Reception

End of block checkpoints

White Rose MATHS

Autumn

End of block checkpoints

Reception

White Rose MATHS

End of block checkpoint

Checkpoint 1

The box that the buttons are stored in has been dropped.

There are buttons everywhere.

Ask children to sort the buttons and put them back in the box in sets.

Observe children as they sort the buttons.

Can they explain how they have sorted them?

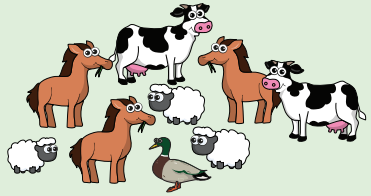
Can they find another way to sort them?

Checkpoint 2

When playing alongside children in the small world area, can children make collections and say why they belong to a set?

For example, "This set are all cows" or "This set are all horses".

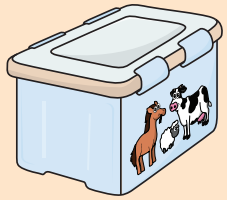
Can children say which set has more?



Checkpoint 3

The daily routine of tidy-up time is a great opportunity to observe children and notice who can match and sort effectively.

Are children able to use the pictures and shadowing on the storage units to ensure that the resources are put back in the correct area of the classroom, shelf or box?



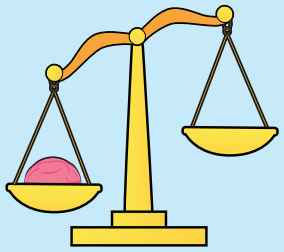
End of block checkpoint

Checkpoint 1

Children use simple language of comparison such as 'size', 'mass' and 'capacity' when playing.

Observe children as they play in continuous provision. The dough, water and construction areas provide a great opportunity to support this.

Do they use the language appropriately?



Checkpoint 2

Set up a repeating AB pattern that has three units of repeat.

Provide extra resources for children to choose from that are both in the pattern and not.

Ask children to complete the pattern.

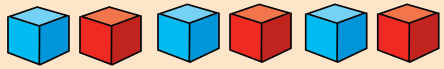
Are they able to copy and complete the simple pattern?

Checkpoint 3

Provide children with objects and loose parts to make simple patterns.

Ask children to use the resources independently to make an AB pattern.

Children may need to be given just two different types of objects, for example, blue and red cubes.



End of block checkpoint

Checkpoint 1

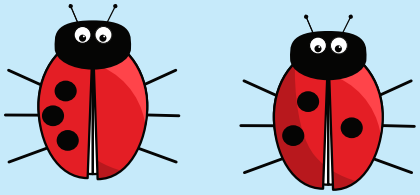
Set up a tuff tray with an assortment of wood, autumn leaves and seeds.

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

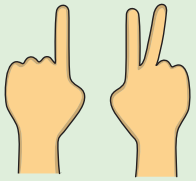
Play 'Bunny Ears'.

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.

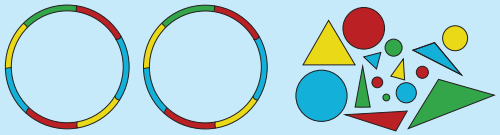
Encourage the children to notice how many goats are on each side of the bridge as they play.

End of block checkpoint

Checkpoint 1

Hide different-sized circles and triangles around the classroom and outdoor area.

Place two hoops on the carpet.



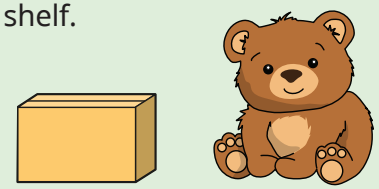
Can children identify the triangles and circles and sort the shapes by placing them into the hoops?

Are they able to explain why they have placed each shape in the chosen hoop?

Checkpoint 2

Place a toy, such as a bear, on top of your head. Where is the bear?

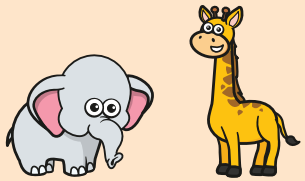
Position the bear in different areas of the classroom, for example, under the chair, next to the box and on the shelf.



