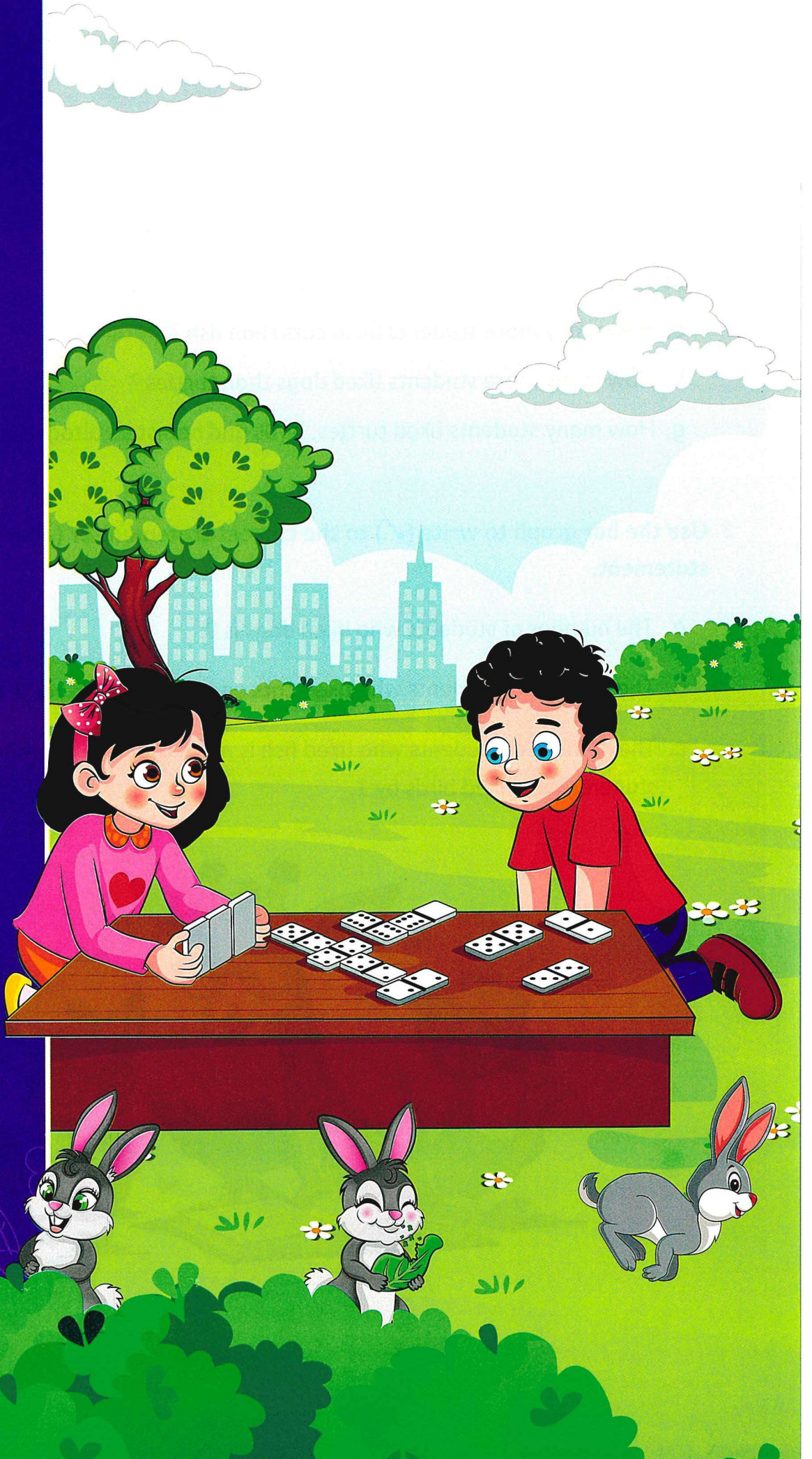




CHAPTER





Outcomes of chapter two :

At the end of chapter two , your child will be able to:

- ▶ **Lessons 1 & 2 :**
 - Participate in calendar math activities.
 - Apply the mental math strategy of adding doubles.
 - Apply the mental math strategy of counting on from the bigger number to add.
 - Apply the mental math strategy of counting on from the smaller number to subtract.
 - Solve addition and subtraction problems.

- ▶ **Lessons 3 & 4 :**
 - Participate in calendar math activities.
 - Solve addition and subtraction problems.
 - Apply the mental math strategy of adding or subtracting 10.
 - Apply the mental math strategy of making tens to add or subtract.

- ▶ **Lessons 5 & 6 :**
 - Participate in calendar math activities.
 - Apply mental math strategies to solve addition story problems.
 - Apply mental math strategies to solve subtraction story problems.

- ▶ **Lessons 7 to 10 :**
 - Participate in calendar math activities.
 - Solve addition problems to find a missing addend.
 - Apply mental math strategies to solve addition problems.
 - Solve subtraction problems to find a missing subtrahend.
 - Apply mental math strategies to solve subtraction problems.
 - Solve problems to find a missing addend or subtrahend.
 - Apply mental math strategies to add 1-digit number to 2-digit number.

Lessons 1 & 2

- Adding doubles
- Adding and subtracting by counting

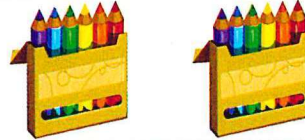


Learn 1 Adding doubles

Sometimes the number in each group is the same. That is called a **double**.



$$1 \text{ eye} + 1 \text{ eye} = 2 \text{ eyes}$$



$$6 \text{ crayons} + 6 \text{ crayons} = 12 \text{ crayons}$$



$$2 \text{ legs} + 2 \text{ legs} = 4 \text{ legs}$$

MAY	Mo	Tu	We	Th	Fr	Sa	Su
	X	X	X	X	X	X	X
	X	X	X	X	X	X	X
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31				

$$7 \text{ days} + 7 \text{ days} = 14 \text{ days}$$



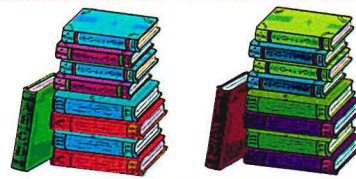
$$3 \text{ flowers} + 3 \text{ flowers} = 6 \text{ flowers}$$



