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| Kind Handwriting  Cute Aurora | | | |
| Week Commencing: | White Rose Phase | | |
| EVERY WEEK | Throughout the classroom environment, children are given opportunities to practice, embed and deepen their mathematical understanding as part of daily practice. Mathematical resources and challenges are constant within continuous provision, seeking to promote a love of mathematics and a genuine interest in mathematical exploration.  We follow the White Rose Maths Scheme of learning, which divides learning into areas of focus in order for learning to delve deeply into specific skills, with clear progression throughout the year. In accordance with this, there are constant opportunities to gain an understanding of: the one-one principle, the stable-order principle, the cardinal principle, the abstraction principle and the order-irrelevance principle. The BBC Series ‘Number Blocks’ is used to support early number understanding; it is a fun favourite of the children! | | |
| **EMERGENCY HOME LEARNING LINKS** | In the event of a class bubble or school closure, Robin Class will be provided with a ‘Maths Learning Grid’, which will include activity ideas and links to online games and resources to be used throughout the week to support learning. | | |
|  | WRM Guidance: | Teacher Directed Input Ideas: | Continuous Provision Ideas: |
| Week 1  W/C: 22.02.2021  Growing 6, 7 & 8 | **Length and Height**  Children begin by using language to describe length and height, e.g. the tree is tall, and the pencil is short. When making direct comparisons, they may initially say something is bigger than something else. Encourage them to use more specific mathematical vocabulary relating to length (longer, shorter), height (taller, shorter), and breadth (wider, narrower). Encourage the children to make indirect comparisons using objects such as blocks or cubes to measure items. E.g. The sand tray is 4 blocks long. The table is 5 blocks long. The sand tray is shorter than the table. | * Opportunities for comparing length or height will arise naturally through the children’s talk as they play. They may compare the height of their towers or length of their roads, or see who has the longest scarf, or who can thread the longest string of beads. * Support each child to make a paper ‘footprint’. Can they find items which are longer than their foot, shorter, about the same size? Can a small group arrange their footprints in size order by making direct comparisons? * Provide a selection of measuring items for the children to explore. E.g. rulers, tape measures, trundle wheels, height charts. The children may also like to create their own height charts and tape measures and use them to measure items inside and out. * Provide pots and soil and seeds for the children to plant. Encourage them to find ways to measure, compare and record the height of their plants as they grow. | * Build a tower or a road. Challenge the children to build a tower the same height as yours, a shorter tower, and a taller tower. A longer road, a shorter road. How tall is the tallest tower they can build? * Provide materials for the children to construct bridges for the cars. They will need to consider how long, how wide and how high they want their bridges to be and select which blocks to use. They could also investigate who can push their car the furthest? Provide a variety of ribbon, lace, string. Ask the children to cut pieces and make direct comparisons with a given length (E.g. a piece of ribbon taped to the table) * Encourage the children to use mathematical language relating to length as they play. Ask: Can you make a long snake? A short snake? A thick snake? A thin snake? |
| Week 2  W/C: 01.03.2021  Growing 6, 7 & 8 | **Time**  Children continue to order and sequence important times in their day and use language such as now, before, later, soon, after, then and next to describe when events happen. They begin to recognise that regular events happen on the same day each week and use the vocabulary ‘yesterday’, ‘today’ and ‘tomorrow’ to describe when events happen. Children are able to describe significant events in their lives and talk about events they are looking forward to. They learn through their own experience and the stories they read that some processes such as growing vegetables, take a longer time. | * Look back over the year so far with the children –use pictures or learning journeys to help them remember. What have been their favourite times in Reception? What key events can they remember? * Ask the children to bring in a photograph of themselves when they were small. Can the children guess whose picture is who? How have they changed? * Start each day by singing the days of the week song. Read Jasper’s Beanstalk. Order the days of the week and ask the children to order and match the key events in the story to the days of the week. * Challenge the children to see how many tasks they can complete in one minute. For example how many times can they write their name in one