Are children able to identify where the bear is positioned in relation to other objects?

Checkpoint 3

Set up a small world area related to children's interests. While playing, check that children are able to follow and use the language related to position, for example, "The cow is walking around the pond", or "The elephant is standing next to the giraffe".

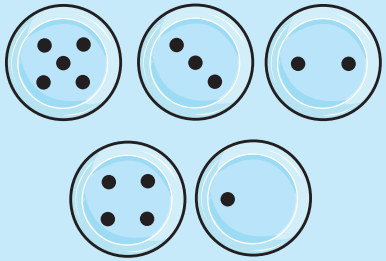


Give children different instructions to follow, and encourage them to give you instructions.

End of block checkpoint

Checkpoint 1

Show children a range of dot plates with different arrangements of 1, 2, 3, 4 and 5 dots.



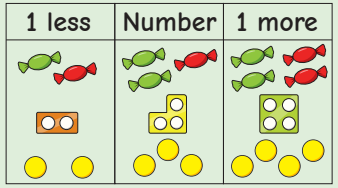
Are they able to subitise how many they can see and represent the amount on their fingers?

Is there more than one way to show the number using both their hands?

Checkpoint 2

Provide digit cards labelled from 1–5 and a range of objects to count with.

Prompt children to pick a digit card and represent the amount with objects.

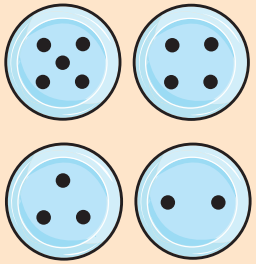


Are they able to find 1 more and 1 less than the number using different representations?

Checkpoint 3

Lay a selection of dot plates showing 1–5 on the floor.

Show children a digit card from 1 to 5. Prompt them to take it in turns to find dot plates that make that number.

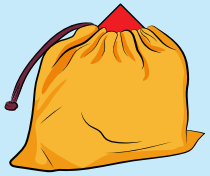


End of block checkpoint

Checkpoint 1

Hide a range of flat 2-D shapes in a feely bag or underneath a cloth.

Partially reveal a shape, encouraging children to say what different shapes it could be or could not be and why.



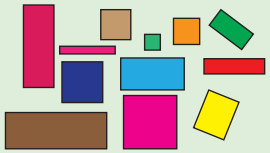
Pull the shape out further.
Do they still think it could be the same shape?

What has changed about the shape? What is the same?

Checkpoint 2

Provide children with a selection of paper squares and rectangles in various sizes and colours.

Prompt them to combine two shapes to make a rectangle or a square.



Are they able to combine three or four shapes?

Which ways will work?

Which ways will not work?

Checkpoint 3

Label a daytime and night-time area outside.

Call out an activity familiar to children and ask them to run to the daytime or night-time area. For example, stars appear, we put on our pyjamas, we get dressed, we eat lunch or owls wake up.

Encourage children to suggest some of their own daytime and night-time activities.

Spring

End of block checkpoints

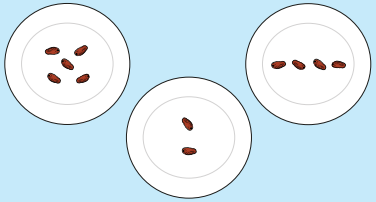
Reception

White Rose MATHS

End of block checkpoint

Checkpoint 1

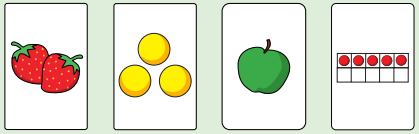
During snack time, ask children to count out a given quantity (for example, five raisins). Prompt them to use the snack to make different arrangements. Then explore what happens if they eat different amounts.



How many are left if they eat them all? How many would they have if they were given one more?

Checkpoint 2

Place dot plates or picture cards representing 0–5 on the floor.

