Autumn Block 3

It's me 1, 2, 3

White Rose
MATHS

Teacher guidance

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Key books

- *Anno's Counting Book* by Mitsumasa Anno
- *How to Count to One* by Caspar Salmon
- *Goldilocks and the Three Bears*
- *The Gingerbread Man*
- *A Squash and a Squeeze* by Julia Donaldson
- *The Three Billy Goats Gruff*

Key resources

Top tips

- Having a set of teacher resources available for children in provision will encourage them to independently demonstrate their learning.

- A great alternative to double-sided counters are dried butterbeans. Spray these on one side or decorate as minibeasts for activities in checkpoint 1

- Blank paper plates could be left out for children to design their own dot plates.

- If you do not have a 1-3 dice, you can use a standard 1-6 dice and cover the numbers 4, 5 and 6

Small steps

Step 1	Find 1, 2 and 3
Step 2	Subitise 1, 2 and 3
Step 3	Represent 1, 2 and 3
Step 4	1 more
Step 5	1 less
Step 6	Composition of 1, 2 and 3

Find 1, 2 and 3

Notes and guidance

In this small step, children will explore different representations of 1, 2 and 3. The focus is on finding the representations rather than making them at this point. Start by ensuring children can confidently say the number names 'one', 'two' and 'three' out loud. Once they can do this, they will match the verbal number names to numerals and quantities. Encourage children to count to three using objects in different arrangements by touching each object as they count. They should recognise that the final number they say is the quantity in that set.

Share stories and pictures which represent 1, 2 and 3 and point out the groups. Encourage children to find objects in provision and notice 1, 2 and 3 in the environment.

Rhymes

- *Three Blind Mice*

Books

- *Anno's Counting Book* by Mitsumasa Anno

Key questions

- How many altogether?
- How many ways can you find 1/2/3?
- Where can you see 1/2/3?

Possible sentence stems

- There is 1 _____ .
- There are 2/3 _____ .
- There are _____ altogether.
- I can see...

Links to the curriculum

- *Development Matters* – Reception
  - Count objects, actions and sounds.
  - Link the number symbol (numeral) with its cardinal number value.
- *Birth to 5 Matters* – Range 5 – Links numerals with amounts up to 5 and maybe beyond.

Find 1, 2 and 3

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Adult-led learning

Give children a range of picture cards showing different representations of 1, 2 and 3
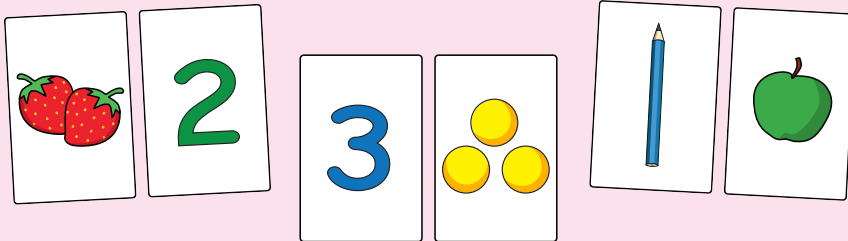
Ask the children to match and sort the cards.

Can children identify the cards which do or do not show each number?

Take children on a number hunt.

Where can they find 1, 2 and 3?

Do they count to find how many?

Allow time to sort the different objects into different groups based on their quantity.

Encourage children to create their own collections of 1, 2 and 3

Show children the illustrations from pages 1, 2 and 3 of the story *Anno's Counting Book* by Mitsumasa Anno.

Encourage them to look at the pictures and identify where they can see the different representations of 1, 2 and 3

Where do they see each representation?

How do they see it?

Give children a set of number cards.

Some cards should show 1, 2 and 3 as numerals.

The other cards should show different representations of 1, 2 and 3

Ask children to find each number.

Get them to check each other's answers.

Subitise 1, 2 and 3

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Notes and guidance

In this small step, children perceptually subitise. This form of subitising refers to instantly recognising the number of objects or items in a group without needing to count them.

