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EYFS Pre-shape, space and measure Policy Progression Grids

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Pattern		
Coverage	**Opportunities**	**Representations**
Continuing an AB pattern Children need the opportunity to see a pattern, to talk about what they can see, and to continue a pattern. At first, they will do this one item at a time, e.g. red cube, blue cube, red cube…verbalising the pattern helps. Children may then be asked to say what they would add next to continue it.	• Building towers or trains of different-coloured cubes (continuing patterns horizontally and vertically) • Extending patterns using a wide range of identical objects in different colours, e.g. beads; small plastic toys such as bears, dinosaurs, vehicles. Try to avoid interlocking cubes or bead-threading so children can focus on the pattern rather than their coordination skills.	• Counters • Construction blocks • Modelled examples of pattern ideas • Compare bears • Dot patterns (bingo dobbers) • Loose parts • Patterns in different directions- vertically, horizontally, diagonally
Copying a AB pattern Copying a pattern can be difficult for children if they have to keep comparing item by item. AB patterns are easiest – when presented to children, these should contain several repeats, to ensure that the pattern unit is evident. Discuss the nature of the pattern: how has the pattern been made? Patterns can have a range of features such as varying objects, size or orientation.	• Accessing a range of patterns to copy. For example, using the plastic bears: big, small, big, small, big… footwear: shoe, welly, shoe, welly..., actions and sounds: jump, twirl, jump, twirl, jump… or clap, stamp, clap, stamp… • Collecting things in the outdoors environment: leaf, stick, leaf, stick…	• Objects in the environment • Musical instruments • Loose parts • Constructions blocks • Compare bears • Patterns in different directions- vertically, horizontally, diagonally
Making their own AB pattern As children progress from continuing to copying patterns, they can be challenged to change the sample pattern or to create their own. A range of objects can be provided for children to decide	• Challenging the child to change one element of the pattern they have created, e.g. 'Can you change the red bear to a blue bear? What is the pattern now?'	• Small world objects • Construction • Loose parts • Patterns in different directions- vertically, horizontally, diagonally

what the features of the pattern are going to be. Children may find it easier to make a pattern with • challenging the child to change one element of the pattern they have created, e.g. 'Can you change the red bear to a blue bear? What is the pattern now?' • • ensuring that there are numerous opportunities to create patterns – e.g. in the outdoors, using natural materials such as sticks, leaves, stones, pine cones; in craft activities, using stamping, sticking, printing; with musical instruments, using sounds such as drums, shakers, triangles, etc. • • working collaboratively with a friend to take turns to create a pattern, e.g. one claps, one stamps, or one gets the red bear, one gets the yellow bear, etc. • • challenging a friend to continue or copy their pattern. the same colours as the original but with different objects. For example, copying a red–blue cube pattern with red and blue dinosaurs is easier than with yellow and green cubes. Patterns can involve different aspects and modes such as sounds, words or actions: some children will need suggestions, while others will think of their own. As children construct the patterns, ensure they have opportunities to: Repeat the unit at least three times (big bear, small bear; big bear, small bear; big bear, small	• Ensuring that there are numerous opportunities to create patterns – e.g. in the outdoors, using natural materials such as sticks, leaves, stones, pine cones; in craft activities, using stamping, sticking, printing; with musical instruments, using sounds such as drums, shakers, triangles, etc. • Working collaboratively with a friend to take turns to create a pattern, e.g. one claps, one stamps, or one gets the red bear, one gets the yellow bear, etc. • Challenging a friend to continue or copy their pattern.	

