

# Maths for year 1 to 2



- Number bonds to 10
- Using number bonds to 10 work out number bonds to 20
- Know number bonds to 100 and beyond
- Use number facts to help with addition and subtraction

# Learn number bonds to 10 by heart.

- Egs of activities

Find a group of 10 objects (this works better if you use just 2 colours) Some suggestions of things that you can use -pegs, Lego pieces, gems, pencils.

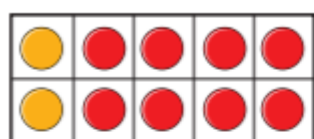
How many different ways can you split them into 2 groups.

0+10 1+9 2+8 3+7 4+6 etc

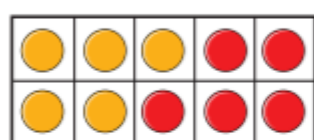
Children can record this in various ways. Draw pictures of their sets, write the number sentences.

Ask children at random times if they can tell you 2 numbers that make 10.

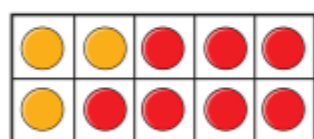
1 Match the ten frames to the number sentences.



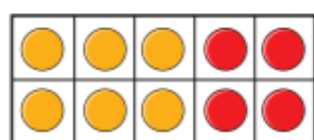
$$3 + 7 = 10$$



$$6 + 4 = 10$$

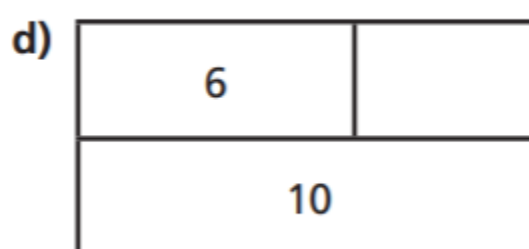
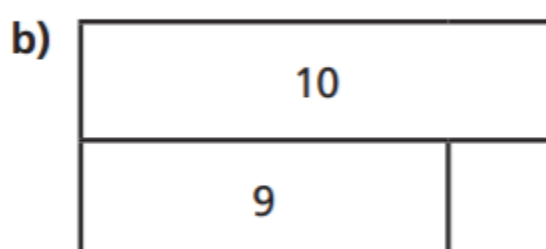
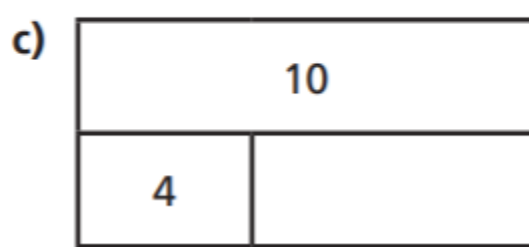
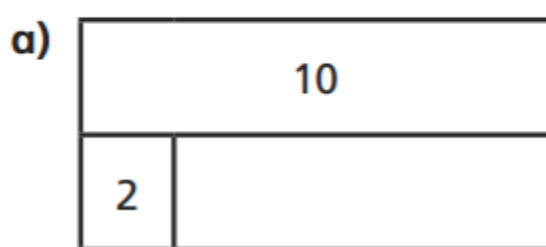


$$2 + 8 = 10$$



$$5 + 5 = 10$$

2 Complete the bar models.



- 3 10 children can sit at this table.



How many more children can sit down?

- 4 Eva and Mo have 10 sweets between them.

Eva has 4 sweets.



How many sweets does Mo have?

- 5 Take 10 cubes.

Give some to your friend.

How many cubes could you each have?

**1** Match the number bonds that are equal.

$3 + 4$

$2 + 5$

$1 + 1$

$1 + 4$

$3 + 0$

$3 + 5$

$2 + 3$

$2 + 1$

$4 + 4$

$3 + 3$

$5 + 1$

$0 + 2$

**2** Are these number sentences true or false?

$2 + 4 = 3 + 3$

$5 + 3 < 2 + 7$

$6 + 1 > 3 + 7$

**3** Write  $<$ ,  $>$  or  $=$  to make the statements correct.

a)  $3 + 4$    $4 + 4$

c)  $9$    $1 + 6$

b)  $2 + 6$    $8$

d)  $3 + 0$    $0 + 3$

4 Here is some fruit.



5p



6p



4p



5p



6p



4p

Eva buys an apple and some grapes.

