

Lesson 10 – Multiplication & Division – Mixed 2, 5 and 10 Times Tables

NC Objective:
Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables

Resources needed:
Differentiated Sheets
Teaching Slides

Vocabulary:
Multiplication, division, represent, counting

Children have worked separately on their 2, 5 and 10 times tables, they now work on a range of questions using 2, 5 and 10 times tables.

Key Questions:

What if there were 10 packs of crayons? If there are 50 crayons altogether, how many packets are there? How do you know? How many tens go into 30? Can you count in 10s to 30? If there are 30 _____, how many flowers? Can you count in 5s to 30? How many 5s go into 30? How many 5s go into 35? Can you count in 2s to 24? How many 2s go into 10?

★ Working Towards

1. Complete the number sentence to describe the array.
2. How many socks are there?
3. Complete the number track.
4. How many legs are there?
5. Use comparison symbols to make the statements correct.
6. Altogether there are 10 beads. How many beads are there?

★★ Working Within

1. With 5 pencils, how many arrays can you make?
2. Complete the number sentence to describe the array.
3. Complete the number track.
4. How many socks are there?
5. Complete the number track.
6. There are 10 dragons. How many legs are there?

★★★ Greater Depth

1. There are 20 marbles to make an array. What are three possible arrays?
2. There were 20 marbles packed yesterday. How many marbles are there today?
3. Heidi and Lily have 10 marbles each. Heidi had 5 marbles. Lily had 5 marbles. How many marbles did they have together?
4. Use a comparison symbol between the answers of the two questions.
5. Heidi and Lily have 10 marbles each. Heidi had 5 marbles. Lily had 5 marbles. How many marbles did they have together?
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7. Heidi and Lily have 10 marbles each. Heidi had 5 marbles. Lily had 5 marbles. How many marbles did they have together?
8. Use a comparison symbol between the answers of the two questions.
9. Heidi and Lily have 10 marbles each. Heidi had 5 marbles. Lily had 5 marbles. How many marbles did they have together?
10. Use a comparison symbol between the answers of the two questions.

Children review how to use arrays, 2 times tables, 5 times tables and 10 times tables. This sheet tests their memory as well as their ability to solve simple problems.

On this review sheet, there are more complex problems than the previous sheet. Children need to analyse the problems to understand what the problem is asking. There are comparisons to do and number tracks to complete.

On this review sheet, children need to read carefully and have deeper analysis for each of the problems. They work with multiplication facts outside of the times tables. They need to think thoroughly because most of the problems do not have pictures to represent the problem.

Reasoning & Problem Solving

Leanna thinks that $5 \times 5 = 25$.
Do you agree with her?
Draw a picture to explain your answer.

Rosie has 10 packs and Tia has 0 packs.
Rosie has 10 packs and Tia has 10 packs.
Rosie has 1 pack and Tia has 5 packs.
Rosie has 3 packs and Tia has 0 packs.

Leanna thinks that $10 \times 5 = 50$.
Do you agree with her?
Draw a picture to explain your answer.
Will the answer change if we write 5×10 ? Why?

How many packs do they each have?
Is there more than one option? Explain.

Leanna thinks that multiplying a number by 5 the answer ends in 5.
Do you agree with her?
Give at least five examples to prove your answer.
What do you notice?

How many packs do they each have?
Is there more than one option? Explain.



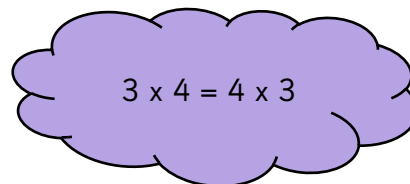
Complete the questions.

- ① Complete the number sentence to describe the array.



x and x

- ② Draw an array to show:



- ③ Complete the number track.



- ④ How many socks are there?



There are socks in total.

x =

- ⑤ How many fingers are there?



x =

- ⑥ Use comparison symbols to make the statements correct.

1 x 5 10 x 0

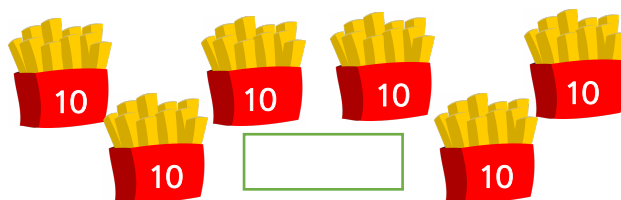
8 x 5 10 x 4

- ⑦ Altogether there are 90 books, how many shelves are there?



x =

- ⑧ How many chips are there altogether?



x =



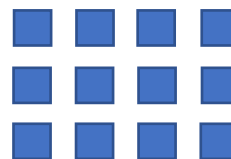
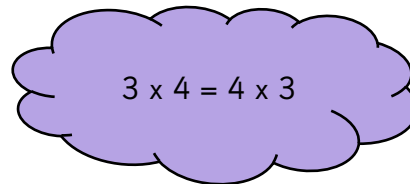
Complete the questions.

- ① Complete the number sentence to describe the array.



$$\boxed{2} \times \boxed{9} \text{ and } \boxed{9} \times \boxed{2}$$

- ② Draw an array to show:



- ③ Complete the number track.



- ④ How many socks are there?