bear). This is to ensure the child can sustain the pattern Make a specified pattern, e.g. 'Can you do a green, yellow pattern?' This is to ensure the child can apply their pattern understanding Choose their own rule, e.g. 'I am going to make a big, small pattern.' This is to ensure the child can identify pattern features/rules/criteria Choose their own actions or sounds, e.g. clap, stamp… This is to help children generalise the idea of pattern.		
Spotting an error in AB pattern When working with AB patterns, children also need the opportunities to spot and correct errors. It is easiest to spot an extra item, then a missing item, then items swapped around. When presented with an AB pattern, children can be encouraged to describe it to make sure it is right. Then, to detect an error, they can track the pattern from the start. To begin with, children may know there is something wrong, but might not be able to say what the error is. They then might take several attempts to correct it, before being able to repair the error in one move.	• Presenting patterns with deliberate errors, including extra, missing and swapped items, e.g. red cube, blue cube, red cube, blue cube, red cube, red cube, blue cube – identifying there is an extra item and fixing it by removing the extra red cube, putting in an extra blue cube, or swapping the final cubes • Asking the children to make a pattern with a deliberate mistake and challenging a friend to spot it.	• Examples of odd one out- vertically and horizontally • Cubes • Small world animals/objects • Loose parts
Identifying the unit of repeat The key aspect of understanding patterns is identifying the smallest part of the pattern, or the 'unit of repeat' You can draw children's attention to this when building patterns by picking up a unit at a time, e.g. a blue block and a red block together, and describing this as a 'red-blue pattern', rather than a red, blue, red, blue, red,	• Highlight within a pattern what the unit of repeat is and ask the children to describe it. At this point for pattern novices (children who aren't as experienced as others), it would be good to do this with physical objects so that the unit of repeat can be moved to show how it repeats.	• Cubes • Construction blocks • Dot patterns- *bingo dobbers* • Stamps •

blue pattern. Children can also be asked to show the pattern unit which repeats, e.g. show two blocks, a red and a blue	Patterns that are printed, stamped or stuck down, and therefore cannot be corrected, are more appropriate for more confident pattern makers.	
Continuing a ABC pattern Once children are secure with alternating patterns, they can tackle more complex pattern structures: ABC has more items in the unit of repeat, but all different, e.g. red, blue, yellow; red, blue, yellow… ABB is more challenging because they have two items within the same unit of repeat, e.g. red, blue, blue; red, blue, blue… ABBC is more complex because it is longer, with three items, but also includes items which are the same, e.g. red, blue, blue, yellow; red, blue, blue, yellow… AABB may be simpler as there are just two items, both repeated, e.g. red, red, blue, blue; red, red, blue, blue… Children who have only experienced alternating ABC patterns may state that patterns such as ABBC are not patterns, as you cannot have two of the same colour next to each other. This highlights that children need lots of experience of a range of pattern types, so early misconceptions do not form about what makes a pattern. When working on continuing these patterns, children should be encouraged to focus on the unit of repeat, e.g. 'I see you are making a red, blue, green pattern'.	• Building towers or trains of different-coloured cubes (continuing patterns horizontally and vertically) • Extending patterns using a wide range of identical objects in different colours, e.g. beads; small plastic toys such as bears, dinosaurs and vehicles. • Try to avoid using interlocking cubes or bead-threading, so children can focus on the pattern they are constructing rather than on their coordination skills.	• Counters • Construction blocks • Modelled examples of pattern ideas • Compare bears • Dot patterns (bingo dobbers) • Loose parts • Patterns in different directions- vertically, horizontally, diagonally

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Ensure that children repeat the pattern at least three times and are encouraged to describe and say how they would continue.		
Continue a pattern which ends mid unit As children work on patterns involving more elements, they can be challenged to continue patterns which do not end after a whole unit of repeat. Provide experiences where the given pattern stops mid-unit.	• Providing a range of patterns – physical and on cards – that children can continue • Ensuring that the patterns offered have different structures and end after a complete or a partial unit.	• Peg boards • Double sided counters • Food • Loose parts
Make their own ABB, ABBC As with the first stages of making an AB pattern, the same range of experiences needs to be provided when the unit of repeat extends. A range of objects can be provided for children to decide what the features of the pattern are going to be. Patterns may include varied items and modes, such as sounds and actions. Ensure that children have opportunities to: • • repeat the unit at least three times (big bear, small bear, medium bear; big bear, small bear, medium bear; big bear, small bear, medium bear). This is to ensure the pattern can be sustained over a longer duration • • make a specified pattern, e.g. 'Can you do a green, yellow, blue pattern?' This is to ensure the child can apply their pattern understanding • • choose their own rule, e.g. 'I am going to make a big, small, small pattern.' This is to ensure the child can identify pattern features/rules/criteria	• Utilising a range of items in the environment to create patterns such as interlocking cubes and toys, e.g. links, elephants, camels • Exploring and creating patterns on peg boards, with fruit (e.g. fruit kebabs), musical instruments, movements and dance sequences.	• Counters • Construction blocks • Modelled examples of pattern ideas • Compare bears • Dot patterns (bingo dobbers) • Loose parts Patterns in different directions- vertically, horizontally, diagonally

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• • choose their own actions or sounds, e.g. clap, stamp, twirl… This is to support children in generalising pattern structures.		
Spotting an error in an ABB pattern When working with ABB patterns, children also need the opportunities to spot and correct errors. It is easiest to spot an extra item, then a missing item, then items swapped around. When presented with an ABB pattern, children can be encouraged to describe it to make sure it is right. Then, to detect an error, they can track the pattern from the start. To begin with, children may know there is something wrong, but might not be able to say what the error is. They then might take several attempts to correct it, before being able to repair the error in one move.	• Including the following phrasing in discussion and dialogue: 'This is a red blue pattern; this/that; I call it an A (one of these) then a B (one of those).' • Constructing patterns with actions and developing symbols to show the pattern and to provide 'instructions' for someone else to follow the pattern • Inviting friends to copy the pattern from the symbols.	• Modelled sentences, oral rehearsing • Construction objects • Examples of odd one out- vertically and horizontally • Cubes • Small world animals/objects • Loose parts
Symbolising the unit structure As children become more experienced with pattern-continuing, -extending and -creating, encourage them to record the patterns that they make. Initially this might be straightforward representations, but over time these recordings may become more iconic, e.g. a red dot representing the red dinosaur, a squiggle or the letter R for red dinosaur. As this progresses, encourage the children to symbolise their patterns in a range of ways, and to use these symbols to continue the pattern to demonstrate their understanding of the pattern. Children may, with adult direction, pick up on the coding of patterns as AB, ABB, ABBC, etc. One additional level of challenge is to create symbols for	• Including the following phrasing in discussion and dialogue: 'This is a red blue pattern; this/that; I call it an A (one of these) then a B (one of those).' • Constructing patterns with actions and developing symbols to show the pattern and to provide 'instructions' for someone else to follow the pattern • Inviting friends to copy the pattern from the symbols.	• Modelled sentences, oral rehearsing • Construction objects • Examples of odd one out- vertically and horizontally • Cubes • Small world animals/objects • Loose parts

movement/sound patterns, as the children need to construct a symbol with less concrete/visual support.		
Generalising structures to another context As children gain experience of symbolising patterns, they develop their experience of pattern structure. As they identify the unit of repeat and express it, they will be able to use this knowledge to create a pattern in a different medium, which follows the same structure. You may ask them to describe the pattern, what comes next, what the rule is for their pattern, etc. If a child can do this confidently, they could be asked to recreate the same pattern rule with different objects. 'Can you use the nature basket to create a pattern with the same rule?' The child would need to recognise they need three different items, one of which is duplicated. They may say they will use a twig instead of the circle, a leaf instead of the square, a conker instead of the triangle.	• Providing a range of experiences where children can create a pattern using a coding structure • Ensuring children can follow the patterns they have coded.	 