minute? How high can they count in one minute? How many star jumps can they do in one minute? * Support the children to make toast for snack. How does the bread change when you toast it? * How long do they need to toast the bread for to make nice golden toast? What happens if it is toasted for too long? What happens if it’s not toasted for long enough? | * Provide a range of timers that measure different lengths of time. Children can choose a timer and then see what they can do in that period of time. E.g. how many star jumps can you do in 30 seconds? How many bean bags can you throw into the hoop in one minute? * Provide seeds, soil and plant pots. Encourage the children to plant seeds and to look after them as they grow. Have a look each week and discuss the changes you can see. Inside you can grow cress seeds or grass heads which grow more quickly. * Set up a circuit of different activities around the outdoor area. Challenge the children to see how many of each activity they can do in one minute. E.g. How many bean bags can they throw into the hoop? How many skittles can they knock down? How many bricks can they build into the tower? Provide minute timers for the children to use. |
| Week 3  W/C: 08.03.2021  Building 9 and 10 | **9 and 10**  Children continue to apply the counting principles when counting to 9 and 10 (forwards and backwards) They represent 9 and 10 in different ways. Arranging 9 or 10 items into small groups will support the children to conceptually subitise these larger numbers and explore their composition. (E.g. I know it is 9 because I see 3, 3 and 3) Children notice that a 10 frame is full when there is 10. They can use 10 frames, fingers and bead strings to subitise groups of 9 and 10. | * Show me 10 fingers. Now show me 9 Did you need to count your fingers? Show me 10 beads on the bead string. Show me 9 Show me 10 cubes on the 10 frame. What do you notice? Show me 9 cubes. What do you notice this time? Could you put 9 or 10 buttons on the 10 frame without counting them? * Hold up a number card. Ask the children to show the corresponding number of fingers or to do the corresponding number of actions. Ask the children to help you order the digit cards from 1-10 and make deliberate mistakes. Can the children spot these and correct you? If you hide a card, can they work out which number is missing? * Ask the children to count out 9 or 10 small objects. Can they find different ways to arrange their items? What do they notice? * Make a class counting book with a double page spread for each number 1 to 10 Stick in drawings or photographs of objects the children have collected. Discuss the different ways the children have represented each number. | * Provide a starting line. Ask the children to take 9 giant steps, 9 tiny steps, 9 jumps, 9 tiptoes etc. How far do they travel each time? Who can travel the furthest in 9 giant steps? Who can travel the shortest distance with 9 tiny steps? * Ask the children to build a wall and set up 10 green bottles. Each time a bottle ‘accidently falls’ ask the children how many have fallen and how many are standing. Do they always have 10 in total? * Provide a selection of bricks in different sizes and shapes. Ask the children to make the tallest possible tower using 10 bricks. Which bricks will they choose? How will they place their bricks to make the tower as tall as possible? |
| Week 4  W/C: 15.03.2021  Building 9 and 10 | **Comparing Numbers to 10**  Children continue to make comparisons by lining items up with 1-1 correspondence to compare them directly or by counting each set carefully and comparing their position in the counting order. As the children’s sense of number develops so does their knowledge of where each number sits in relation to other numbers. They understand that when making comparisons a set can have more items, fewer items or the same number of items as another set. They begin by comparing 2 quantities and progress to ordering 3 or more quantities. | * Ask questions to make comparisons for a real purpose. Are more children having sandwiches or dinners? Which book shall we read today? Can you place a cube to vote for your favourite? As you read the stories, compare the quantities in different parts of the story. E.g. in Cockatoos, are more birds hiding in the bathroom or in the attic? * Grab a handful of buttons. Ask the children to guess how many you could be holding and then count them out onto a 10 frame to see. How many buttons can they hold in one hand? Compare their handful to their friends. * Use cubes to build towers from 1 to 10. Can the children order the towers? What do they notice? Can they see that each number is one more than the number before? | * Provide the children with a collection of items to sort. Encourage the children to sort the items into sets and then compare the quantity in each set. Can you find a set with more than this one? Can you find 2 sets with the same quantity? * Make a caterpillar by threading some beads onto a pipe cleaner. Ask the children to make caterpillars with more beads and fewer beads than you. Which caterpillar is the longest? Which is the shortest? Can we arrange the caterpillars in order? * Provide a set of dominoes. Can the children sort them into sets of dominoes with 7 spots, more than 7 spots and fewer than 7 spots? In pairs, play Who Has More with the dominoes face down, choose one domino each and compare the spots. The player with the most spots can keep the pair. |