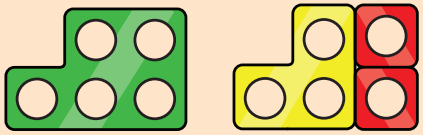


Hold up a numeral and prompt children to use a swatter to swat the correct dot plate or picture card. Encourage children to take it in turns to lead the game.

Checkpoint 3

Give children a range of 1 to 5 number shapes.

Encourage them to use two smaller numbers to make a whole. Children check by placing the two parts on top of the whole number. Is there another way they can make the number?



Can children show a number in three parts?

End of block checkpoint

Checkpoint 1

Can children use the language 'heavy' and 'light' to explore and compare mass when playing?

Observe children as they play in provision. The dough and construction areas provide great opportunities to support this.

Are children able to describe what they notice when they place objects on a balance scale?

Are they able to find a balance?

Checkpoint 2

In the snack area, provide a variety of jugs of milk and some beakers. Encourage children to take drink orders and make these for other children in the class.

Are they able to use the language 'full', 'empty', 'nearly full' and 'nearly empty'?

Checkpoint 3

Observe children in continuous provision as they explore and compare capacity. The sand, water and mud kitchen provide great opportunities to support these skills.

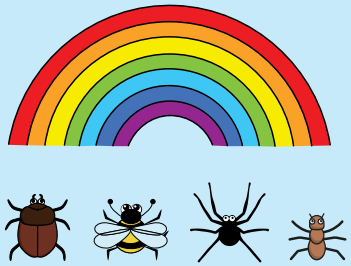
Encourage children to explore how much water or sand (or how many objects) different containers hold.

Can children predict how many of one container it takes to fill another? Can they explore which containers hold more and explain why?

End of block checkpoint

Checkpoint 1

Provide images of rainbows, insects and spiders to inspire children to recreate these in mark-making and art provision.

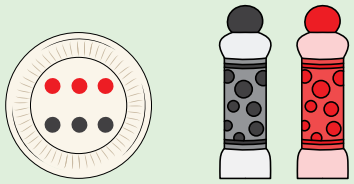


Can children represent 6, 7 and 8 and talk about their creations accurately? This could be used for looking at composition and doubling on ladybirds and butterflies.

Checkpoint 2

Provide children with paper plates and two different-coloured dabbers.

Prompt them to create their own dot plates for the numbers 0–8, using the two colours to show two parts within the whole.



Can children talk about the parts and the whole?

Checkpoint 3

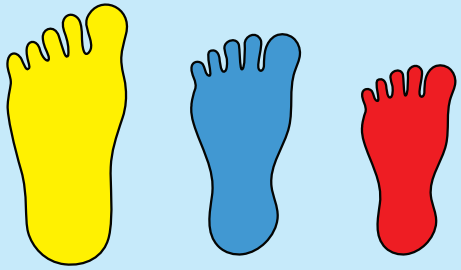
Provide ladybirds with up to 8 spots in different arrangements.

Ask children to choose one ladybird. How many spots does it have altogether? Prompt children to find a ladybird with the same number of spots but in a different arrangement. Can they find a ladybird with 1 less spot and a ladybird with 1 more spot?

End of block checkpoint

Checkpoint 1

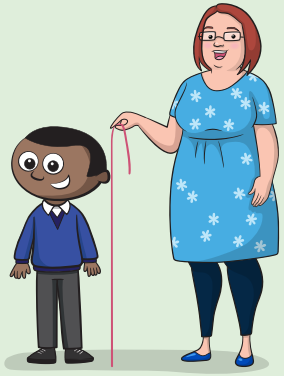
Support each child to make their own footprint. Are they able to find items which are longer than, shorter than or the same size as their foot?



Are children able to use the language of length to compare and order the footprints?

Checkpoint 2

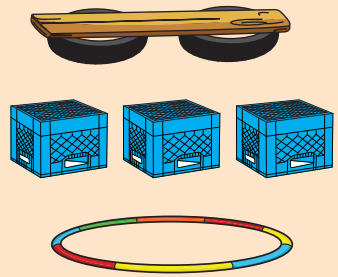
Measure the height of some children using string. Choose one of the pieces of string and play a game of 'Who could it be?'.



