 3? Place some items from the role-play area in feely bags (e.g. plastic food). How many items are in each bag? How do you know? What would a bag with zero items in feel like?	Place 0 – 3 sponge numbers in a water tray. Provide cups with 0 – 3 dots drawn on them. Pupils then fish out the correct numeral to match the number of dots on the cup. Place paper-plate lily pads on the surface of the water in the water tray. Each lily pad will have 0 – 3 dots drawn on it. Pupils count out plastic frogs or bugs to sit on each lily pad to match the number of dots on it. Place pom-poms of different sizes in the tray. Pupils have a small sieve to retrieve one, then two and finally three pom-poms.

Learning Sequence: Age 4 – 5 Block 1 Counting

Part 1/2

Connect	Vocabulary	Explain	Example	Attempt (checking for understanding)	Guided
Lesson 1 – getting to know zero					
Ask pupils make the shape of the numeral zero with their finger in the air.	Instruct the key vocabulary – zero (x3)	Introduce the pupils to zero. We are learning about the number zero today. Show pupils an empty tens frame and an empty basket (or similar) to embed the concept that there are no items there. There are no teddies in my basket. There are zero teddies in my basket. There are no counters on my tens frame. There are zero counters on my tens frame. Explain the numeral is the way we write the number. This is the numeral zero.	Point to the numeral zero on the number track. I have zero teddies. I have zero leaves. Model showing zero fingers and ask pupils to repeat this. Show different representations of the numeral zero.	Pick up some counters and ask pupils to indicate which hand has zero counters in it.	Have a range of tens frames with counters on and one with zero counters and ask pupils to identify the tens frame that has zero counters. This can be repeated with other objects.
Lesson 2 – getting to know one					
Sing *One finger, one thumb*.	Instruct the key vocabulary – one (x3)	Introduce pupils to one. We are learning about the number one today. Show one of a range of different objects (including different sized-objects) and show different arrangements of one – on a tens frame, on a dice, etc. Remind pupils that the numeral is the way we write the number. This is the numeral one.	Point to the numeral one on the number track. I have one teddy. I have one leaf. There is one dot on the dice. I can do one clap. Model taking one from a larger number of objects as well as just having one of an object. Show different representations of the numeral one.	Tell pupils to take their counters out. Then, ask them to count out one counter from their larger collection. Do one clap. Show me one finger.	Have a larger collection of objects available. Model taking one item from the larger collection and adding it to another empty container. Ask pupils to take one item each. Use the sentence stem *I have one* ___. Reteach the numeral one and show different representations of this number.

Learning Sequence: Age 4 – 5 Block 1 Counting

Part 1/2					
Connect	**Vocabulary**	**Explain**	**Example**	**Attempt** (checking for understanding)	**Guided**
Lesson 3 – getting to know two					
Sing *Two little dicky birds.*	Instruct the key vocabulary – two (x3)	Introduce pupils to two. We are learning about the number two today. Show two of the same objects (including different-sized objects) and show different arrangements of two, e.g. on a tens frame, on a dice. Revisit the fact that the numeral is the way we write the number. This is the numeral two.	Point to the numeral two on the number track. I have two teddies. I have two leaves. There are two dots on the dice. I can do two claps. Model taking two from a larger number of objects. Ask pupils to show the two little dicky birds with their fingers. Then ask them to show two little dicky birds in a different way. Show different representations of the numeral two.	Tell pupils to take their counters out. Then, ask pupils to count out two counters from their larger collection and add them to their tens frame. Do two claps. Show me two fingers.	Have a larger collection of objects available. Model taking two items from the larger collection and adding them to another empty container. Ask pupils to take two items each. Use the sentence stem *I have two* ___. Reteach the numeral two and show different representations of this number.
Lesson 4 – getting to know three					
Sing *Three currant buns.*	Instruct the key vocabulary – three (x3)	Introduce pupils to three. We are learning about the number three today. Show three of the same objects (including different-sized objects) and show different arrangements of three, e.g. on a tens frame, on a dice. Revisit the fact that the numeral is the way we write the number. This is the numeral three.	Point to the numeral three on the number track. I have three teddies. I have three leaves. There are three dots on the dice. I can do three claps. Model taking three from a larger number of objects. Show different representations of the numeral three.	Tell pupils to take their counters out. Then, ask pupils to count out three counters from their larger collection and add them to their tens frame. Do three claps. Show me three fingers.	Have a larger collection of objects available. Model taking three items from the larger collection and adding them to another empty container. Ask pupils to take three items each. Use the sentence stem *I have three* ___. Reteach the numeral three and show different representations of this number.

