**Maths Plan 13/7/2020**

**Online games / activities to support doubles and halving.**

**>** Doubles up to 10 <https://www.twinkl.co.uk/resource/T-GO-03-doubles-up-to-10>

>Double archery <https://www.ictgames.com/mobilePage/archeryDoubles/index.html>

>Doubling and halving <https://www.topmarks.co.uk/Search.aspx?q=doubling%20and%20halving>

**Monday (Recognising double)**

**>Sing the doubles song** <https://www.youtube.com/watch?v=8jOzhiACB68> **>** Discuss what ‘double’ means. When we add the same two numbers together we are finding double. Can children think of anything we need double of e.g. shoes, gloves, socks etc. **>** Using two diceroll two numbers. Discuss if the dice are showing us double***. If you don’t have dice you can use two sets of numbers cards from 0 to 10. Turn all the cards upside down and choose two numbers at a time. Discuss if the selected numbers show double or not.***  >Divide a sheet of A4 paper into two halves. As the children find number pairs they can record the numbers in a number sentence. If they roll a double they can record the number sentence on one half of their page, if they do not roll a double they can record the number sentence on the other side.

**Tuesday (Showing double) > Sing the doubles song** <https://www.youtube.com/watch?v=8jOzhiACB68> > Recap the meaning of double. > Divide an A4 page into 6 boxes. Write a different number between 3 and 10 in each box. Children can represent the number in each box by drawing images e.g. they may draw 4 yellow flowers or 4 red cars. Then ask them to double the number using a different colour e.g. add 4 blue flowers or 4 green cars. Discuss what happened when 4 was doubled. First we had 4 flowers, then we added 4 more, now we have 8 flowers. Double 4 is 8. Repeat with different numbers.

**Wednesday (Halving shapes and objects)** >Look at the attached PowerPoint about halving food. >Look for objects around the house that the children could demonstrate finding half of 1 whole object. Food is ideal for demonstrating half e.g. cutting a banana, apple, carrot, potato, biscuit etc. in half >Explain that half means splitting something into 2 smaller parts. Emphasise that we can only say we have found half if both parts are the same size. >Pre-cut some basic shapes e.g. cut out a square, rectangle and circle, templates are attached or you may wish to draw and cut the shapes. Model how to fold the shape in half and then cut the shape so that there are two equal halves. Some children may notice that when we cut a shape in half we make two new shapes e.g. half of a circle is a semi-circle.

 **Thursday (Halving numbers)**

>Look at the attached PowerPoint ‘Halving shapes and numbers’ >Revise what was learnt yesterday. Discuss how numbers can be halved as well as objects. > Lay out a set of even number cards from 2 to 16. > Choose a number card and count out that number of counters (pasta pieces, buttons, coins etc.) Model how to share the counters between yourself and your child. Take one for yourself, then give one to them, continue until all the counters have been shared. Both count up how many you have and check you have the same. Model saying the sentence, first I had 8, then I gave away half, now I have 4. If your child is comfortable with this method of halving you may wish to move them on to drawing models like the one below to represent half. If your child needs more time to practise the skills of halving using counters spend more time on this rather than moving on. > Choose a number and model how to find half. Draw a long horizontal line and alternately draw a spot first above the line(1), then below the line(2), then above the line(3) etc. Count as you draw the spots and stop when you have drawn six spots. Encourage the children to decide if we have shared the number equally into two halves by counting how many on the top half and how many are on the bottom half. It is important that the children understand that they must evenly share the spots by first drawing on the top half, then drawing a spot on the bottom half alternately.

 **3 on the top half**

 Finding half of 6

 **3 on the bottom half**

>Children can randomly choose their number card and follow the model above to represent half.

**Friday (Odd and Even)**

>Using number cards from yesterday repeat ways of representing half by using the model above. >Add the odd number cards to the set of cards. Look at an odd number e.g. 5. Use the model above to try to find half e.g.

Finding half of 5 **3 on the top half**

1. **on the bottom half**

**>You may wish to use counters again rather than the drawn model to try and halve 5.** >Discuss how there is no fair way to share the number 5, one half always have more than the other. Introduce the term ‘odd’ number as a number than we cannot share equally between two (where both halves get a whole number), introduce ‘even’ numbers as numbers that can be shared equally between 2. >Explore all of the numbers between 0 and 12 discovering whether the number can be halved or not. Sort the numbers into odd and even groups.

**Number cards**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **0** | **1** | **2** | **3** | **4** | **5** |
| **6** | **7** | **8** | **9** | **10** |  |
| **0** | **1** | **2** | **3** | **4** | **5** |
| **6** | **7** | **8** | **9** | **10** |  |