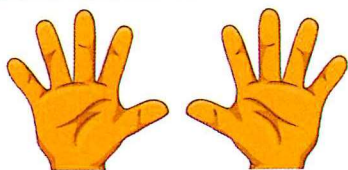
$$8 \text{ pieces} + 8 \text{ pieces} = 16 \text{ pieces}$$



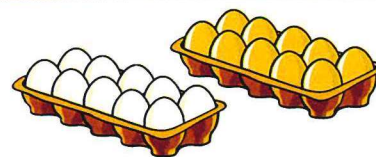
$$4 \text{ legs} + 4 \text{ legs} = 8 \text{ legs}$$



$$9 \text{ books} + 9 \text{ books} = 18 \text{ books}$$

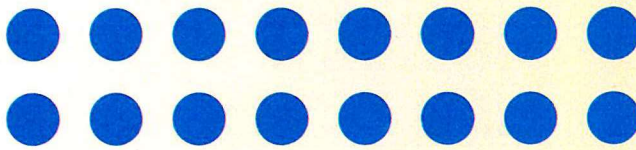


$$5 \text{ fingers} + 5 \text{ fingers} = 10 \text{ fingers}$$



$$10 \text{ eggs} + 10 \text{ eggs} = 20 \text{ eggs}$$

$$\begin{array}{r} 8 \\ + 8 \\ \hline 16 \end{array}$$



When you add two numbers that are the same, the sentence is a doubles fact.

$$8 + 8 = 16 \text{ is a doubles fact.}$$



16 is the double of 8

Check



Add. Write the sums.

$$\begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$$

$$3 + 3 = \underline{\quad}$$

$$5 + 5 = \underline{\quad}$$

$$9 + 9 = \underline{\quad}$$

$$1 + 1 = \underline{\quad}$$

$$8 + 8 = \underline{\quad}$$

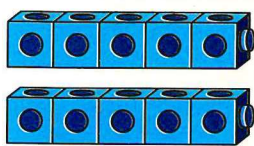
$$6 + 6 = \underline{\quad}$$



- Ask your child to give you one example of a doubles fact ($3 + 3 = 6$) and one example of an addition sentence that is not a doubles fact ($3 + 5 = 8$).

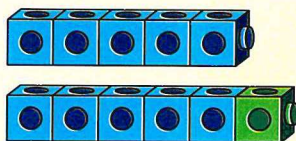


Learn 2 Adding doubles plus one



$$\begin{array}{r} 5 \\ + 5 \\ \hline 10 \end{array}$$

$5 + 5 = 10$ is a **doubles** fact.



$$\begin{array}{r} 5 \\ + 6 \\ \hline 11 \end{array}$$

$5 + 6 = 11$ is a **doubles plus one** fact.

$5 + 5 = 10$
is a **doubles** fact.
 $5 + 6 = 11$
is a **doubles plus one** fact.



Check



Write the sums.

$\begin{array}{r} 6 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 7 \\ \hline \end{array}$
---	---

$\begin{array}{r} 3 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ + 4 \\ \hline \end{array}$
---	---

$\begin{array}{r} 8 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 9 \\ \hline \end{array}$
---	---

$\begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ + 2 \\ \hline \end{array}$
---	---

$\begin{array}{r} 9 \\ + 9 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ + 9 \\ \hline \end{array}$
---	--

$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$
---	---

$\begin{array}{r} 5 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 5 \\ \hline \end{array}$
---	---

$\begin{array}{r} 7 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$
---	---

$\begin{array}{r} 0 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 0 \\ + 1 \\ \hline \end{array}$
---	---

Notes for parents

- Have your child tell you the doubles facts and the doubles plus one facts for 3 as $3 + 3 = 6$, so $3 + 4 = 7$
- Your child can think $3 + 4$ as $(3 + 3 = 6 \text{ plus } 1 = 7)$ or $(4 + 4 = 8 \text{ minus } 1 = 7)$.



Learn 3 Counting on to add

Count on to find the **sum**. Start with the greater number to make counting easier.

What is **8 + 2** ?

Say 8
Count on 2 more.
9, 10
The sum is 10

$$\begin{array}{r} 8 \\ + 2 \\ \hline 10 \end{array}$$

What is **4 + 12** ?

Say 12
Count on 4 more.
13, 14, 15, 16
The sum is 16

$$\begin{array}{r} 4 \\ + 12 \\ \hline 16 \end{array}$$

When you add, the answer is called the **sum**.



Check



Circle the greater number. Count on to find the sum.

$$\begin{array}{r} 6 \\ + 2 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 5 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 5 \\ \hline \end{array}$$

- When you count on to find the sum, your child can start with the smaller number, but it is easier to start with the greater one.



Learn 4 Counting on to subtract

Count on to find the difference. Start with the smaller number.

What is $7 - 4$?

Use your fingers to count on after 4 to reach 7.



You raised 3 fingers.

$$\begin{array}{r} 7 \\ - 4 \\ \hline 3 \end{array}$$

When you subtract, the answer is called the difference.



Check

Circle the smaller number. Count on to find the difference.

$$\begin{array}{r} 9 \\ - 5 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 12 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \\ - 12 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 2 \\ \hline \end{array}$$

Notes for parents


- Your child also can count back to find the difference $7 - 4$. Start with the greater number 7 and count 4 backwards (6, 5, 4, 3), the answer is 3.

