


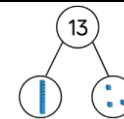


## Year 1 Maths Parent Overview –Spring 1 2022

Pupils will be taught maths in a way that ensures a deep understanding of number through using concrete objects and pictorial representations. Pupils develop their reasoning skills by explaining their answers in full sentences and using the correct mathematical language. This approach helps children to reason and solve problems and supports their understanding of abstract methods.

Maths KIRF (Key Instant Recall Facts)- Addition and subtraction facts within 10

Maths Objective	Ways of supporting this objective
3D Shapes	<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="flex: 1;"> <ul style="list-style-type: none"> <li>We will work with the following 3D shapes</li> <li>Look out for these shapes around the house and out and about. The supermarkets are a great place to spot 3D shapes.</li> </ul> </div> <div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; border-radius: 5px;">cube</div> <div style="border: 1px solid black; padding: 2px 5px; border-radius: 5px;">cylinder</div> <div style="border: 1px solid black; padding: 2px 5px; border-radius: 5px;">cuboid</div> <div style="border: 1px solid black; padding: 2px 5px; border-radius: 5px;">pyramid</div> <div style="border: 1px solid black; padding: 2px 5px; border-radius: 5px;">cone</div> <div style="border: 1px solid black; padding: 2px 5px; border-radius: 5px;">sphere</div> </div> </div> <ul style="list-style-type: none"> <li>Build models using 3D shapes or items eg tins, boxes etc.. </li> <li>Ask questions to extend their thinking-Do all cubes look the same? Is a pyramid only a pyramid when the point is at the top? Does the shape change when we turn it around?</li> <li>Sort 3D shapes according to number of faces/ edges, curved or staright faces/edges, points/corners. Shapes that roll/ don't roll.Shapes that stack/ don't stack etc...</li> <li>Play guess the shape game- post it a shape name to yor child's forehead/ back and they must ask questions about their shape. Answers are only yes/no. eg does my shape have flat faces? Does my shape have straight edges, does my shape have any corners/ points?</li> </ul>
2D Shapes	<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="flex: 1;"> <ul style="list-style-type: none"> <li>We will work with these 2D shapes</li> <li>Hunt for 2D shapes and identify 2D shapes in 3D shapes. Relate them directly to the shapes of the faces on 3D shapes eg a pyramid has 3 triangular faces</li> <li>Play "guess the 2D shape" game (as above)</li> <li>Use 3D shapes as printing blocks and look at 2D shape it creates eg a cube will produce a square print- create repeating patterns with these shapes-</li> <li></li> <li>Cover part of a 2D shape- what shape is it?</li> </ul> </div> <div style="display: flex; gap: 10px;"> <div>Rectangle</div> <div>Circle</div> <div>Square</div> <div>Triangle</div> </div> </div> <p>Sort shapes into groups eg 4 sides/ not 4 sides, curved / not curved, corners/ no corners.</p>
Represent numbers to 20 showing the tens and ones	<ul style="list-style-type: none"> <li>Count by wrote 0-20 . What happens to the sounds of some of the numbers after10? Can you hear the word teen?</li> <li>Look at the numbers written down. What do all the numbers between 10 and 19 start with? What does this mean? This shows that each of these numbers starts with a 10. The Numicon staircase illustrates this clearly</li> </ul> <div style="text-align: center; margin: 10px 0;">  </div> <ul style="list-style-type: none"> <li>Represent nos to 20 using other resources/ manipulatives eg 16 raisins grouped into a ten and 8 ones on their own or 15 clothes pegs in a group of 10 and 5 on their own.</li> </ul>



- We also represent numbers 11-20 with Deines on a part whole model

## Comparing numbers 0-20

- Which is greater 1 ten and 2 ones or 1 ten and 5 ones? How can you prove this? You could line up 12 counters/coins/pegs and then 15 of the same object. Check the 1 to 1 correspondence and the longest line shows the biggest number



- 12 13 14 15 Numicon also represents this clearly.
- You can write  $12 < 15$  or  $15 > 12$

## Ordering objects and numbers to 20 using tens and ones values

- Order the crayons from smallest to greatest



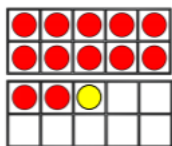
The children can represent the numbers of crayons with counters/ pegs/coins and line them up to show the longest line or they can represent them with Numicon or draw a part whole model as above. It is important that they notice all of these numbers have a 10 , but it is the ones part of the number that is different.



$$11 < 13 < 14$$

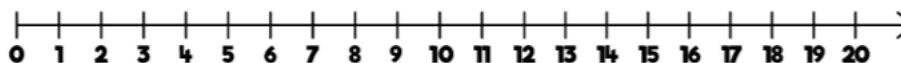
## Adding by counting on

- Add numbers by counting on using counters on a 10 frame so that



$$12 + 1 = 13$$

- Or children can count on along the number line- starting on 12 and taking 1 jump forwards along the number line. They always start on the biggest number and add on the smallest number. They need to explain why it is better to do this ie – not so many jumps to take , or ones to add on.



<p>Finding number bonds to 20 using knowledge of bonds to 10</p>	<div data-bbox="1570 38 1860 123" data-label="Image"> </div> <ul style="list-style-type: none"> <li>• If we know that <math>7+3=10</math> , then we can use this fact to work out <math>17+3=20</math></li> <li>• Use resources as to illustarte this – If I have 14 pencils and then find 6 more, how many will I have. <math>4+6=10</math> so <math>14+6=20</math>. There is an extra 10 when making <math>14+6</math></li> </ul> <div data-bbox="730 201 978 253" data-label="Figure"> </div>
<p>Add by making 10 first</p>	<ul style="list-style-type: none"> <li>• If <math>7 + 5 = 12</math> , how can we make 10 first to make the addirion easier? We can look at how many we add to 7 to make 10 , which is 3 and then the remainder 2 will add on to 10 to make 12</li> </ul> <div data-bbox="730 451 1108 548" data-label="Figure"> </div> <p>The 3 yellow counters move over to fill the first ten frame</p> <div data-bbox="730 584 1188 682" data-label="Figure"> </div> <p>Practise this strategy in everyday situations eg 5 eggs plus 6 eggs, 8 grapes plus 4 grapes.</p>