Encourage children to subitise groups of 1, 2 and 3 items. This will allow them to develop an understanding of what each number looks like, and what it is made up of. Use images and stories that include groups of 1, 2 and 3 characters or objects to point out and encourage children to subitise. Dice and spinners with dots are useful in helping support children to develop their subitising skills. It is important that they see the dots or other objects in different arrangements so that they don't think a number representation such as 3 always appears in the same way.

Rhymes

- *When I Was One, I Banged My Thumb*

Books

- *How to Count to One* by Casper Salmon

Key questions

- How many can you see?

  How do you know?
- How many are there in each group?
- What can you show me?
- What can you see?

Possible sentence stems

- There are _____ dots altogether.
- There is 1 _____ .
- There are 2/3 _____ .
- I can see _____ without counting.
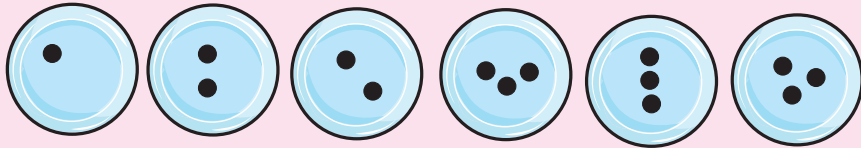- I can subitise _____

Links to the curriculum

- *Development Matters* – Reception – Subitise
- *Birth to 5 Matters* – Range 5 – Subitises one, two and three objects (without counting)

Subitise 1, 2 and 3

Adult-led learning

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

Hold up the dot plates and ask the children how many dots.

Can children show the correct number of fingers?

Ask children if they can match the numerals 1, 2 and 3 to the dot plates.

Share stories such as *How to Count to One* by Casper Salmon.

Encourage them to subitise and notice where they see 1, 2 and 3

Where can they see 1, 2 and 3 groups of objects or characters from the story?

Can they show you 1, 2 and 3?

Play a simple track game with small world creatures or characters.

Children take it in turns to roll a 1-3 dice, or a spinner, and subitise the number of dots.

They move the creature or character the corresponding number of jumps.

Who will be the first to reach the finish?

Represent 1, 2 and 3 using small objects.

Cover each amount with a bowl or cup.

Quickly reveal one group of objects and ask children how many there are.

Swap the positions around.

When you stop, can they point to the bowl with 3?

Lift the bowl and see if the children can instantly say whether they are correct.

Represent 1, 2 and 3

Notes and guidance

In this small step, children build on their learning from the earlier steps as they create their own different representations of 1, 2 and 3 using different objects. Provide opportunities for children to match their different representations to cards showing the numerals.

Encourage children to count and subitise as a way of checking their representations. Remind them to touch each object as they count, and remind them that the final number they say is the quantity of the set.

This idea can be extended further to include groups of 1, 2 and 3 sounds or movements. For example, children could use a drum to count sound beats. Alternatively they could jump or clap up to 3

Rhymes

- *Hickory Dickory Dock*

Books

- *Goldilocks and the Three Bears*

Key questions

- How many? How many now?
- How many different ways can you find 1, 2 and 3?
- How many did you count? How do you know?

Possible sentence stems

- There is 1 _____ .
- There are 2/3 _____ .
- We jumped/clapped/twirled _____ times.
- There are _____ altogether.

Links to the curriculum

- *Development Matters* – Reception
  - Count objects, actions and sounds.
  - Link the number symbol (numeral) with its cardinal number value.
- *Birth to 5 Matters* – Range 5 – Links numerals with amounts up to 5 and maybe beyond.

Represent 1, 2 and 3

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Adult-led learning

Give each child a five frame and 3 cubes or counters.

Clap twice.

Ask children to show the number of claps on their five frame.

Then, get children to come up to the front and represent either 1, 2 or 3 using sounds or actions for others to show on their five frame.

Encourage the children to help you prepare for Baby Bear's 3rd birthday.

How many cups, bowls and spoons are needed so that Mummy, Daddy and Baby Bear all have one each?

How many candles are needed on the cake?

Does it matter which object we start counting from?

Have a pile of beanbags.

Beat a drum either 1, 2 or 3 times.
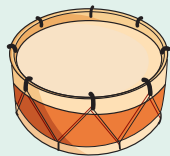
Children listen carefully and count out 1, 2 or 3 beanbags from a larger group to match the number of beats.