Exercise


5

On Lessons 1 & 2

- Adding doubles
- Adding and subtracting by counting

 From the school book

1 Use the doubles fact to find the answer.


a.  $3 + 3 = \underline{\quad}$

c.  $4 + 4 = \underline{\quad}$

e. $10 + 10 = \underline{\quad}$

g. $8 + 8 = \underline{\quad}$

i. $9 + 9 = \underline{\quad}$

b.  $7 + 7 = \underline{\quad}$

d. $5 + 5 = \underline{\quad}$

f. $1 + 1 = \underline{\quad}$

h. $2 + 2 = \underline{\quad}$

j. $6 + 6 = \underline{\quad}$



2 Use doubles plus one strategy to find the answer.

a. $5 + 5 = \underline{\quad}$ so,
 $5 + 6 = \underline{\quad}$

b. $4 + 4 = \underline{\quad}$ so,
 $4 + 5 = \underline{\quad}$

c. $7 + 7 = \underline{\quad}$ so,
 $8 + 7 = \underline{\quad}$

d. $9 + 9 = \underline{\quad}$ so,
 $9 + 10 = \underline{\quad}$

e. $6 + 6 = \underline{\quad}$ so,
 $7 + 6 = \underline{\quad}$

f. $8 + 8 = \underline{\quad}$ so,
 $9 + 8 = \underline{\quad}$

g. $2 + 2 = \underline{\quad}$ so,
 $2 + 3 = \underline{\quad}$

h. $3 + 3 = \underline{\quad}$ so,
 $3 + 4 = \underline{\quad}$

i. $10 + 10 = \underline{\quad}$ so,
 $11 + 10 = \underline{\quad}$

3 Count on to add each of the following.

a. $7 + 2 = \underline{\quad}$

d. $14 + 7 = \underline{\quad}$

g. $5 + 8 = \underline{\quad}$

j. $13 + 2 = \underline{\quad}$

m. $7 + 3 = \underline{\quad}$

b. $8 + 4 = \underline{\quad}$

e. $12 + 5 = \underline{\quad}$

h.  $10 + 6 = \underline{\quad}$

k. $15 + 4 = \underline{\quad}$

n. $9 + 6 = \underline{\quad}$

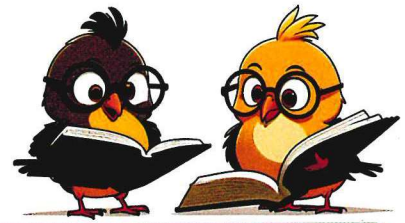
c.  $3 + 12 = \underline{\quad}$

f. $7 + 7 = \underline{\quad}$

i. $4 + 7 = \underline{\quad}$

l. $9 + 7 = \underline{\quad}$


o. $8 + 3 = \underline{\quad}$



4 Count on to subtract each of the following.

a. $9 - 3 = \underline{\quad}$

d. $10 - 2 = \underline{\quad}$

g.  $15 - 10 = \underline{\quad}$

j. $11 - 7 = \underline{\quad}$

b.  $8 - 6 = \underline{\quad}$

e. $13 - 5 = \underline{\quad}$

h. $16 - 7 = \underline{\quad}$

k. $17 - 9 = \underline{\quad}$

c. $14 - 7 = \underline{\quad}$

f. $16 - 9 = \underline{\quad}$

i. $18 - 2 = \underline{\quad}$

l. $15 - 1 = \underline{\quad}$

5 Put (✓) to the correct statement or (X) to the incorrect statement.

a. $5 + 5 = 10$ ()

c. $5 + 13 = 17$ ()

e. $4 + 7 = 11$ ()

g. $14 - 7 = 6$ ()

b. $7 + 6 = 14$ ()

d. $9 + 9 = 18$ ()

f. $17 - 5 = 12$ ()

h. $10 + 10 = 20$ ()

6 Choose the correct answer.

a. $7 + 7 = \underline{\quad}$

b. $8 + 9 = \underline{\quad}$

c. $5 + 9 = \underline{\quad}$

d. $9 + \underline{\quad} = 18$

e. $19 - 2 = \underline{\quad}$

f. $5 + \underline{\quad} = 10$

g. $12 - 4 = \underline{\quad}$

(9 or 14 or 15)

(17 or 18 or 19)

(4 or 14 or 15)

(9 or 10 or 18)

(15 or 17 or 18)

(4 or 5 or 7)

(5 or 6 or 8)



Place
a smiley
face

Lessons 3 & 4

- Adding or subtracting the number 10
- Adding and subtracting by making tens



Learn 1 Adding the number 10

Add 26 + 10

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Start at **26**
and count **10** forward,
you will reach **36**.

You moved up
one row.

$$\begin{array}{r} 26 \\ + 10 \\ \hline 36 \end{array}$$



- From the previous, notice that when you **add 10**, the digit in ones place doesn't change, and the digit in tens place increases by 1.

For example:

$$\begin{array}{r} 38 \\ + 10 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 25 \\ + 10 \\ \hline 35 \end{array}$$

$$\begin{array}{r} 20 \\ + 10 \\ \hline 30 \end{array}$$

Check



Add.

$$\begin{array}{r} 27 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ + 44 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 10 \\ \hline \end{array}$$

$$10 + 15 = \underline{\quad}$$

$$23 + 10 = \underline{\quad}$$

Notes for parents

- Help your child use the numbers chart to solve the addition problems in this page.



Learn 2 Subtracting the number 10

Subtract 26 - 10

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

To 20

Start at **26**
and count **10** backward,
you will reach **16**.
You moved down
one row.

$$\begin{array}{r} 26 \\ - 10 \\ \hline 16 \end{array}$$



- From the previous, notice that when you **subtract 10**, the digit in ones place doesn't change, and the digit in tens place decreases by 1.

For example:

$$\begin{array}{r} 25 \\ - 10 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 49 \\ - 10 \\ \hline 39 \end{array}$$

$$\begin{array}{r} 16 \\ - 10 \\ \hline 6 \end{array}$$

Check

Subtract.

$$\begin{array}{r} 23 \\ - 10 \\ \hline \end{array}$$

$$\begin{array}{r} 77 \\ - 10 \\ \hline \end{array}$$

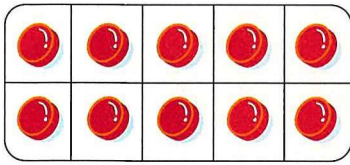
$$\begin{array}{r} 58 \\ - 10 \\ \hline \end{array}$$

$$\begin{array}{r} 82 \\ - 10 \\ \hline \end{array}$$

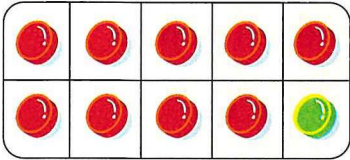
$$43 - 10 = \underline{\quad}$$

$$10 - 10 = \underline{\quad}$$

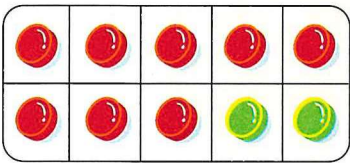
Remember the components of 10



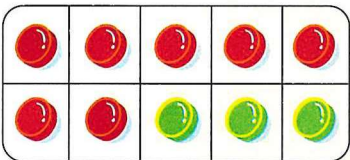
$$10 + 0 = 10$$



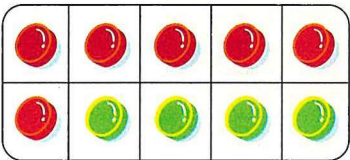
$$9 + 1 = 10$$



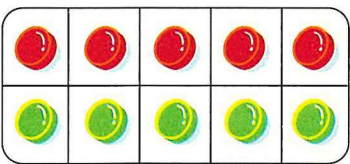
$$8 + 2 = 10$$



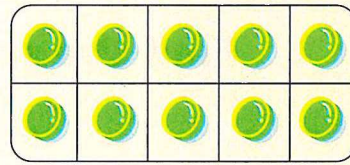
$$7 + 3 = 10$$



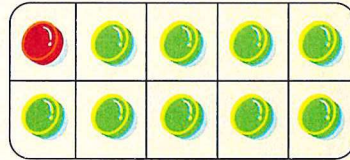
$$6 + 4 = 10$$



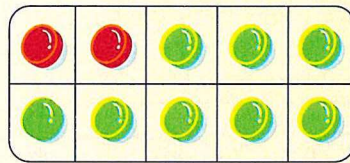
$$5 + 5 = 10$$



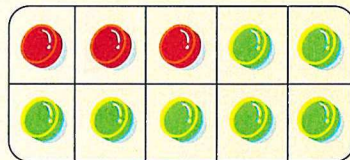
$$0 + 10 = 10$$



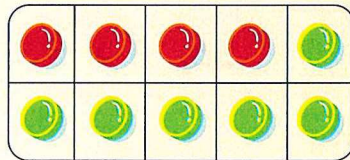
$$1 + 9 = 10$$



$$2 + 8 = 10$$



$$3 + 7 = 10$$



$$4 + 6 = 10$$

Components of 10 help you make a 10 to add and subtract.



Check



Find all ways to make a 10.

$$\bullet 7 + \text{---} = 10$$

$$\bullet \text{---} + 2 = 10$$

$$\bullet \text{---} + 1 = 10$$

$$\bullet 4 + \text{---} = 10$$

$$\bullet \text{---} + 3 = 10$$

$$\bullet 8 + \text{---} = 10$$

$$\bullet 5 + \text{---} = 10$$

$$\bullet \text{---} + 6 = 10$$

$$\bullet 9 + \text{---} = 10$$



Learn 3 Make a 10 to add

You make a 10 and have 3 extra.

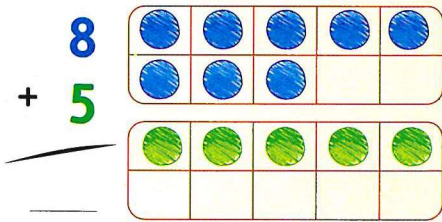


Find the sum of 8 + 5

First way

Show 8.

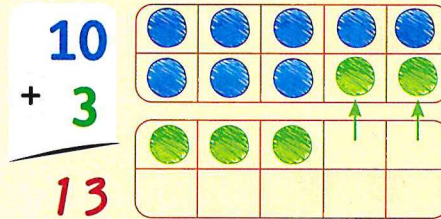
Then show 5.



Make a ten.

8 is close to 10

Move 2 counters into the ten frame.



Second way

$$8 + 5$$

2

Make a 10

3

Add the rest

$$8 + 2 = 10 \quad \text{and} \quad 10 + 3 = 13$$

$$\text{So, } 8 + 5 = 13$$

Break apart the 5. Use 2 to make a ten.



Check



Make a ten to add.

$$7 + 4$$

3 1

$$10 + \underline{\quad} = \underline{\quad}$$

$$8 + 6$$

2 4

$$10 + \underline{\quad} = \underline{\quad}$$

$$9 + 7$$

○ ○

$$10 + \underline{\quad} = \underline{\quad}$$

$$3 + 8$$

○ ○

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

$$7 + 9$$

○ ○

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

$$5 + 7$$

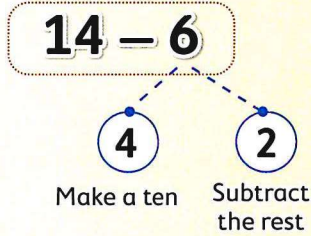
○ ○

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



Learn 4 Make a 10 to subtract

Find the difference of $14 - 6$



Break apart the 6.
Use 4 to make a ten.



$14 - 4 = 10$ and $10 - 2 = 8$

So, $14 - 6 = 8$

Check



Make a ten to subtract.

$15 - 7 = \underline{\quad}$

5 2

$10 - \underline{\quad} = \underline{\quad}$

$17 - 8 = \underline{\quad}$

7 1

$10 - \underline{\quad} = \underline{\quad}$

$18 - 9 = \underline{\quad}$

8 1

$10 - \underline{\quad} = \underline{\quad}$

$11 - 5 = \underline{\quad}$

1 4

$10 - \underline{\quad} = \underline{\quad}$

$12 - 5 = \underline{\quad}$

○ ○

$10 - \underline{\quad} = \underline{\quad}$

$14 - 9 = \underline{\quad}$

○ ○

$10 - \underline{\quad} = \underline{\quad}$

$16 - 9 = \underline{\quad}$

○ ○

$10 - \underline{\quad} = \underline{\quad}$

$13 - 5 = \underline{\quad}$

○ ○

$10 - \underline{\quad} = \underline{\quad}$

$15 - 8 = \underline{\quad}$

○ ○

$10 - \underline{\quad} = \underline{\quad}$


• Make a 10 to subtract, this way is used when the units digit of the first number is less than the units digit in the second one.