How much does Eva spend?

Teddy buys a pear and an orange.

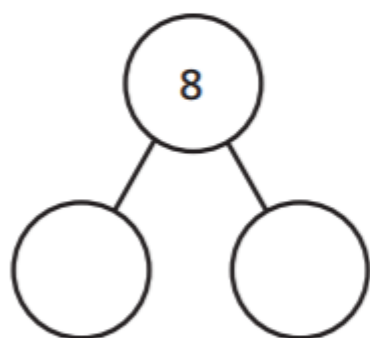
How much does Teddy spend?

Who spends the most money?

1 Look at the picture.



Complete the part-whole model and the fact family.



$$\square + \square = 8$$

$$\square + \square = 8$$

$$8 - \square = \square$$

$$8 - \square = \square$$

Can you write each number sentence a different way?



2 Look at the picture.



Complete a part-whole model and a fact family.

Which of your number sentences shows the number of apples?

Can you write each number sentence a different way?

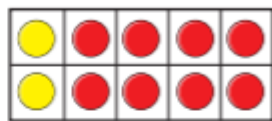
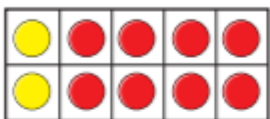
3 Some T-shirts have spots and some do not.



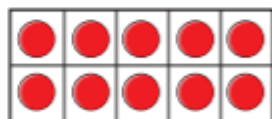
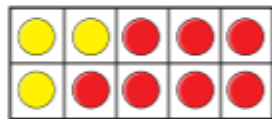
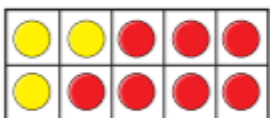
Complete a fact family.

**I** Write additions to match the ten frames.

**a)**



**b)**



**c)** What do you notice?





# Number bonds to 20

$$10+10$$

$$11+9$$

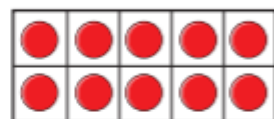
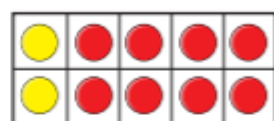
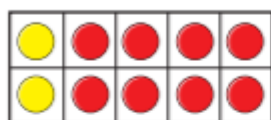
$$12+8$$

etc

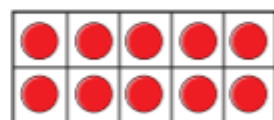
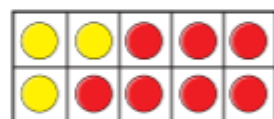
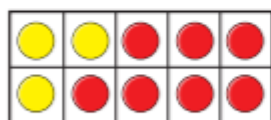
- Using sets of objects (as suggested in previous number bonds to 10 slide) Ask children to make bonds to 10.
- Check that they understand that there are 10 altogether.
- If we have 10 how many more do we need to make 20?
- Make a separate set of 10 and add to the number bonds they have made. How many do we have now? (20)
- Repeat with different number bonds to 10
- You can use something e.g a stick or pencil. This can represent 10. Add the stick/pencil to the number bonds to 10 to make 20.
- Practise drawing, writing out and quizzing children on number bonds to 20