Place 1, 2 or 3 items into a feely bag.

Ask children to feel inside the bag and try to count how many there are without looking.

Count the items out to check.

Encourage children to have a go themselves and ask each other to count how many, changing the amounts placed in the bag each time.

1 more

Notes and guidance

In this small step, children are introduced to the concept of 1 more, still working only with the numbers 1, 2 and 3. They begin to understand that as they count, each number they say is 1 more than the previous number. Children should notice how numbers and amounts increase in value when 1 more is added.

They should recognise that the order of the numbers when counting does not change. This is the stable order principle. Use a range of representations to support this understanding including stories, songs and rhymes that include finding 1 more. Encourage children to represent the 1 more pattern as they count and use manipulatives such as cubes to show this. Support children to notice the 1 more pattern and make comparisons as they play in provision.

Rhymes

- *One Elephant Went Out to Play*

Books

- *The Gingerbread Man*

Key questions

- How many?
- How many now?
- What is 1 more than _____ ?
- What is the number after _____ ?

Possible sentence stems

- There are _____
- There are _____ altogether.
- _____ is 1 more than _____

Links to the curriculum

- *Development Matters* – Reception – Understand the 'one more than/one less than' relationship between consecutive numbers.

- *Birth to 5 Matters* – Range 5 – Beginning to recognise that each counting number is one more than the one before.

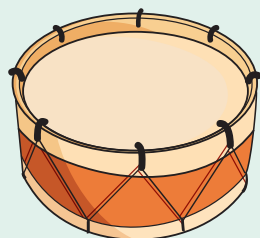# 1 more

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Adult-led learning

After reading the story *The Gingerbread Man*, support children to build the 1 more pattern by bringing in each character using images or the children themselves as characters, to introduce 1 more each time.

Extend this by building the pattern with cubes, adding 1 cube for each character.

Drum with the children and get them to copy your beats.

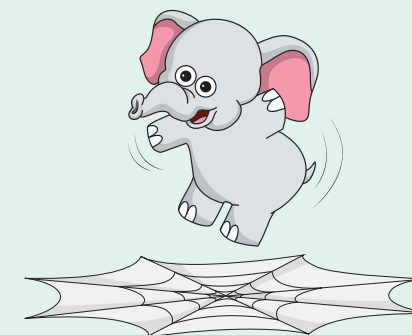Once children can copy, ask them to do 1 more beat than you with 1, 2 or 3 beats.

Model the rhyme *One Elephant Went Out to Play* with the children.

Use children and props at the front of the class to emphasise the 1 more pattern and the amount increasing.

Children can then build towers with cubes to represent the elephants.

What happens to the tower when we get to 3?

Play *What's the Time Mr Wolf?* to 3

Mr Wolf says '1 more than' 1, 2 or 3

Children then have to walk 1 more step than the number given.

1 less

Notes and guidance

In this small step, children are introduced to the concept of 1 less, still only working with the numbers 1, 2 and 3. Children begin to understand that as we count back, each number is 1 less than the number before. Children should notice that when they find 1 less, the numbers and amounts reduce because they are taking 1 away. They should recognise that the order of the numbers when counting does not change. This is the stable order principle. Use a range of representations including stories, songs and rhymes that include finding 1 less. Encourage children to represent the 1 less pattern as they count and use manipulatives such as cubes to show this. Support children to notice the 1 less pattern and make comparisons as they play in provision.

Key questions

- How many?
- How many now?
- What is 1 less than _____ ?
- What is the number before _____ ?

Possible sentence stems

- There are _____
- There are _____ altogether.
- _____ is 1 less than _____

Rhymes

- *Three Little Speckled Frogs*

Books

- *A Squash and a Squeeze* by Julia Donaldson

Links to the curriculum

- *Development Matters* – Reception – Understand the 'one more than/one less than' relationship between consecutive numbers.
- *Birth to 5 Matters* – Range 5 – Positive relationships – Emphasise the *one more, one less* pattern in rhymes and traditional tales, asking children to predict the next number.