Exercise

6

On Lessons 3 & 4

- Adding or subtracting the number 10
- Adding and subtracting by making tens

 From the school book

1 Add.

a.  $4 + 10 = \underline{\quad}$

d. $84 + 10 = \underline{\quad}$

g. $37 + 10 = \underline{\quad}$

j. $17 + 10 = \underline{\quad}$

m. $29 + 10 = \underline{\quad}$

p. $63 + 10 = \underline{\quad}$

b. $42 + 10 = \underline{\quad}$

e. $21 + 10 = \underline{\quad}$

h. $50 + 10 = \underline{\quad}$

k. $39 + 10 = \underline{\quad}$

n. $80 + 10 = \underline{\quad}$

q. $76 + 10 = \underline{\quad}$

c. $75 + 10 = \underline{\quad}$

f. $19 + 10 = \underline{\quad}$

i. $67 + 10 = \underline{\quad}$

l. $71 + 10 = \underline{\quad}$

o. $47 + 10 = \underline{\quad}$

r. $22 + 10 = \underline{\quad}$

2 Subtract.


a. $78 - 10 = \underline{\quad}$

d. $99 - 10 = \underline{\quad}$

g.  $16 - 10 = \underline{\quad}$

j. $19 - 10 = \underline{\quad}$

m. $91 - 10 = \underline{\quad}$

p.  $20 - 10 = \underline{\quad}$

b. $24 - 10 = \underline{\quad}$

e. $71 - 10 = \underline{\quad}$

h. $49 - 10 = \underline{\quad}$

k. $37 - 10 = \underline{\quad}$

n. $62 - 10 = \underline{\quad}$

q. $54 - 10 = \underline{\quad}$

c. $38 - 10 = \underline{\quad}$

f. $87 - 10 = \underline{\quad}$

i. $51 - 10 = \underline{\quad}$

l. $45 - 10 = \underline{\quad}$

o. $23 - 10 = \underline{\quad}$

r. $81 - 10 = \underline{\quad}$

3 Complete.

a. $4 + \underline{\quad} = 10$

d. $5 + \underline{\quad} = 10$

g. $8 + \underline{\quad} = 10$

b. $7 + \underline{\quad} = 10$

e. $2 + \underline{\quad} = 10$

h. $9 + \underline{\quad} = 10$

c. $1 + \underline{\quad} = 10$

f. $6 + \underline{\quad} = 10$

i. $\underline{\quad} + 3 = 10$

4 Make a ten to add.

a. $9 + 5$

 $10 + \underline{\quad} = \underline{\quad}$

b. $7 + 6$

 $10 + \underline{\quad} = \underline{\quad}$

c. $6 + 6$

 $10 + \underline{\quad} = \underline{\quad}$

d. $9 + 3$

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

e. $8 + 4$

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

f. $9 + 6$

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

g. $8 + 7$

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

h. $6 + 5$

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

i. $7 + 5$

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

j.
$$\begin{array}{r} 6 \\ + 8 \\ \hline \\ \hline \end{array}$$

k.
$$\begin{array}{r} 8 \\ + 4 \\ \hline \\ \hline \end{array}$$

l.
$$\begin{array}{r} 4 \\ + 9 \\ \hline \\ \hline \end{array}$$

5 Make a ten to subtract.

a. $12 - 5 = \underline{\quad}$

d. $13 - 7 = \underline{\quad}$

g. $17 - 9 = \underline{\quad}$

j. $15 - 9 = \underline{\quad}$

m. $13 - 8 = \underline{\quad}$

b. $17 - 8 = \underline{\quad}$

e. $14 - 5 = \underline{\quad}$

h. $18 - 9 = \underline{\quad}$

k. $16 - 8 = \underline{\quad}$

n. $11 - 7 = \underline{\quad}$

c. $15 - 7 = \underline{\quad}$

f. $16 - 7 = \underline{\quad}$

i. $12 - 7 = \underline{\quad}$

l. $14 - 8 = \underline{\quad}$

o. $13 - 4 = \underline{\quad}$

p.
$$\begin{array}{r} 15 \\ - 6 \\ \hline \\ \hline \end{array}$$

q.
$$\begin{array}{r} 17 \\ - 8 \\ \hline \\ \hline \end{array}$$

r.
$$\begin{array}{r} 11 \\ - 5 \\ \hline \\ \hline \end{array}$$

s.
$$\begin{array}{r} 12 \\ - 8 \\ \hline \\ \hline \end{array}$$

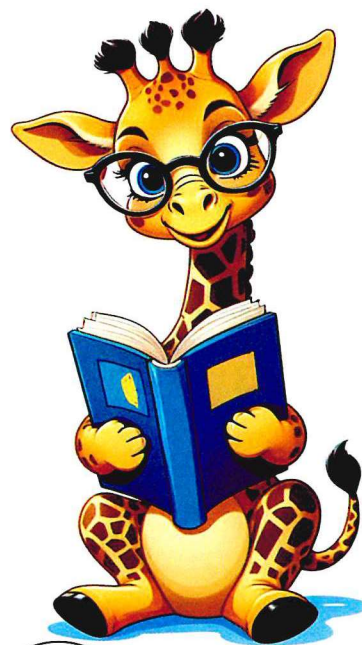
t.
$$\begin{array}{r} 14 \\ - 7 \\ \hline \\ \hline \end{array}$$

6 Use the Making Tens mental math strategy to solve these problems.

a.	$5 + 6$	$5 + \underline{\quad\quad} = 10$	So, $5 + 6 = \underline{\quad\quad}$
b.	$7 + 4$	$7 + \underline{\quad\quad} = 10$	So, $7 + 4 = \underline{\quad\quad}$
c.	$8 + 5$	$8 + \underline{\quad\quad} = 10$	So, $8 + 5 = \underline{\quad\quad}$
d.	$13 - 3$	$13 - \underline{\quad\quad} = 10$	So, $13 - 3 = \underline{\quad\quad}$
e.	$12 - 5$	$12 - \underline{\quad\quad} = 10$	So, $12 - 5 = \underline{\quad\quad}$
f.	$18 - 9$	$18 - \underline{\quad\quad} = 10$	So, $18 - 9 = \underline{\quad\quad}$

7 Choose the correct answer.

- a. $8 + 5 = \underline{\quad\quad}$ (12 or 13 or 14)
- b. $24 + 10 = \underline{\quad\quad}$ (14 or 24 or 34)
- c. $35 - 10 = \underline{\quad\quad}$ (34 or 24 or 25)
- d. $18 - 9 = \underline{\quad\quad}$ (7 or 8 or 9)
- e. $93 - 10 = \underline{\quad\quad}$ (83 or 73 or 92)
- f. $7 + 8 = \underline{\quad\quad}$ (10 or 15 or 20)
- g. $22 + 10 = \underline{\quad\quad}$ (32 or 23 or 33)
- h. $9 + 6 = \underline{\quad\quad}$ (10 or 15 or 16)
- i. $77 - 10 = \underline{\quad\quad}$ (66 or 76 or 67)
- j. $23 + 10 = \underline{\quad\quad}$ (33 or 24 or 34)



Place
a smiley
face

Lessons 5 & 6

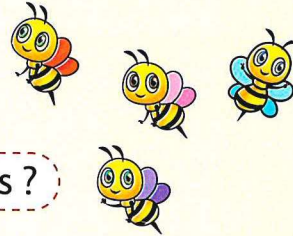
- Story problems on adding
- Story problems on subtracting



Learn 1 Story problems on adding

Bassem saw 7 bees on Saturday.

He saw 6 bees on Sunday.



How many bees did he see in all the two days ?



Understand

- What do you want to find out ?

Circle the questions.



Plan

- What facts do you need ?

Underline them.



Solve

- You can use different ways to solve the problem

$$7 + 6 = ?$$

Counting on

Say 7

Count on 6 more

8, 9, 10, 11, 12, 13

The sum is **13**

Use doubles plus one

$$\begin{array}{r} 6 \\ + 6 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 7 \\ + 6 \\ \hline 13 \end{array}$$

Make a 10 to add

$$\begin{array}{r} 7 + 6 \\ \swarrow \quad \searrow \\ \textcircled{3} \quad \textcircled{3} \end{array}$$

$$7 + 3 = 10$$

$$10 + 3 = 13$$

Bassem saw **13** bees in all the two days.

Check



Ahmed has 8 blue pens and 9 black pens. How many pens does Ahmed have ?

Notes for parents

- In this lesson your child will use the strategies he/she has studied before to solve addition and subtraction word problems.
- Help your child understand, plan, solve and check the answer each time he/she answered the problem.



Learn 2 Story problems on subtracting

There are 11 birds on a tree.

5 of them flew away.

How many birds are left on the tree ?



Understand

- What do you want to find out ?

Circle the questions.



Plan

- What facts do you need ?

Underline them.



Solve

- You can use different ways to solve the problem $11 - 5 = ?$

Counting on

Use your fingers to count on after 5 to reach 11.

$$11 - 5 = 6$$

Make a ten to subtract

$$11 - 5$$

$$11 - 1 = 10 \quad \text{and} \quad 10 - 4 = 6$$

The number of birds left on the tree is 6 birds.



- Understand
- Plan
- Solve
- Check your answer

Check



Mostafa has 11 pounds, he bought a bottle of water by 3 pounds.

How much money is left with Mostafa ?

Notes for parents

- Make sure that your child understand the problem. Talk with him/her about the different ways of solving it.

- For each problem, ask your child to tell you how he/she decided whether to add or subtract.

Exercise

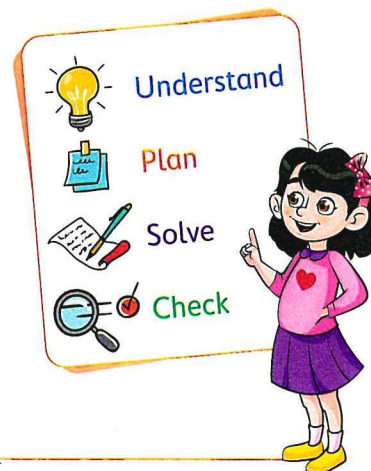
7

On Lessons 5 & 6

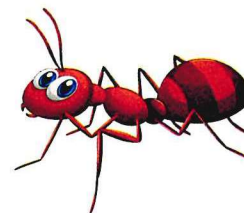
- Story problems on adding
- Story problems on subtracting

From the school book

- 1** Mariam has 8 books in Arabic and 5 books in English.
How many books does Mariam have ?



- 2** Raja counted 7 ants crawling on the sidewalk.
Then he found 3 more ants crawling.
How many ants did Raja see in all ?




- 3** Ali has 7 marbles, his brother give him 6 marbles.
How many marbles does Ali have ?



- 4** There are 2 crayon boxes, in each box there are 6 crayons.
What is the number of crayons in the two boxes ?



5  Mukhtar has 6 jelly beans in a jar. He has another 8 jelly beans in his pocket.

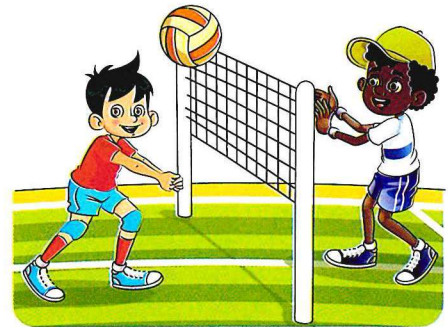
How many jelly beans does Mukhtar have in all ?




6 Ali caught 9 fish and Mina caught 8 fish.
Find the number of fish with both.




7 Mohamed and Paula are in a volleyball team.
In the last match Mohamed scored 7 points and Paula scored 5 points.
What is the number of points that Mohamed and Paula scored ?

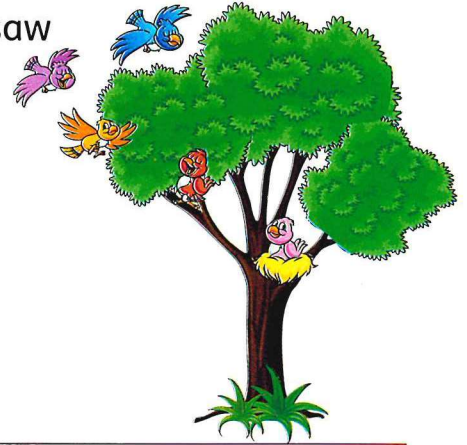


8  Heba has 7 stickers. Her teacher gives her 9 more stickers.
How many stickers does Heba have all together ?



9  Miryam saw 8 birds flying in the sky. She also saw 4 birds sitting in a tree.

How many birds did Miryam see in all ?



10 There are 2 vases. In each vase there are 7 flowers.

What is the number of flowers in all ?



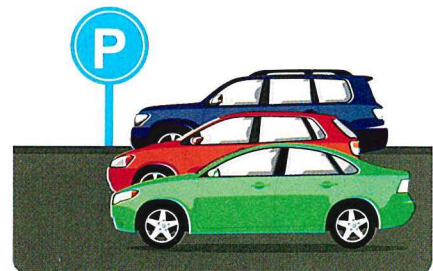
11 Tamer had 8 pens. He gave 6 pens to Jana.

How many pens does Tamer have now ?



12 There are 12 cars in the park, if 9 cars go away.

How many cars are there in the car park now ?



13 Khadega bought 15 candies, she gave 6 candies to her brother.

How many candies does Khadega have now ?



14 Farida had 11 oranges, she ate 7 of them.


How many oranges are remained with Farida ?



15 There are 12 people in a bus, if 7 of them get off the bus.


How many people are remained in the bus ?

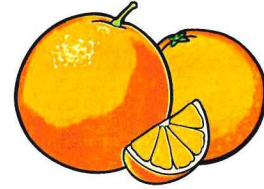



16  Ahmed gathers 15 rocks at the beach. He tosses 6 rocks into the water.

How many rocks does Ahmed have left ?




17  Rashida bought 13 oranges. She gave 3 oranges to her father.
How many oranges does she have now ?



18  Salma has 18 figs. She eats 10 figs.
How many figs does Salma have left ?



19  Mustafa has 16 candies. He ate 6 candies.
How many candies does Mustafa have left ?



20 There are 15 birds on a tree, 7 of them flew away.
How many birds are left on the tree ?



Place
a smiley
face

- Mental applications on adding
- Mental applications on subtracting
- Mental applications on adding and subtracting
- Adding using the 120 chart

Learn 1 Mental applications on adding "Finding a missing addend"

Sameh had **12** books.

His teacher gave him some extra books.

Sameh has now **19** books.

How many books did his teacher give him ?



Addition problem solving using counting on strategy

✿ Write a number sentence.

$$12 + \boxed{?} = 19$$

↑
What Sameh had

↑
What his teacher gave him

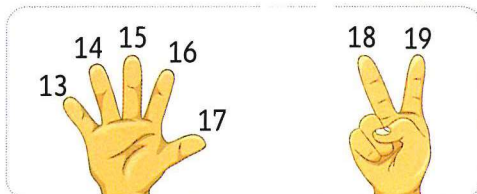
↑
The sum

Addends are the numbers you add together in addition problem.

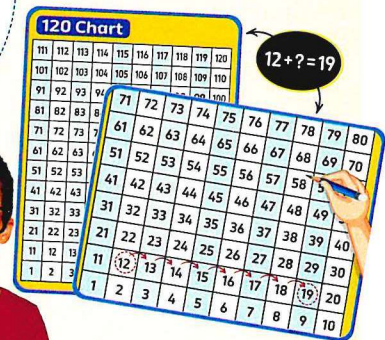
$$9 + 3 = 12$$

↑ ↑ ↑
addend addend sum

✿ Count on after 12 to reach 19.



You can use the 120 chart to add the two numbers.



- You raised 7 fingers. So, $12 + 7 = 19$
- His teacher gave him 7 books.



Check

Find the missing addend.

$5 + \underline{\quad} = 12$

$9 + \underline{\quad} = 14$

$\underline{\quad} + 7 = 14$

$2 + \underline{\quad} = 11$

$\underline{\quad} + 6 = 13$

$\underline{\quad} + 7 = 16$



Learn 2

Mental applications on subtracting "Finding a missing subtrahend"

17 birds were flying.

Some landed on a tree.

11 are still in the air.

How many birds did land on the tree ?



Subtraction problem solving using counting on strategy

✿ Write a number sentence.

$$17 - \boxed{?} = 11$$

Number of birds were flying

Number of birds landed on the tree

Number of birds still in the air

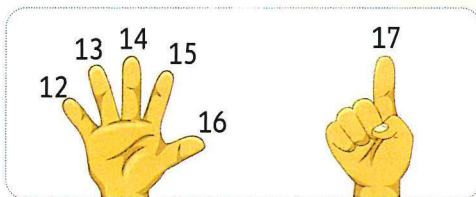
Subtrahend is a number to be subtracted from another number.

$$9 - 3 = 6$$

subtrahend

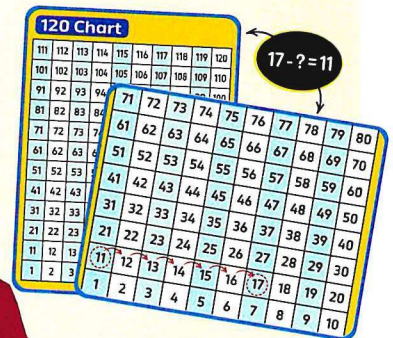
You can use the 120 chart to subtract the two numbers.

✿ Count on after 11 to reach 17.



- You raised 6 fingers. So, $17 - \boxed{6} = 11$

- 6 birds landed on the tree.



Check



Find the missing subtrahend.