**1** Write additions to match the ten frames.

**a)**



**b)**



**c)** What do you notice?



**2** Complete the number bonds.

**a)**  $4 + 6$

$4 + 16$

**b)**  $5 + 5$

$5 + 15$

**c)**  $10 = \square + 1$

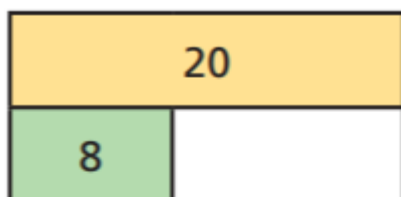
$20 = \square + 1$

**d)**  $10 = 3 + \square$

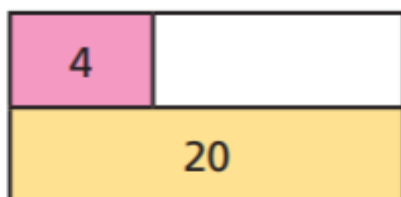
$20 = \square + 13$

**3** Complete the bar models.

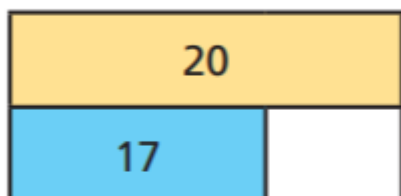
a)



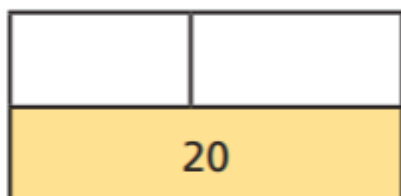
c)



b)



d)



**4** Colour all the number bonds to 20

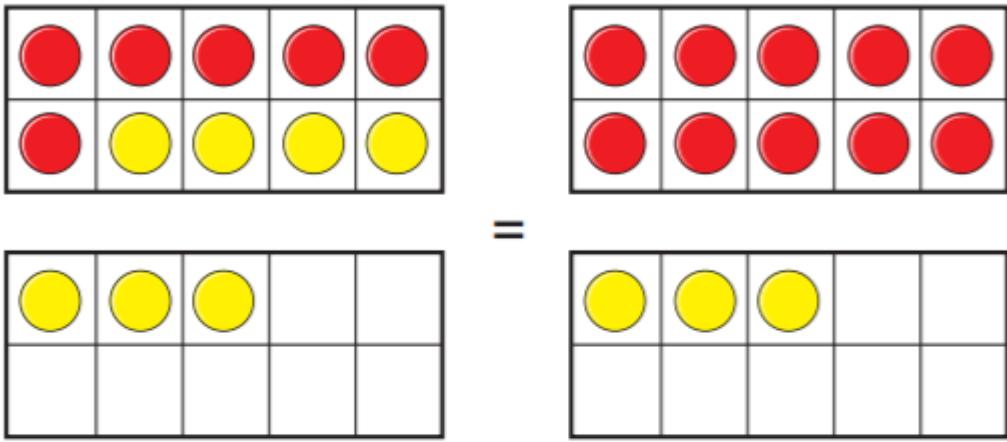


$14 + 3$	$17 + 3$	$2 + 18$	$0 + 20$	$3 + 16$	$9 + 11$	$17 + 3$	$18 + 2$	$2 + 0$
$18 + 1$	$3 + 7$	$12 + 7$	$5 + 15$	$4 + 8$	$1 + 19$	$13 + 5$	$20 + 0$	$1 + 15$
$11 + 8$	$11 + 9$	$19 + 1$	$3 + 17$	$10 + 0$	$13 + 7$	$16 + 2$	$8 + 12$	$5 + 5$
$5 + 6$	$4 + 16$	$19 + 0$	$10 + 1$	$2 + 0$	$14 + 6$	$17 + 1$	$11 + 9$	$11 + 8$
$12 + 5$	$12 + 8$	$18 + 2$	$15 + 5$	$4 + 15$	$16 + 4$	$10 + 10$	$15 + 5$	$13 + 3$

Make your own puzzle like this.



- 1** The ten frames show that  $6 + 7$  is the same as  $10 + 3$



Use counters to show that  $5 + 6$  is the same as  $10 + 1$



- 2** Complete the additions.  
Use ten frames to help you.

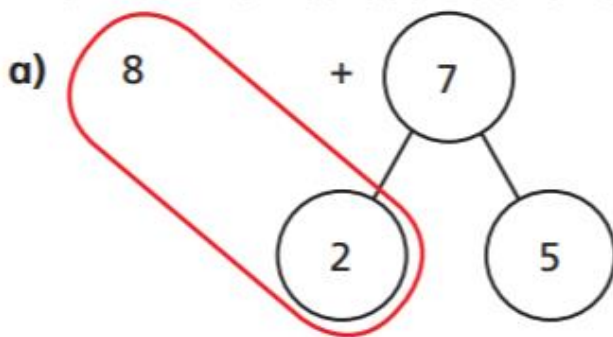
a)  $8 + 3 = 10 + \square$

c)  $7 + 5 = 10 + \square$

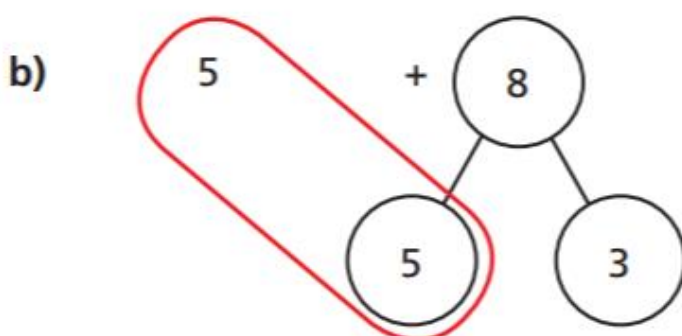
b)  $9 + 7 = 10 + \square$

d)  $6 + 8 = 10 + \square$

- 3** Use number bonds to complete the additions.  
The first one has been done for you.

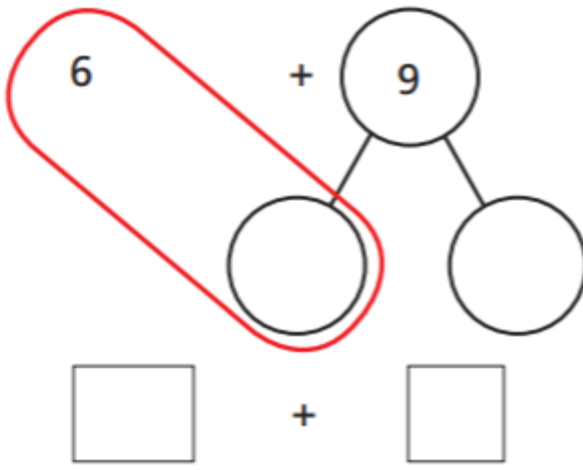


$10 + 5 = 15$

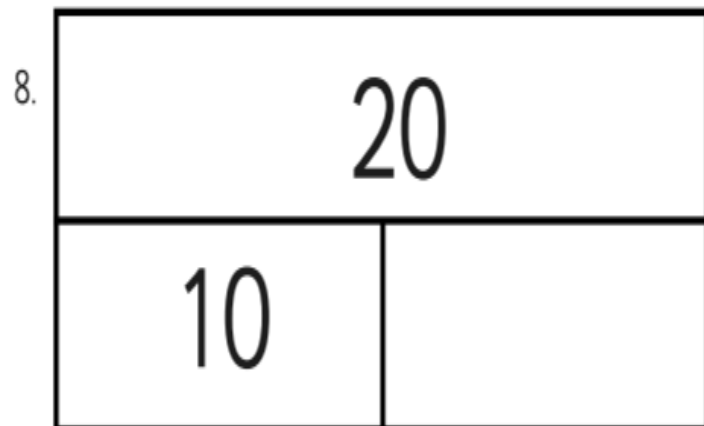
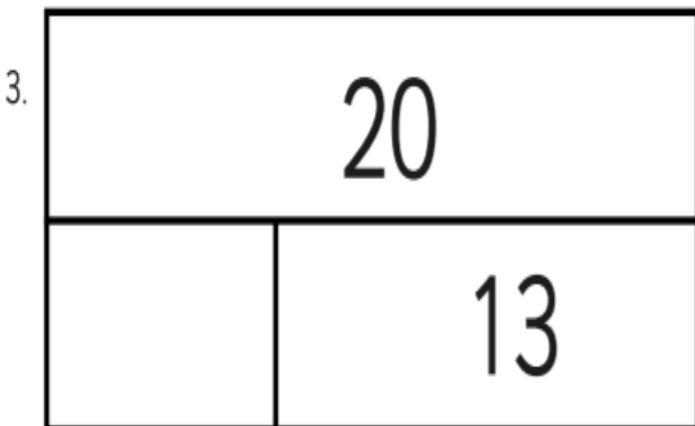
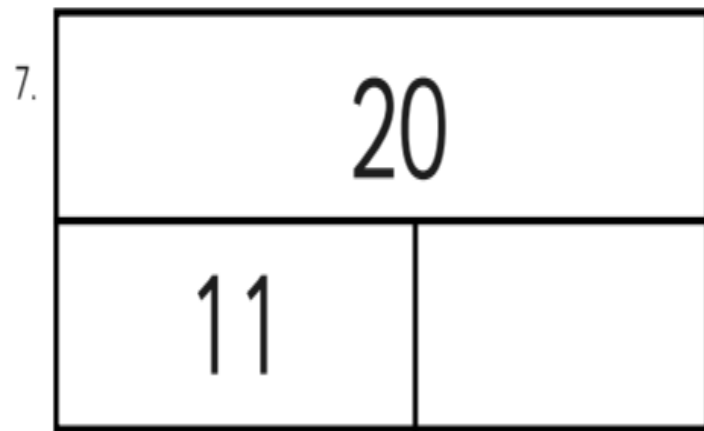
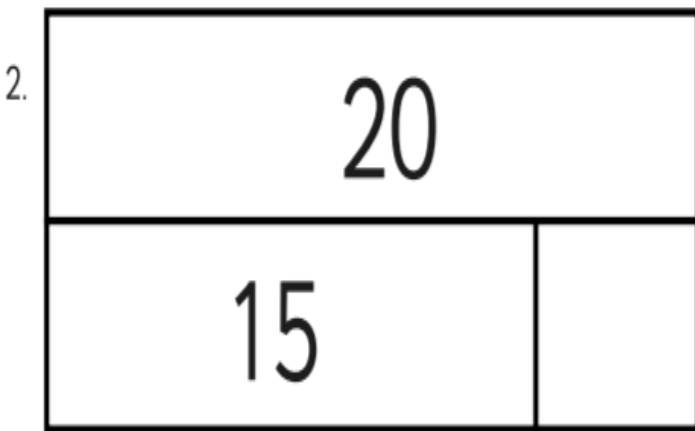
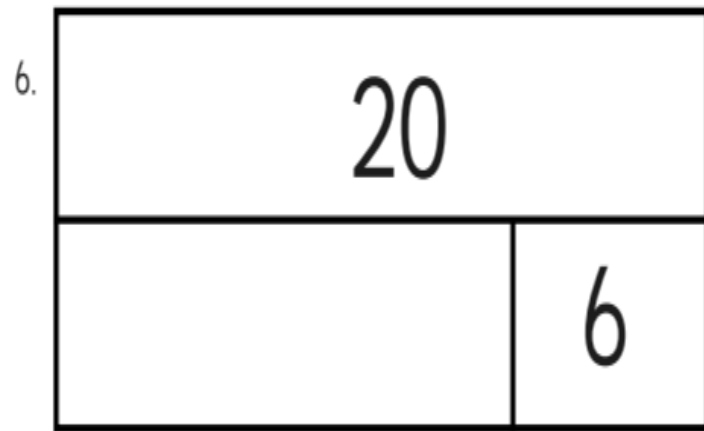
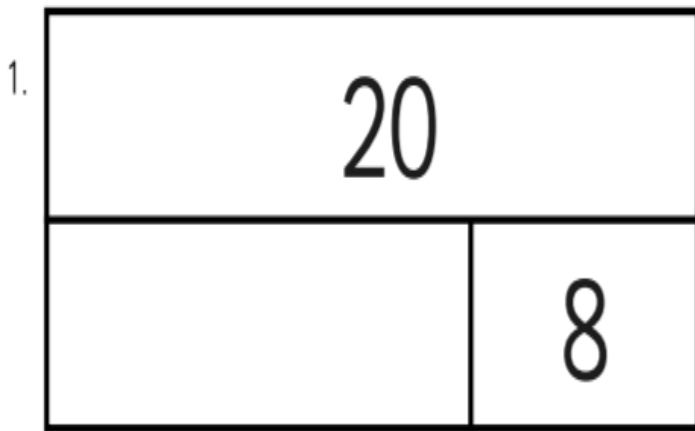