Are children able to use the language of height to talk about who is the same height as the piece of string?

Checkpoint 3

Provide children with a range of picture cards showing different obstacles. Encourage children to sequence the pictures to make a set of instructions for a partner using the language 'first', 'then', 'next', 'after', and 'finally'.



Children follow the instructions in the correct order to complete the obstacle course.

End of block checkpoint

Checkpoint 1

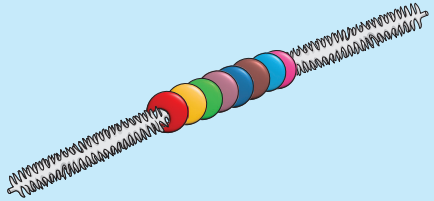
Make a caterpillar by threading up to 10 beads onto a pipe cleaner.

Are children able to make caterpillars with more and fewer beads than you?

Which caterpillar is the longest?

Which is the shortest?

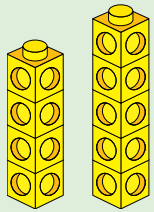
Can we arrange the caterpillars in order?



Checkpoint 2

Provide children with 9 cubes. Prompt them to work in pairs where one person holds the 9 cubes behind their back and breaks them into two parts. They reveal just one part.

The other child in the pair has to work out how many cubes are hiding behind their partner's back.

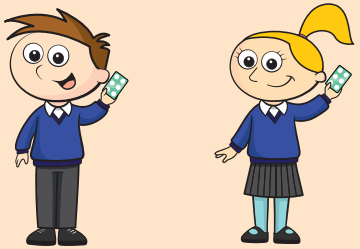


This activity can be varied by giving children 10 cubes or by asking children to snap the cubes into three parts.

Checkpoint 3

Hand out a range of 1 to 10 number shapes so that each child has one shape.

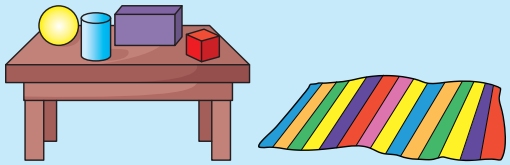
Ask questions and give instructions such as, "Stand up if you have an odd number." Can you find someone with a number shape that is double your number? Can you find someone who has an even number shape or someone who has an odd number shape? Encourage children to talk about what they notice.



End of block checkpoint

Checkpoint 1

Show children a range of 3-D shapes of various sizes and colours. Cover the shapes with a piece of material, ask children to close their eyes and remove one of the shapes.



Lift off the material and encourage children to identify which shape has been removed. Ask them to explain how they know by referring to the properties of the shapes.

Checkpoint 2

Show children a pattern that uses a more complex structure, such as ABCD, AAB, ABB or ABBA. Can they identify the pattern?

Can they copy and then continue your pattern?

Provide children with the resources, such as pattern blocks, for them to use to copy and continue the patterns.

Checkpoint 3

Provide children with objects and loose parts to make more complex patterns.

Ask children to use the resources independently to make an ABCD, AABB, AAB, ABB or ABBA pattern. Encourage them to talk about the pattern and its structure.

Summer

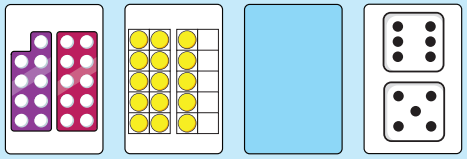
End of block checkpoints

Reception

End of block checkpoint

Checkpoint 1

Provide children with a selection of picture cards from 11 to 20 and ask them to select four each. Hold up numeral cards one by one. If children have the matching picture card, they can turn it over.



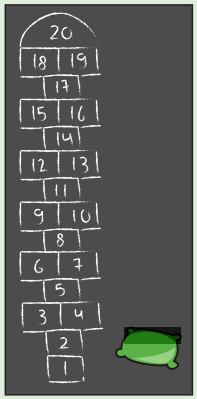
Can children recognise what number is represented on each picture card?

