

Y3 Week 1 and 2

Activities for Home

Make 10 and Then Subtraction

Dear Families

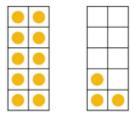
At school we are learning about subtracting across 10, for example, 13 - 5. When we subtract across 10 we use the "Make 10 and Then" strategy we learnt for addition, just in reverse. Below is an explanation of the strategy for subtraction, and at the bottom of the page are some suggested equations to act out together with your child, using the tens frames provided, and some small everyday objects such as pieces of pasta.

Make 10 and Then Strategy (subtraction)

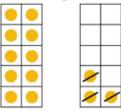
To use the 'Make 10 and Then' strategy we need to break the number being subtracted into two parts and then perform two calculations, as shown below. Talk to your child about how we have been doing this at school.

For example: 13 - 5

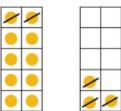
Step 1: Lay out the number 13 on two tens frames in its 'Ten and A Bit' format. (You can use any every day object, such as pasta pieces, to show the number on the tens frame).



Step 2: Subtract the 'Bit' in the starting number to Make 10. The 'Bit' is 3.



Step 3: Then, subtract what's left of the 5. What's left is 2.



So, 13 - 5 is the same as 13 - 3 - 2. The answer is 8.

Work through the following equations with your child using your everyday objects and the tens frames provided:

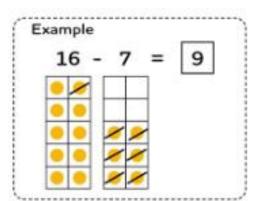
13 - 7 = 14 - 5 = 12 - 4 = 11 - 6 = 15 - 6 = 12 - 7

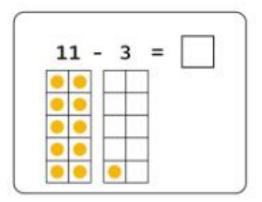


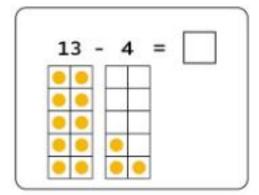
Tens Frames

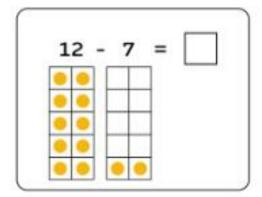


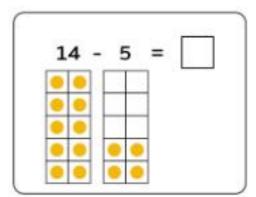
First take 'the Bit' then take the rest. What's left?

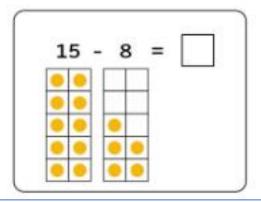












Talking Tip

Start by relating the equation to the image, "We have 16 and we need to subtract 7." Then ask your child to cross out the number of counters being subtracted. First they should cross out the counters on the 10s frame that is not full - "the bit". Then they should cross out the other counters that need to be subtracted from the 10s frame that is full - "the rest".

Instead of just counting 7 counters to cross out, encourage your child to recall their number facts i.e. to take 7 from 16 we need to subtract 6 and 1 more. Also encourage them to "just see" what is left rather than counting. Reinforce learning with your language such as, "That's right, the answer is 9. First we subtracted 6, then we subtracted 1 more. We have $9 \cdot \text{left}$."

Connect the expression on the left, to its equivalent expression in the middle, and then to the answer on the right.

Example

13 - 3 - 3

4

12 - 2 - 6

7

15 - 5 - 1

8

12 - 2 - 1

9

17 - 7 - 2

9

14 - 4 - 4

6



Doubles & Halves

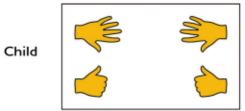
Activities for Home

Dear Families

This week in maths we are learning doubles of numbers 6 to 10. We are learning how these help us to solve addition and subtraction facts like 6 + 6 = 12 and 14 - 7 = 7. Here are some simple activities you can do at home to support your child's learning:

Show

Ask your child to show you on their hands a number from 6 - 10. Then you double the number by mirroring it with your own hands, as shown below for 6:



Adult

You then say, "6 is 5 and 1 more. So, double 6 is 10 [touch your full hand of 5 to their full hand of 5] and 2 more [touch your hand of 1 to their hand of 1]. 10 and 2 more is 12". Over time your child can start to take over more of the talking, using the same kind of language. Repeat this for all the numbers between 6 and 10.

