

Relate Addition and Subtraction

These are Willow's beautiful fish. She likes to watch them swim and play. Today Willow will be adding more fish to her tank. Let's help Willow count her fish!

How many fish do you see? 1, 2, 3. Yes! There are 3 fish because $2+1=3$. When we look at this equation, 2 and 1 are the parts, and together they make up the whole.

In fact, all equations are made up of a part, part, whole. That means we can also say $1+2=3$. 1 and 2 are the parts, and together they make up the whole. We can use this part, part, whole chart to help us see the equation clearly.

I noticed that we only used the numbers 1, 2, and 3 in our part, part, whole chart. I wonder if we can make subtraction problems using those same numbers. Hmm, let's see. $3-2=1$. In this equation, we start with 3 as the whole. When we take away a part, we are left with the other part. We can create another subtraction equation by switching the parts. Look! $3-1=2$. 3 is the whole and 1 and 2 are the parts.

Look at the equations we just created. These four equations are called a fact family. A fact family is a group of 4 equations that use the same numbers. When we know the numbers in a fact family, they can help us add and subtract easily. Let's help Willow find more fact families!

Willow is adding new fish to her fish tank. How many fish do you see? 1, 2, 3, 4, 5. Yes! Now there are 5 fish. Let's use the part, part, whole chart to help us find the addition equations. $3+2=5$. What numbers are the parts? That's right! 3 and 2. That must mean that 5 is the whole.

Can you think of the other addition equation? $2+3=5$. Great job! 2 and 3 are the parts, and together they make up the whole.

We can use these same numbers to create subtraction equations. Let's see, $5-2=3$. 5 is the whole and 2 and 3 are the parts. We can create another subtraction equation by switching the parts. Look! $5-3=2$.

We made another fact family! $3+2=5$, $2+3=5$, $5-2=3$, and $5-3=2$. Great job!

Willow is adding more fish to her fish tank. How many fish do you see? 1, 2, 3, 4, 5, 6, 7. Yes!

Now there are 7 fish. Based off of what we know about fact families, let's try to fill out the part, part, whole chart. We know there are 7 fish all together. That is the whole. What 2 parts make up the whole? That's right! 4 and 3.

Now we're ready to find the fact family! $4+3=7$, $3+4=7$, $7-4=3$, $7-3=4$. Great job! We made 2 addition equations and 2 subtraction equations using the same 3 numbers. Wow!

Thanks for helping Willow create fact families! Her fish are very happy to be in their new home!