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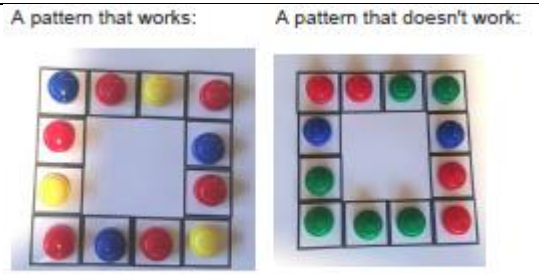
Making a pattern which repeats round in a circle As children become more experienced with the structures of patterns, they can investigate whether patterns can continue indefinitely in a circle. Linking elephants, camels or making a necklace can provoke discussion about this. You then might lead discussions about whether the pattern works and how you can tell. If it doesn't work, can children explain why, and correct it so it does? Circles allow children to adjust the circle size, so they can add or take out items.	• Making circular patterns such as necklaces, circles of linking elephants or camels • Using pre-given circles to create a border, such as on or around a paper plate • Exploring which patterns work, which don't, and why • Offering a unit of the pattern and asking the child if they can include it in their pattern • Making patterns around rectangular or other shaped frames.	
Making a pattern with a fixed number of spaces This is where the children explore creating a pattern around a given space. In these sorts of activities, children have the additional challenge of recognising if their pattern can 'work' – fit into the given space. It is useful to include indoor and outdoor spaces, e.g. creating an outdoor reading area and defining it with a border of carpet tiles. Children can create a pattern on the carpet tiles with cubes to see if their pattern works, e.g. one coloured cube per tile.	• Creating borders around defined spaces in the learning environment, i.e. a garden for the teddy bears, an outdoor reading area, etc. • Encouraging children to predict if the pattern could 'keep going', voting on this and discussing their thoughts and reasons with a partner.	 When exploring if a pattern works or not, draw attention to the number of spaces and the size of the unit of repeat.

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Measures		
Coverage	Opportunities	Representations
Recognising attributes In this first stage, children are able to recognise the specific attributes of (for example) length – that a stick is long; adults are tall. Their initial recognition may be a descriptor and over-applied (all straight things are long, and if it is not straight it cannot be long; all adults are tall). Children may use gestures or words to start to compare amounts of continuous quantities (length, capacity, weight), pointing to items that are big, tall, full or heavy. Children learn this vocabulary from the adults around them. Adults can seek opportunities to extend and refine conversations about things that are long, tall, high, heavy, full, etc. rather than just 'big'. At this point children may not be using comparative language such as, 'You are taller than me.'	• Ensuring adults model language which highlights the specific attribute that is the focus of attention • Dough modelling, which can provide a good opportunity to discuss the length of snakes, or the weight of different-sized lumps • Water and sand-play, which can provide lots of opportunities to highlight capacity.	• Playdough • Stamps • Tools for the playdough • Jugs in different sizes, shapes • Tubes and pipes • Funnels for pouring • Pipettes • Syringes • Bottles and cups
Comparing continuous amounts of quantities Children can find something that is longer/shorter or heavier/lighter than a given reference item. They will utilise strategies such as direct comparison, e.g. placing objects side by side to determine which is longer. Children compare sizes, lengths, weights and capacities verbally and begin to use more specific terms, such as 'taller than', 'heavier than', 'lighter than', and 'holds more than', as well as more general	• Encouraging children to compare different attributes in everyday situations: 'I wonder who has the longest snake?' 'I wonder whose pot will hold the most water?' 'I wonder which ball is the heaviest?' • Cutting a piece of ribbon as long as a child's arm and encouraging them to find things in the environment that are longer, shorter or the same length	• Balancing scales • Cubes • 1g weights • Weighing scales • String • Different lengths of material • Non-examples/ odd one out • Large balancing scales

comparative phrases, such as ‘not enough’, ‘too much’, and ‘a lot more’. When comparing lengths directly, children need to ensure that they align the starting points, and compare like-for-like, e.g. straightening skipping ropes before comparing lengths. When comparing capacities directly, children can pour from one container to another to find which holds more, or find one that is the same. However, children may conclude that if one container overflows that must mean ‘bigger’. Ensure that children have opportunities to see a jug of coloured water poured into a range of container shapes. Ask: ‘What do you think will happen if we pour this tall thin jugful into this short fat dish?’ Comparing weight can be tricky to conceptualise. One way is to identify that greater mass is shown by a greater downward pull. Ask children to hold a carrier bag; encourage them to notice it feels as though their hand is being pulled down when something heavy is put in it. Place a carrier bag in each hand and identify which one is heavier, by discussing which arm feels more pulled down. Show this using a simple spring balance or a box attached to elastic bands; identify that the elastic is being stretched by being pulled down, just like our arms. Explore the link to the balance scales to show that the heavier side goes down. If possible, exemplify this with a see-saw.	• Focusing on asking for specific things according to their attributes. For example: 'Please can you pass me a ... that is ... than this one?' • wWen comparing directly, finding the odd one out, by providing a varied range of container shapes all containing the same amount of liquid except for one. 'Which one do you think is the odd one out? Why? How will we check? Were we right?' • Posing see-saw problems, relating to weight: ‘What can we do to make this side of the see-saw go down?’ • using a simple spring balance to compare the weight of cargo for a toy boat • setting up a ‘balancing station’ with interesting things to weigh and to balance, indoors and outdoors • comparing different parcels, ensuring some of the smaller parcels are heavy, and some of the larger parcels are light.	