1 less

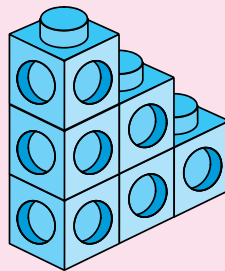White Rose MATHS

Adult-led learning

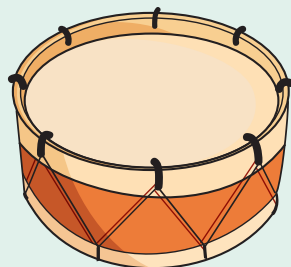Use 1 less pattern stories to model the pattern of 1 less.

Enact the story with the children removing one character at a time.

Extend this by building the pattern with cubes and then removing a cube for each character that leaves.

Drum with the children and get them to copy your beats. Once children can copy, ask them to do 1 less beat than you with 1, 2 or 3 beats.

Model the rhyme *Three Little Speckled Frogs* with the children. Use both children and props at the front of the class to emphasise the 1 less pattern and the amount decreasing. Children can then build towers with cubes to represent the frogs and when they are jumping into the pool.
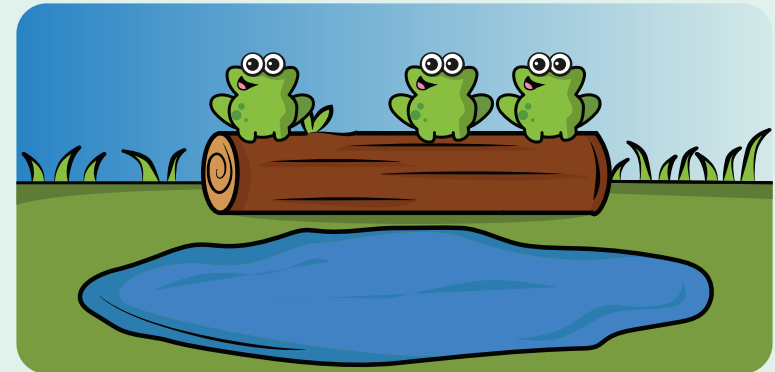
Task the children with dropping pebbles into a bucket or into a cup. Encourage them to count the sounds. Ask them to predict how many pebbles there would be if you took one out. Count together to check. This can also be used for reinforcing 1 more.

Composition of 1, 2 and 3

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Notes and guidance

In this small step, children are introduced to the idea that all numbers are made up of smaller numbers, and these are referred to as the parts of the number. Learning to see a whole number and its parts at the same time is a key development in children's number understanding.

Give children practical opportunities to explore a range of ways to partition a whole number, so they can find different parts which make the same whole. Then show children how to explore the different ways that numbers can be partitioned into more than two parts. For example, 3 can be composed of 1 and 1 and 1

Although the focus of this step is on numbers to 3, children may choose to notice and explore the composition of greater numbers in their play.

Rhymes

- *Three Little Ducks*

Books

- *The Three Billy Goats Gruff*

Key questions

- How many different ways can you make 1/2/3?
- How can you show 2/3 in a different way?
- How many did you count? How do you know?
- What number have I made?

  Can you make the same number in a different way?

Possible sentence stems

- I can see _____ is made up of _____ and _____
- I can see _____ is made up of _____, _____ and _____
- There is _____ here and _____ there so there must be _____ altogether.
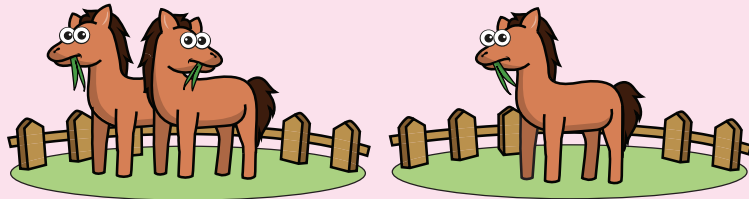
Links to the curriculum

- *Development Matters* – Reception – Explore the composition of numbers to 10
- *Birth to 5 Matters* – Range 5 – Separates a group of three or four objects in different ways, beginning to recognise that the total is the same.

Composition of 1, 2 and 3

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Adult-led learning

Set up a small world scene with 2 fields or pens.