| Week 5  W/C: 22.03.2021  Building 9 and 10 | **Bonds to 10**  The children explore number bonds to 10 using real objects in different contexts. E.g. There are 10 apples. How many in the tree and how many on the ground? 10 frames or egg boxes (with 10 holes) can be partially filled with objects and the children asked How many more do we need to make a full ten? Other manipulatives such as fingers, bead strings and number shapes are also useful for exploring bonds to 10 | * Ask the children to explore different ways of building the bonds to 10 E.g. How many ways can they find to park 10 cars in 2 car parks, place 10 fairies on 2 toadstools, 10 dinosaurs in 2 Jurassic parks. * Provide each child with a number shape. Ask them to find a partner so that their combined shapes total ten. Compare the different tens that are made. * Hold up a number shape and ask the children to find the shape which goes with yours to make 10 * Ask the children to count out 10 double-sided counters or butter beans. Drop their counters onto a paper plate. How many are red? How many are yellow? Repeat. How many are red and yellow this time? Did anyone get 5 red and 5 yellow? Did anyone get all 10 red? | * You will need: Ten frame cards showing 1- 10 (5-and-a-bit and pair structure) Memory Game: Place the cards upside down. The children take turns to turn over 2 cards. When they find a pair which add to 10, they keep the cards. The player who collects the most pairs wins. * Fish: (For 3-4 players) Share out the cards. The aim is to make bonds to 10. The children take turns to ask any player for a card they need. E.g. If they have a 4, they ask one of the other players for a 6 Once they have made a bond to 10, they put that pair down. The first player to put down all of their cards wins the game. * Place 10 chairs into 5 rows of 2 to resemble the seats on a bus. Ask: How many passengers are there on the bus? How many more passengers could ride on the bus? How many are getting on or off at the next stop? How many are on the bus now? * Hide 10 items (rubber ducks, beanbags etc.) around the outside area and chalk a large 10 frame onto the ground. As the children find the items, they put them into the 10 frame. Prompt the children to use the 10 frame to help them see how many they have found and how many are still hiding. |
| Week 6  W/C: 29.03.2021  Building 9 and 10 | **3D Shape**  Children will naturally explore and manipulate 3-D shapes through their block play and modelling. Prompt them to consider which shapes stack and which shapes roll and why that is.  They should be given opportunities to build using a variety of shapes and to construct their own 3-D shapes in different ways.  Children can be introduced to the names of the shapes and be given opportunities to explore similarities and differences between them as they play and to sort them according to what they notice. | * Hold up an object for example a crisp tube or a cereal box. Which of the 3-D shapes is this like? Why is it like this? What other items have this shape? * Show the children a collection of 3-D shapes. Choose one of the shapes. Ask the children to tell their partner as many things as they can about the shape. Can they find another shape like this? Can they find a different shape? How is it different? * Sort the shapes into groups. Ask: ‘Why did you put these shapes together? How is this set different to this one? Is there another way we could sort them?’ * Which shapes would you use to build Rapunzel’s tower? * Can you add a staircase? * Which shapes would you use at the bottom of the tower? Which shapes would you use at the top? | * Show the children a print made from a 3-D shape. What shape is the print? Which 3-D shape could have made this print? Is there more than one? Which of the 3-D shapes could you use to print a triangle or a square? Can you print a pattern using the shapes? * Provide a variety of empty boxes, tubes, lids etc. Ask the children to make a model for a particular purpose. E.g. build a bridge for the 3 Billy Goats, a new chair for Baby Bear. Encourage them to tell you about their model. Which shapes were easy to fasten together? Which shapes were difficult to fasten together? * Provide pictures of buildings such as castles, palaces, mosques, city-scapes. Ask the children to discuss the shapes they can see in the buildings? Encourage the children to design their own models and to extend these by adding arches, bridges and moats. * Ask the children to make 3-D shapes using the dough. Ask: Which shapes are the easiest to make? Why? Which are harder to make? Why? How did you make the flat sides? |