$17 - \underline{\quad} = 9$

$$\begin{array}{r} 13 \\ - \underline{\quad} \\ \hline 4 \end{array}$$

$15 - \underline{\quad} = 7$

$$\begin{array}{r} 18 \\ - \underline{\quad} \\ \hline 7 \end{array}$$

$12 - \underline{\quad} = 7$


$$\begin{array}{r} 12 \\ - \underline{\quad} \\ \hline 5 \end{array}$$

Exercise

8

On Lessons 7 to 10

- Mental applications on adding
- Mental applications on subtracting
- Mental applications on adding and subtracting
- Adding using the 120 chart

 From the school book

1 Find the missing number.

a. $\text{---} + 7 = 10$

d. $\text{---} + 4 = 11$


g. $\text{---} + 9 = 14$

j.  $11 - \text{---} = 7$

m.  $13 - \text{---} = 9$

p. $15 - \text{---} = 6$

b. $\text{---} + 5 = 9$

e.  $10 + \text{---} = 16$

h. $15 - \text{---} = 8$

k. $12 - \text{---} = 7$

n.  $10 + \text{---} = 19$

q. $17 - \text{---} = 8$

c.  $6 + \text{---} = 12$

f. $8 + \text{---} = 17$

i. $16 - \text{---} = 7$

l. $18 - \text{---} = 12$

o. $9 + \text{---} = 12$

r.  $19 - \text{---} = 8$

s.
$$\begin{array}{r} 8 \\ + \text{---} \\ \hline 16 \end{array}$$

t.
$$\begin{array}{r} \text{---} \\ + 5 \\ \hline 14 \end{array}$$

u.
$$\begin{array}{r} 13 \\ - \text{---} \\ \hline 6 \end{array}$$

v.
$$\begin{array}{r} 17 \\ - \text{---} \\ \hline 9 \end{array}$$

w.
$$\begin{array}{r} 7 \\ + \text{---} \\ \hline 12 \end{array}$$

x.
$$\begin{array}{r} 14 \\ - \text{---} \\ \hline 7 \end{array}$$

y.
$$\begin{array}{r} 15 \\ + \text{---} \\ \hline 18 \end{array}$$

z.
$$\begin{array}{r} 17 \\ - \text{---} \\ \hline 10 \end{array}$$

2 Circle the correct number.

a. $10 + \text{---} = 15$

b. $13 - \text{---} = 5$

c. $13 + \text{---} = 15$

d. $7 + \text{---} = 14$

(3 or 5 or 8)

(7 or 8 or 9)

(3 or 12 or 2)

(10 or 7 or 9)



e. $15 - \text{---} = 9$

f. $18 - \text{---} = 10$

g. $\text{---} + 16 = 19$

h. $12 - \text{---} = 2$

i. $\text{---} + 13 = 17$

j. $10 - \text{---} = 5$

k. $\text{---} + 8 = 16$

l. $13 - \text{---} = 7$

m. $4 + \text{---} = 11$

n. $15 + \text{---} = 19$

o. $17 - \text{---} = 9$

(6 or 7 or 8)

(12 or 10 or 8)

(2 or 3 or 4)

(6 or 8 or 10)

(4 or 14 or 3)

(15 or 10 or 5)

(8 or 9 or 10)

(5 or 6 or 20)

(2 or 15 or 7)

(4 or 5 or 9)

(2 or 8 or 9)

3 Match.

a. $\text{---} + 7 = 11$

b. $18 - \text{---} = 9$

c. $\text{---} + 5 = 12$

d. $14 - \text{---} = 8$

e. $13 - \text{---} = 3$

f. $16 - \text{---} = 8$

8

4

10


9

6

7




4 Answer the following.

- a.  At 8 p.m., Omar saw 3 stars in the sky.
At 9 p.m., he saw 13 stars in the sky.

**How many stars were added to the sky
between 8 p.m. and 9 p.m. ?**

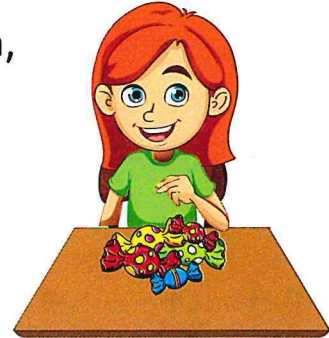
_____ + _____ = _____



- b.  Before lunch, Aya had 20 candies. After lunch,
Aya had 11 candies left.

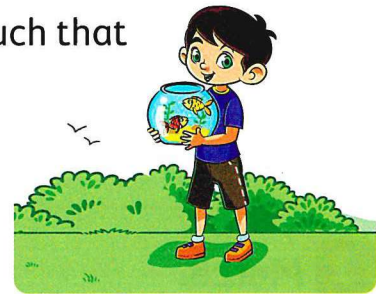
How many candies did Aya eat at lunch ?

_____ - _____ = _____



- c. Adam has 9 yellow fish. He added some red fish such that
the total number of fish became 13.

Find the number of red fish.



- d. A team scored 13 goals in the first round and scored some goals in
the second round. The total goals in the two rounds are 19 goals.

How many goals did this team score in the second round ?



- e. There are 12 dogs in a pet shop, 3 dogs are white
and the rest are brown.

How many brown dogs are there ?



- f. Ali has 6 pens. He bought some extra pens.
The number of pens with Ali became 14.

How many pens did Ali buy ?



- g. There were 20 boys on the field. Some of them were left. 14 boys were still on the field.

How many boys were left ?



- h. Maged has 12 apples. He gave some of them to his sister and the left is 7 apples.

How many apples did he give to his sister ?



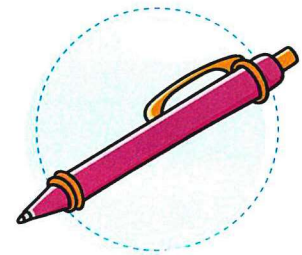
- i. There are 14 carrots. Bunnies ate some of them and 7 carrots are left.

How many carrots did the bunnies eat ?



- j. Bassem had 15 pounds and he bought a pen.
8 pounds is remained with him.

What is price of the pen ?



Place
a smiley
face