Imagine

As above, ask your child to show you a number between 6 and 10 on their hands and then mirror it with your hands. Then, ask them to look at both sets of hands and 'take a photo of it in their minds'. Next ask your child to close their eyes and try to see the "photo" they just took. Ask them what they can see, "that's right, for double 6 you can see 2 full hands that's 10, and 2 hands with just one finger, that's another 2. So, double 6 is 10 and 2 more. Double 6 is 12." Practice doubling all the numbers between 6 and 10 until your child can do this just by imagining the hands. For example, if you say "Double 7" they will be able to imagine 7 on their hands and 7 on your hands, they will be able to visualise the 10 and 4 more. They will tell you the answer is 14

Link

Once your child is gaining confidence with doubles use this game to make the link between doubles and halves. Pick a number from 6, 7, 8, 9 and 10. Both make up that number on your hands, e.g. 9. Then bring both your sets of hands together saying, "Double 9 is 18." Then take away just your hands saying "And half of 18 is 9." Repeat lots of times until they are confident saying the whole sentence on their own for all the double/half combinations.

Matching pairs

Take the number cards 6, 7, 8, 9, 10 and 12, 14, 16, 18 and 20. Lay them out face down. Take it in turns to turn up a pair of cards. When the bigger number is double the smaller number, you keep the pair.

Speedy hands

Lay out the cards 6, 7, 8, 9, and 10- face up this time. You say a double of one of the numbers on the table and your child takes the card with the matching half as quickly as they can. For example, you say, "14" and they say, "7!" and grab the card. Work as a team to clear the cards as quickly as you can. Then play in reverse, with 12, 14, 16, 18 and 20 on the table, and you saying either 6, 7, 8, 9 or 10. You could also switch roles, so your child says double or half of the numbers on the table, and you clear the cards. This will still provide great doubles and halves practice for your child.



Activity Cards



6	12
7	14
8	16
9	18
10	20



Activities for Home

Adjusting

Dear Families

This week at home we are learning to use facts we know already to work out calculations that we don't know yet. We call this strategy 'Adjusting'. Using what we know to work out what we don't yet know is a really important skill in maths. Here are a couple of examples of what we have learnt:

Adding 9: We have learnt that we can add 9 by first adding 10 and then adjusting. E.g.,

$$6 + 10 = 16$$

$$6 + 9 = 15$$

$$15^{2 less}$$

Near Bonds to 10: We have learnt that we can solve some additions by noticing that they are one more than a bond to 10. E.g.,

$$3 + 7 = 10$$
 $3 + 8 = 11$

Your children have learnt other ways to calculate these over the last few weeks, but we've taught adjusting as it is such a useful strategy in maths. If you see your child stuck on calculations, or starting to count on their fingers to solve a calculation, talk to them about any facts they already know which could help them work out this new calculation. You don't need to be the expert — it is just about talking about numbers and different ways to work things out with your child.

Here are a couple of simple activities which use adjusting which you could do with your child:

Bond to 10 or one more?

Say a pair of numbers - sometimes a pair which make 10 (such as 4+6) or sometimes a pair which are one more than this (such a 4+7). Your child simply has to shout out 'Bond to 10' or 'One more than a bond to 10'. Discuss the relationship with your child, and that the pairs which are one more than a bond to 10 will always make 11. "Yes that is right, 4+6 equals $10 \times 4+7 \times 4+7 \times 4+6 = 11$."

Add 10, add 9

Say a number from 2 to 9. Then help your child to first add 10 and then link this to adding 9. For example if you say 6, your child can then say "6 + 10 equals 16 so 6 + 9 equals 15." You may want to write the additions down for your child, just like at the top of this sheet. At school we have also been using a number line to help us understand this:

