7/4 Maths w/c 20th April 2020

3. We are learning to add and take away fractions

Here we have a picture showing .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |

If I was to add another , my picture would look like this:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |

This picture now shows

 + =

Let’s look at this more closely.

 + = the ‘1 + 1 = 2’ part of this makes sense.

 + = so why doesn’t 5 + 5 = 10??

Can you look at the picture above and see why?

The picture is still split into 5 parts.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |

The ‘5’ at the bottom of our fraction is telling us what type of parts we are working with. The top number on the fraction tells us *how many* of those parts. When we are adding or subtracting fractions with the same bottom number, **only** the top number changes.

Try this next example using a number line. Each of these sections is one sixth. One is already shaded in.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |

0 1

Now let’s add another

I will shade them in a different colour so you can see the we started with and the we added.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |

0 1

If we count how many sixths we have now we can see that 2 are shaded in.

This matches the example above:

 + =

 + = the ‘1 + 1 = 2’ bit makes sense.

 + = the ‘6’ bit doesn’t change because our 1 is still split into 6 equal parts.

What would be the answer if we added *another* ? Use shading on the picture and then write the answer underneath.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |

0 1

 + + =

The same works for taking away (subtracting). I can take our from above and take away. (I will show the ‘take away’ by crossing out)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |

0 1

After taking away, I am left with one shaded section. - =

What would I be left with if I took another away? Try it and see.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |

0 1

 - = 0

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

0 1

a) + =

|  |  |  |
| --- | --- | --- |
|  |  |  |

0 1

b) - =

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |

0 1

c) + + - =