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Ensure that children are presented with large, light things and small, heavy things, to prevent the over-generalisation that big means heavy and small means light.		
Showing awareness of predicting and comparison After children have had lots of practical experiences of comparing attributes, they can begin to estimate and to predict. For instance, they can start to consider which container would be best to store a specific item in: 'Which box should Teddy have?', 'What will fit in here?'	• Making a bed for a teddy using blocks • Selecting a box or container to store a specific item • Dressing dolls, and selecting different-sized clothes • Finding things that will fit inside a matchbox.	• Stories that compare size- 3 Little pigs etc • Match boxes • Different sized containers • Construction items • Small world resources
Comparing directly Children can then move onto using one thing to compare with two others, if, for example, asked to put things in order of height, weight or capacity. This may involve using a 'go between', for instance pouring a jugful of water into two bottles to see which holds more. Problems may be posed such as: 'I would like to move this table outside – do you think it will fit through the door?'	• Making 'Russian doll'-type sets of nesting boxes from a collection • Finding ways of seeing if the cupboard or carpet will fit in the role-play area without moving it • Finding which of three pairs of shoes is heaviest for packing in a rucksack • Packing a shopping bag, making sure the lightest items do not get squashed by heavier things.	• Cubes or blocks to make stairs or towers • Different sized bags, rucksacks • Different sized containers
Recognise relationship between size and number of units		• Different sized cooking untensils, pots, pans, spoons, sieves etc

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Before children use standard units of measure, they begin to compare units of different sizes in practical contexts. One example may be in the water tray, where children realise it will take them longer to fill a bucket using teaspoons than bottles. Another example would be to fill identical containers with different-sized objects, e.g. small balls or large balls. These sorts of playful experiences enable children to make the generalisation that the smaller the unit the more we need of them, or the bigger the unit the less we need of them. These experiences can be extended by encouraging estimations: 'How many tennis balls do you think will fit in this tub?' Then check this by filling it. 'What if I try to fill it with ping pong balls? Will our answer stay the same? If not, why not?' In practical situations, these sorts of questions can be asked to support children in their justification of the choice of equipment. For example: 'What can I use to help fill the water tray? Which bag shall I use for my shopping? Which box would be best to store these buttons? Why did you think that is a good choice?'	• Setting up an Estimation Station and guessing how many things are in the jar each day • Making biscuits from a given amount of dough – choosing cutters to see who will make the most biscuits • Choosing from a selection of spoons, ladles, etc, to see who can fill their pot the quickest with rice. How do you know who will be quickest?	• Different sized bags, rucksacks • Different sized containers • Jugs and cups • Bags to fill • Tape measures • Rulers
Begin to use units to compare things Experiences can be provided where children use units to 'measure' and compare. It is better to provide identical bricks, centimetre cubes or metre sticks so they can count physical units, rather than repeating the use of one item as with using hands or feet. In order to measure accurately, they need to ensure there are no gaps	• Setting up a 'filling station' with lots of different-sized containers to fill with beads, then comparing capacities • Using large bricks to measure the height of individuals • Using metre sticks to see if an elephant or dinosaur would fit in the room	• Different sized containers • Jugs and cups • Metre sticks • Large construction objects, bricks, crates • Cubes • Tape measures • Rulers • Metre sticks