$10 + 3 =$

c)



Use known number facts to fill in the missing numbers on these bar models.



4.

20	
10	

9.

20	
	16

5.

20	
	3

10.

20	
	2

1.

20	

6.

20	

2.

20	

7.

20	

3.

20	

8.

20	

# Number bonds to 100

If children are confident with bonds to 10 and 20 they can use this information to help them with bonds to 100

$$1+9=10$$

How many more 10's to get to 100 (90)

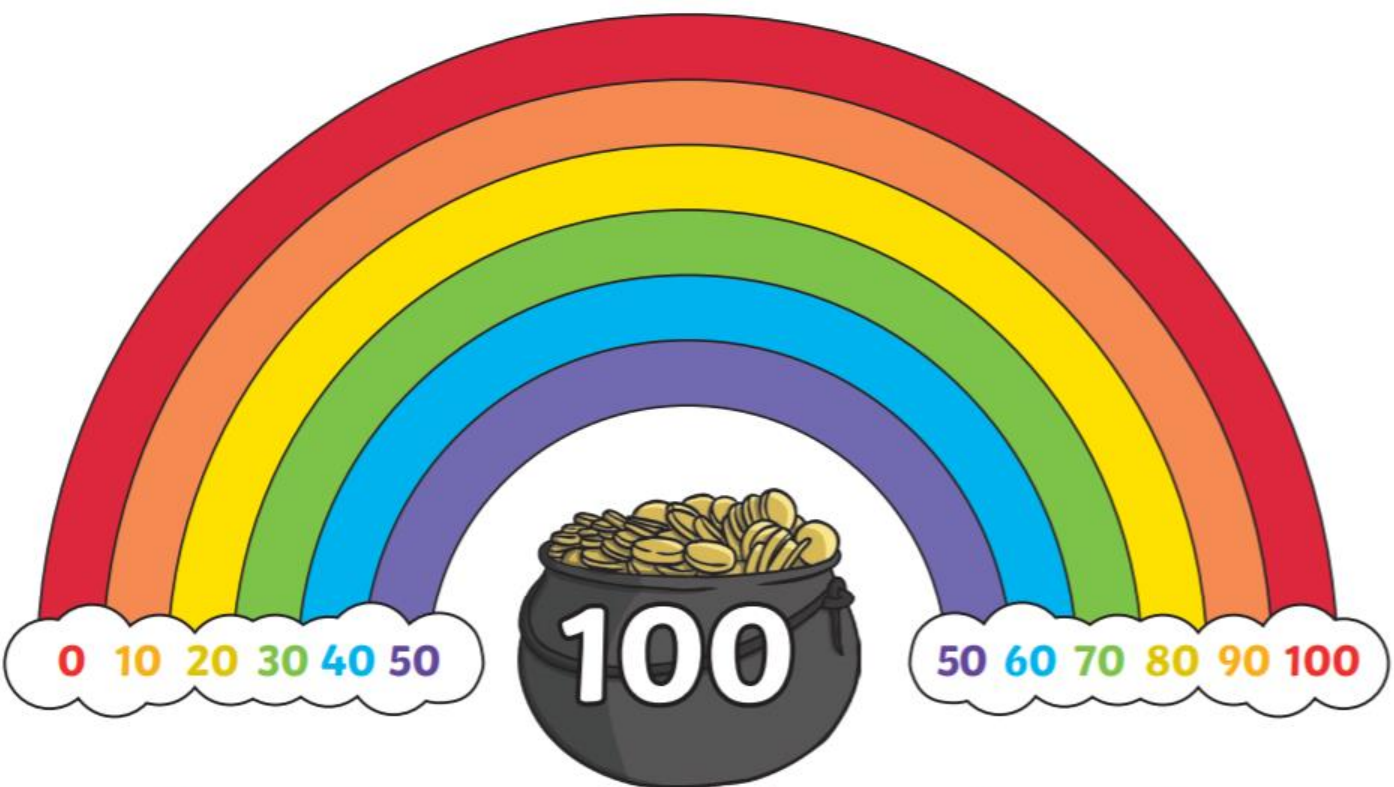
$$1+9=10$$

$$10+90=100$$

Rpt a few times and see if they can see the pattern.

Use objects, pictures, etc to help show them the bonds

# Rainbow to 100



$$\underline{\quad} + \underline{\quad} =$$

$$\underline{\quad} + \underline{\quad} =$$

$$\underline{\quad} + \underline{\quad} =$$

$$\underline{\quad} + \underline{\quad} =$$

$$\underline{\quad} + \underline{\quad} =$$

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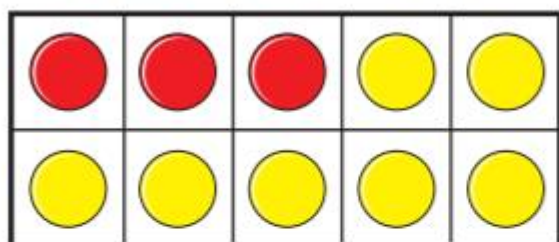
$$\underline{\quad} + \underline{\quad} =$$

$$\underline{\quad} + \underline{\quad} =$$

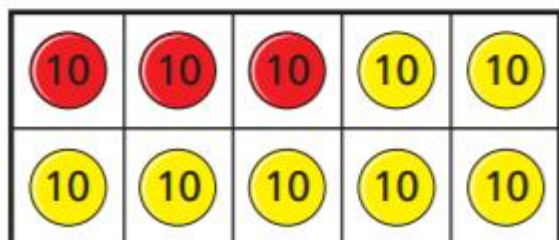
$$\underline{\quad} + \underline{\quad} =$$



- 1 a) What calculation is represented?



- b) What calculation is represented?



- c) What is the same about part a) and part b)?  
What is different?

- 2 a) Write six different number bonds to 10

Compare answers with a partner to make sure you have them all.

- b) Write six different number bonds to 100

Use your answer to part a) and related facts to help you.

- 3 Fill in the missing digits.

a)  $3 + 5 = \square$

$30 + 50 = \square$

$3\_ + 5\_ = 80$

$80 = \_0 + 3\_$

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$$\text{b) } 7 + 2 = \square$$

$$7\_ + 2\_ = 90$$

$$\text{c) } 2 + 2 = \square$$

$$2\_ + 2\_ = 40$$

$$\text{d) } 6 + 0 = \square$$

$$6\_ + \square = 60$$

$$70 + 20 = \square$$

$$90 = \_0 + 7\_$$

$$20 + 20 = \square$$

$$40 = \_0 + 2\_$$

$$60 + 0 = \square$$

$$60 = \square + 6\_$$

4 Continue the pattern.

$$100 = 100 - 0$$

$$90 = 100 - 10$$

$$80 = 100 - \square$$

$$\square = 100 - \square$$

Can you continue this pattern?

Talk to a partner.

Write a similar pattern starting with  $50 = 50 - 0$

How many other patterns can you find that start with different numbers?