Ask children how many animals could go in each field.

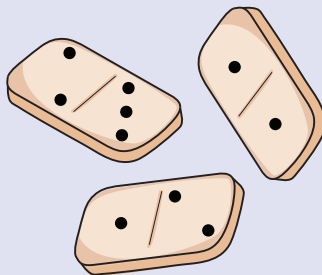Can they find different ways to do this?

This could also be linked to the story *The Three Billy Goats Gruff*.

Provide a set of dominoes.

Ask children to find all the dominoes with 1, 2 or 3 spots.
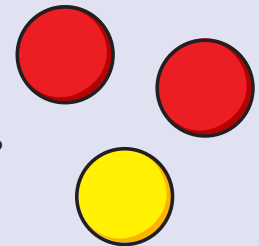
Are they all the same?

How many dominoes can they find with 1, 2 or 3 spots on one side?

Ask children to count out 3 double-sided counters, shake them in their hand and drop them down.

How many are red? How many are yellow?

Can they get all red or all yellow?

With children, count out 1, 2 or 3 items and hide them.

Ask children to use their fingers to show how many are hidden.
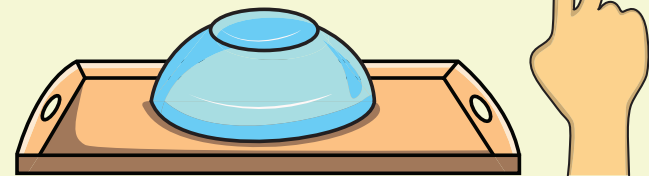
Ask children to watch as you add 1 more item to the hidden group.

How many are hidden now? What if you take one out?

Continuous provision

Support children to make their own representation cards.

Provide them with a piece of paper and allow them to paint, draw or use collage materials to represent the numbers 1, 2 and 3
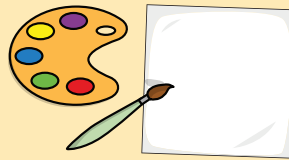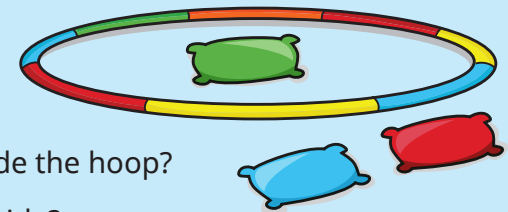
Children can create their own dots, dice patterns, or create a picture of something that interests them.

These can then be used to play games such as 'Snap'.

Place a hoop on the ground.

Ask the children to collect 3 beanbags and to take turns to throw them into the hoop.

How many land inside the hoop?

How many land outside?

Provide an easel or clipboard so that they can record their own scores.

Make dough. Use a recipe that involves measuring using 1, 2 or 3 cups.

Ask children to measure out the ingredients and count the cups.

2 cups of plain flour

1 cup of salt

2 cups of water

2 tablespoons of oil

1 teaspoon of cream of tartar

3 drops of food colouring

Provide a collection of various loose parts or natural objects and some small pots labelled 1, 2 and 3 for children to fill.
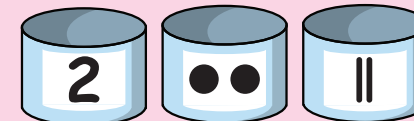
Include some unlabelled pots and encourage children to make their own labels to show how many they put inside.

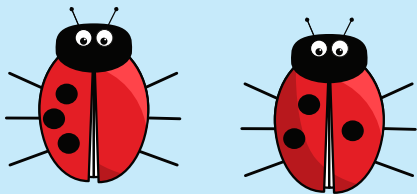# End of block checkpoint

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Checkpoint 1

Set up a tuff tray with an assortment of wood, autumn leaves and seeds.

Hide several ladybirds with 1, 2 or 3 spots.

How many spots does the ladybird have?

Do all the ladybirds with 3 spots look the same?

Can you find a ladybird with 1 less or 1 more spot than mine?
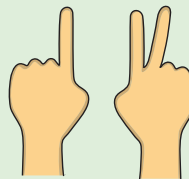
Checkpoint 2

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?

Checkpoint 3

Set up a small world 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.

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