between units of measure. Using standard units helps children make connections with measuring in 'real life'. Young children also enjoy using height charts, measuring tapes, rulers, digital scales and timers, although will not yet fully understand how they work.	• Measuring the growth of a beanstalk or sunflower with interlocking centimetre cubes • Comparing the capacity of different bottles by filling lots of glasses.	
Begin to sequence time Time is an abstract aspect to measure, and tricky in a range of ways. Although their age may be the most familiar number they know, children may have little sense of the unit of a 'year', and few may know the date of their birthday. In order to tell the time, children need a sense of number, space and time, the ability to count, and some notion of fractions (for half and quarter hours). In the Early Years we begin by drawing children's attention to sequencing of activities, important times in their day, and some sequences of time that are significant to them. Vocabulary that supports the understanding of this concept includes the positional language of 'before', 'after', 'next', and the relative terms 'yesterday' and 'tomorrow'. Knowing days of the week also helps children to keep track of time. Direct children's attention to the short hand, pointing to a number on a clockface, and identify what we are doing at that time.	• un-muddling visual timetables • Making picture sequences for cooking instructions • Describing sequences by re-telling stories • Discussing 'o'clock' times at registration, lunchtime, snack time, tidy-up time, etc. • Making their own timetable for a day – selecting activities and ordering them. • Play what's the time Mr Wolf	• Visual time table cards linked to environment • • Sequencing of stories or events • Clocks to play with- small and large • Watches to wear
Begin to experience specific time durations Children need to experience specific time spans in order to start to develop an overall sense of time. Initially, this may be based on familiar	• Events on a class calendar to count down to	• CD player and CDs/songs • Stop watches • Sand timers • Clocks

activities such as the number of 'sleeps' before an event. A class calendar may support this by highlighting certain events ('How many sleeps until the chicks start to hatch?', 'How many sleeps until my birthday?', 'How many sleeps until we go to the park?'). Discuss the number of sleeps getting smaller and what this means. By using timers in play, children can start to explore what they can do in a certain time period. For example: 'I wonder how long it takes you to run around the track?', 'How would we know if you were getting quicker?'. Identify that, in this case, the smaller the number of seconds the quicker you are getting (this is tricky for a child, as usually bigger numbers are 'better'). Children may also have the opportunity to see how many things they can do in a minute. For example: 'How many play people can you rescue from the pit?' (Wrap fabric around a water tray to create small gaps though which people can be rescued.)	• Timers provided for children to set and respond to challenges; e.g. 'I wonder if we can run as fast as a cheetah', 'I wonder how many hops I can do in ten seconds', 'I wonder how many times I can write my name in a minute', etc. • Time durations with songs or music.	

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Shape and Space		
Coverage	Opportunities	Representations
Developing spatial awareness Children need opportunities to move both themselves and objects around, so they see things from different perspectives. This will support them in visualising how things will appear when turned around and imagining how things might fit together. They need to make constructions, patterns and pictures, and select shapes which will fit when rotated or flipped in insert boards, shape sorters and jigsaws. These experiences will support them in noticing the results of rotating and reflecting images, and in visualising these.	• Directing a simple robot or remote-controlled toy vehicle along a route • Tangrams: 'Can you make a person with the shapes?' • With toys in a line: 'Can you say what the teddy on the other side is seeing?'	• Posting boxes • Bikes and trikes • Climbing equipment • Printing/painting • Construction • Beebots • 2D shapes
Developing spatial vocabulary Children need opportunities to be exposed to and to use the language of position and direction: position: 'in', 'on', 'under' direction: 'up', 'down', 'across'. Children also need opportunities to use terms which are relative to the viewpoint: 'in front of', 'behind', 'forwards', 'backwards' ('left' and 'right' to be used later on as ideas develop). Create as many opportunities as possible to explore this language, taking advantage of play in the outdoors to explore sequences of body movements (following obstacle courses, directing a friend, etc.).	• Hunting for hidden objects, with some prompts, e.g. 'Look behind the bicycle store, take three steps from the front of the art cupboard…' • Developing and talking about small-world scenarios, e.g. doll's house, miniature village, play park • Acting out their own versions of well-known stories where characters negotiate routes and obstacles, for example 'We're Going on a Bear Hunt' • Directing each other as robots.	• Hidden objects • Dolls house • Farm yards • Small world construction • Climbing equipment • Beebots