Checkpoint 2

Play hopscotch to 20

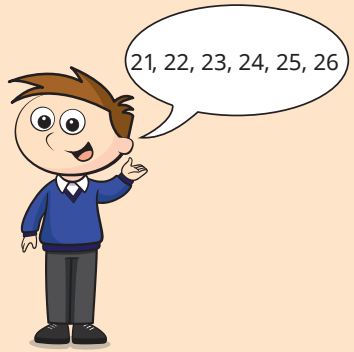
Children throw a beanbag towards the hopscotch.

Can they identify the number their beanbag landed on? Can they count on as they move up the hopscotch and then count back as they return?



Checkpoint 3

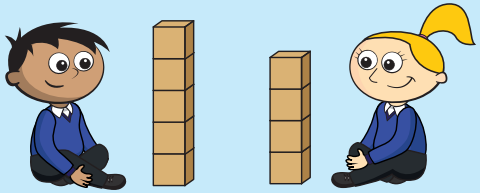
Select a number to begin counting from and ask children to choose whether to count on or back. Can children maintain the stable order when counting beyond 20?



End of block checkpoint

Checkpoint 1

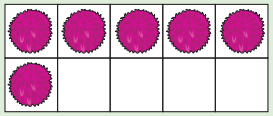
Provide children with a 1 to 3 dice and cubes. Children take it in turns to collect 1, 2 or 3 cubes to add to their tower.



Can children say how many were added? How many cubes do they have now? How tall can they build their towers before they topple over?

Checkpoint 2

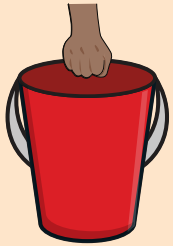
Play a game of 'pass it on' in small groups. Each child starts with 6 loose parts. They roll a 1 to 3 dice and pass the corresponding number of objects to the child on their left. The winner is the first child to give away all their objects.



Can children say how many they have taken away? How many do they have left?

Checkpoint 3

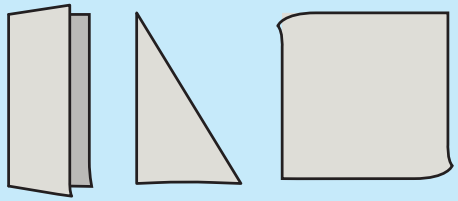
Provide children with a 5 to 10 dice, beanbags and a bucket. Encourage one child to roll the dice and place the corresponding number of beanbags into the bucket. Prompt another child to take some of the beanbags out of the bucket without the group seeing how many. Tip the remaining beanbags out of the bucket. How many are left now? Can children work out how many beanbags must have been taken?



End of block checkpoint

Checkpoint 1

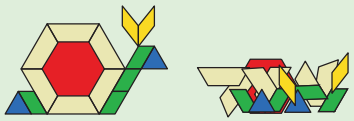
Provide children with pre-cut paper shapes that they can fold to make new shapes. In pairs, one child folds a shape and their partner has to predict what the new shape will be after folding.



Can children correctly predict what new shapes will be made once the paper is folded?

Checkpoint 2

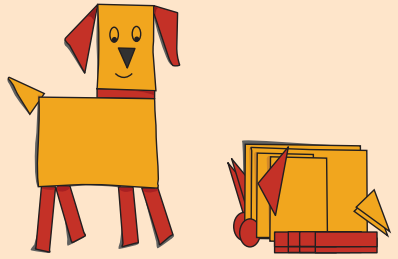
Encourage children to complete pattern block templates. These templates could be coloured, or to extend this further, provide children with black and white templates where they can see only the outlines of the shapes.



Can they select the correct shapes and rotate them to fit on the template?

Checkpoint 3

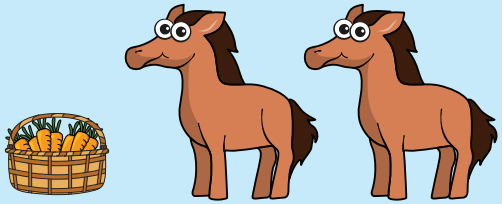
Provide children with a range of pre-cut gummed shapes or felt shapes to make their own shape pictures with. Can they talk about why they are choosing each shape and what it is going to represent on their shape picture?