Learning Sequence: Age 4 – 5 Block 1 Counting

Part 1/2					
Connect	**Vocabulary**	**Explain**	**Example**	**Attempt** (checking for understanding)	**Guided**
Lesson 5 – flexible content					
The purpose of this lesson is to provide teachers with an opportunity to respond to pupil outcomes from the rest of the teaching week. This time should be used strategically to move pupils' thinking forwards. This lesson can be moved to a different position in the week to ensure it is used where and when it is needed. Although not an exhaustive list, below are some suggestions of how this time can be utilised to maximise impact. Revisit areas in which pupils would benefit from further consolidation. Respond to pupils' interests. Deepen pupils' thinking about the subject matter. Pre-teach vocabulary or background knowledge.					

Learning Sequence: Age 4 – 5 Block 1 Counting

Part 2/2

Connect	Vocabulary	Explain	Example	Attempt (checking for understanding)	Guided
Lesson 1 – zero and one					
Play a clip that shows either zero dots or one dot. Pupils say what number is shown.	Instruct the key vocabulary – more (x3) a larger or extra number or amount	Explain that one is one more than zero. Model this jump on the number track. I have no objects. One more than zero is one. I have one object.	Model having an empty tens frame. Pick up one counter and place it on the tens frame. I now have one counter on my tens frame. One more counter than zero counters is one counter.	Show me zero fingers. Show me one more finger. Point to zero on the number track and show me one more than zero.	Have a collection of empty containers available. Place one object in each container. How many objects are in each container now? Repeat with the tens frame. Show the jump on the number track.
Lesson 2 – one and two					
Play a clip that shows either one dot or two dots. Pupils say what number is shown.	Instruct the key vocabulary – jump (x3) to move	Explain that two is one more than one. Model this jump on the number track. I have one object. One more than one is two. I have two objects.	Model placing one counter on a tens frame. Pick up one more counter and place it on the tens frame. I now have two counters on my tens frame. One more counter than one counter is two counters.	Pick up one object. Can you pick up one more? How many objects do you now have? Show me on your fingers.	Have a collection of objects available. Place one object in your basket. Collect one more of those objects. How many objects are in your basket now? Repeat with the tens frame. Show the jump on the number track.

Learning Sequence: Age 4 – 5 Block 1 Counting

Part 2/2

Connect	Vocabulary	Explain	Example	Attempt (checking for understanding)	Guided
Lesson 3 – two and three					
Play a clip that shows either two or three dots. Pupils say what number is shown.	Instruct the key vocabulary – count (x3) to say numbers one after the other in order	Explain that three is one more than two. Model this jump on the number track. I have two objects. One more than two is three. I have three objects.	Model placing two counters on a tens frame. Pick up one more counter and place it on the tens frame. I now have three counters on my tens frame. One more counter than two counters is three counters.	Pick up two objects. Can you pick up one more? How many objects do you now have? Show me on your fingers.	Have a collection of objects available. Place two objects in your basket. Collect one more of those objects. How many objects are in your basket now? Repeat with the tens frame. Show the jump on the number track.
Lesson 4 – one, two and three					
Play a clip that shows either zero, one, two or three dots. Pupils say what number is shown.	Instruct the key vocabulary – count (x3) to say numbers one after the other in order	Revisit the following: • One is one more than zero. • Two is one more than one. • Three is more than two. Model each of these steps on a tens frame. Model the jumps on a number track.	Show pupils one counter. Display and say the sentence stem *How many is _____? One is one more than ____?* Continue in this pattern to three.	Show one more than zero on your tens frame. Show me one more than one on your tens frame. Show me one more than two on your tens frame.	Teacher models showing one more than zero on their tens frame. Pupils repeat this. Teacher models showing one more than one on their tens frame. Pupils repeat this. Teacher models one more than two on their tens frame. Pupil repeat this. (*My Turn, Your Turn*)

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