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Shape awareness- developing shape through construction Through play – particularly in construction – children have lots of opportunities to explore shapes, the attributes of particular shapes, and to select shapes to fulfil a particular need. Support this exploration by discussing items built by children in terms of how towers are built and why certain shapes are chosen to make a tower, and the space that has been created within an enclosure. Ask: 'How did you make that tower?', 'Why were those blocks good ones to use?'	• Construction with structured and unstructured materials • Making dens with varied materials outdoors.	• Blocks • Lego • Loose parts • Wooden blocks • Large construction • Puzzles/jigsaws • Junk modelling
Representing spatial awareness Small world play and model building provide lots of opportunities for children to describe things being 'in front of', 'behind', 'on top of' etc., and to consider objects from different perspectives. Drawing representations of these relationships is a further challenge. These drawings may include a simple representation of a three-dimensional object from a different viewpoint. For example, 'can you draw your construction from above, looking down on it?'	• Designing a plan for a garden or play area, using a small tray with sand, twigs, building bricks, etc • Drawing or making a simple map of a route with 'landmarks', e.g. houses and trees • Following a simple map of an excursion.	• Examples of maps/plans • Google maps/earth • Beebots • Small world construction • Model building

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Identifying similarities through shapes Children need opportunities to construct and create things that represent objects in their environment. As they do this, they should notice shape properties of the object that they want to represent; encourage them to think about the appropriateness of the shapes they choose. Examples of this may include representing a ball as a circle, building a train from wooden rectangular blocks, or using a curved block for the elephant's trunk.	• Stories as a prompt for creating representations, e.g. building a house for the three bears • Making pictures with found materials, as well as structured shapes and blocks.	• Small world construction • Tuff spot set ups for story telling • Junk modelling • Loose parts/outside parts • Construction
Showing an awareness of properties of shapes shapes At this stage, children show increasing intentionality in their selection of shapes, for example using cylinders to represent wheels because they can roll. Draw children's attention to specific properties by using specific language in everyday situations, while children may use informal language. Properties may include:	• making an insect hotel – selecting tube-like shapes from a collection of varied materials, some not fit for purpose • creating an extended channel for water to flow from a high container to a low one, some distance away • asking questions, for example: 'What shapes can you make with three people inside a loop of string? What about with	• 2D shapes • 3D shapes • Real life objects linked to 3D shapes • Junk modelling • Printing with shapes • Construction • Small world

• • curvedness • • numbers of sides and corners (2D) or edges, faces and vertices (3D) • • equal sides • • parallel sides • • angle size, including right angles • • 2D shapes as faces of 3D shapes. In play, children show that they are utilising this knowledge by gathering specific items that are needed for their construction, e.g. making a bed for a teddy and gathering blocks of equal length to make the rectangle; taking time with constructing corners so the shapes fit together to make a right angle.	four people?' 'What is the same and what is different about these?' • making shapes with sticks and with their own bodies • printing with shapes: 'What footprint do you think this cylinder will make? What about if you roll it?'	
Describing properties of shapes As children construct, and appear to be utilising, the properties of shapes, informally ask them about their constructions and representations. Children may use comparisons such as 'ball-shaped' or 'house-shaped', or start to discriminate between shapes, e.g. a 'fat' triangle and a 'pointy' triangle, using informal language. With shapes such as triangles and rectangles, ensure that children are used to seeing a range of examples, and the same shape in different orientations, as well as different sizes, colours and materials.	• covering objects in foil and inviting children to justify their guesses about what is inside • making arrangements with a selection of different rectangles, including squares.	• Feel bags • 2D shapes • 3D shapes • Construction blocks • Peg/geo boards • Different representations of shapes • Shapes in different positions 

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EYFS Pre-shape, space and measure Policy Progression Grids

This has been developed from the NCETM progression documents

Developing an awareness of the relationship between shapes As children become more confident with specific shapes, encourage them to spot shapes within shapes. You might talk about small triangles making a bigger triangle or identifying 2D faces of 3D shapes. Pattern blocks are a useful resource, since children can point out the shapes they have used to make their whole pattern. Also encourage children to predict what will happen when paper is cut or folded, or shapes are combined. Ask: 'What shapes will we see?', 'What will happen if we fold the square in half?', 'What if we put two triangles together?'	• choosing 2D shapes to construct a 3D model, e.g. using triangles and rectangles to make a tent • making decorations by folding and cutting • making 3D shapes using interlocking shapes.	•