End of block checkpoint

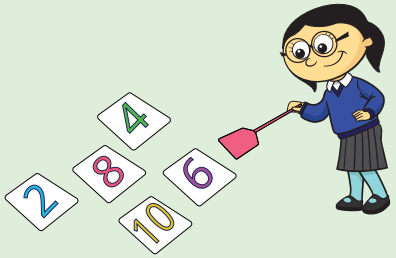
Checkpoint 1

In the small-world area, encourage children to share objects equally between two or more groups. For example, can they share the carrots between 2 horses? Can they share the sheep between 3 fields? How many are there in each group? Are the groups equal? Do they have an odd number?



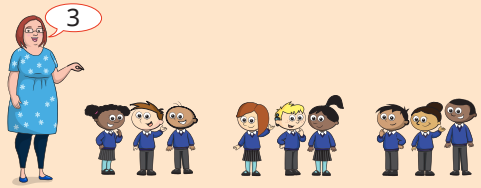
Checkpoint 2

Spread out numeral cards 2, 4, 6, 8 and 10 on the floor or around the classroom. Shout out a number and prompt children to double that number. Encourage them to race to swat the correct numeral with a swatter.



Checkpoint 3

Shout out a number and prompt children to get into groups of that number.



How many groups have we made? Are the groups equal? Is anyone not in a group?

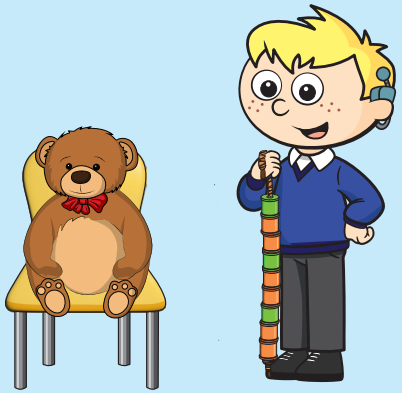
Repeat this with different numbers of children and different numbers in each group. Is your group odd or even?

End of block checkpoint

Checkpoint 1

Place a bear or a puppet on a chair in a focal point of the classroom.

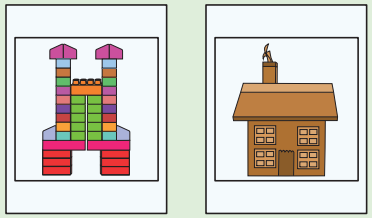
Prompt children to create their own pattern and go to tell the bear on the chair about their pattern and what the rule is.



Checkpoint 2

Encourage children to build models and then draw and explain what they have built. Photographs of these can be taken and placed in the construction area for other children to see, discuss and recreate.

Can children build, visualise and map out their thinking?



Checkpoint 3

Create maps of places that children are familiar with on tuff trays. Prompt children to add different objects, such as cars, people and buildings. Can they describe a journey through the map?

End of block checkpoint

Checkpoint 1

After reading stories such as *You Can't Take an Elephant on the Bus* by Patricia Cleveland-Peck, encourage children to make their own vehicles for toy or small-world animals by planning out what they will need and using simple, non-standard units of measure.

Encourage children to test their vehicles and explain their designs. Why have they worked or not worked?

Checkpoint 2

Provide floor spots with numerals 0 to 10 displayed on them and a 6-sided dice with the words 'double', 'one more', 'one less', 'even', 'equal', and 'odd'.

Children stand on a number and roll the dice. Can children move to a floor spot that matches the instruction on the dice?

Checkpoint 3

In pairs, child 1 covers their eyes while child 2 selects two numeral cards and collects the corresponding number of cubes for each card.

Child 2 then combines all the cubes and turns over one of the numeral cards. Child 1 opens their eyes. Can they work out what numeral is on the hidden card using the cubes to help them? Children then swap roles.

Observe children as they play. Can they find the hidden number without counting out all the cubes?