There are $\boxed{12}$ socks in total.

$$\boxed{2} \times \boxed{6} = \boxed{12}$$

- ⑤ How many fingers are there?



$$\boxed{6} \times \boxed{5} = \boxed{30}$$

- ⑥ Use comparison symbols to make the statements correct.

$$1 \times 5 \quad \boxed{>} \quad 10 \times 0$$

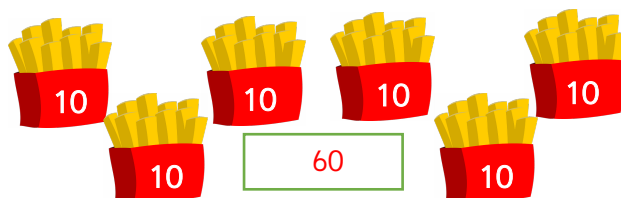
$$8 \times 5 \quad \boxed{=} \quad 10 \times 4$$

- ⑦ Altogether there are 90 books, how many shelves are there?



$$\boxed{9} \times \boxed{10} = \boxed{90}$$

- ⑧ How many chips are there altogether?



$$\boxed{6} \times \boxed{10} = \boxed{60}$$



Complete the questions.

- ① With 6 pearls, how many arrays can you create?

Once you have created your array, complete:

$$\square \times \square = \square \times \square$$

- ② Complete the number sentences to describe the arrays.

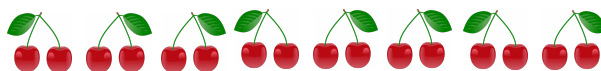


$$\square \times \square \text{ and } \square \times \square$$

- ③ Complete the number track.



- ④ How many cherries are there?



There are cherries in total.

$$\square \times \square = \square$$

- ⑤ Complete.



There are 35 fingers.
How many hands are there?

$$\square \times \square = \square$$

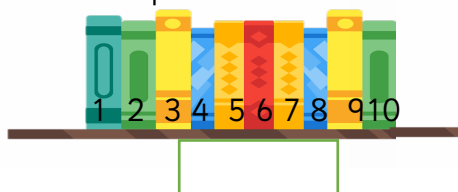
- ⑥ Complete.



There are 45 snowflakes.
How many trees are there?

$$\square \times \square = \square$$

- ⑦ There are 7 chapters in each book, how many chapters are there in all?



$$\square \times \square = \square$$

- ⑧ Think of a multiplication fact for 10s to go in each box.

<input type="text"/>	1 x 10	<input type="text"/>
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Smallest

Greatest



Complete the questions.

- ① With 6 pearls, how many arrays can you create?

4

Once you have created your array, complete:

$$3 \times 2 = 2 \times 3$$

- ② Complete the number sentences to describe the arrays.



$$4 \times 6 \text{ and } 6 \times 4$$

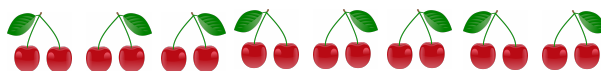
- ③ Complete the number track.

19 20 22 24 26 28 30 32

34 36 38 40 42 44 46 48

16 18 20 22 24 26 28 30

- ④ How many cherries are there?



There are 16 cherries in total.

$$2 \times 8 = 16$$

- ⑤ Complete.



There are 35 fingers.
How many hands are there?

There are 7 hands.

$$7 \times 5 = 35$$

- ⑥ Complete.



There are 45 snowflakes.
How many trees are there?

There are 9 trees.

$$9 \times 5 = 45$$

- ⑦ There are 7 chapters in each book, how many chapters are there in all?



70 chapters

$$7 \times 10 = 70$$

- ⑧ Think of a multiplication fact for 10s to go in each box.

0 x 10

1 x 10

2 x 10

Smallest

Greatest



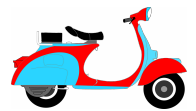
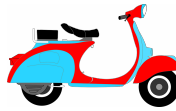
Read the problems carefully and complete.



There are 35 marbles to make an array.
What are those possible arrays?

①

There were 26 motorbikes parked
yesterday.
How many motorbike wheels is that
altogether?



②

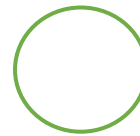
Harold and Lily read a 10-page article. Harold
had read 7 articles. Lily had read 40 pages.
How many articles did Lily have to read to be
the same with Harold?



③

Use a comparison symbol between the answers
of the two statements.

5s that go into
30.



Number of feet
3 people have.

④



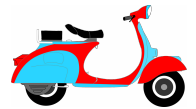
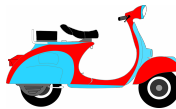
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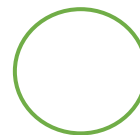
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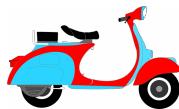
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What are those possible arrays?

5 x 7
7 x 5
1 x 35
35 x 1

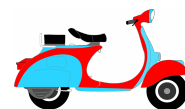
①

There were 26 motorbikes parked
yesterday.

How many motorbike wheels is that
altogether?



$$26 \times 2 = 52$$



②

Harold and Lily read a 10-page article. Harold
had read 7 articles. Lily had read 40 pages.
How many articles did Lily have to read to be
the same with Harold?

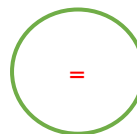


Harold finished 70 pages.
For Lily, $70 - 40 = 30$
Lily has to read 30 pages more or 3 articles.

③

Use a comparison symbol between the answers
of the two statements.

5s that go into
30.



Number of feet
3 people have.

④



Read the problems carefully.

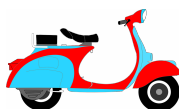


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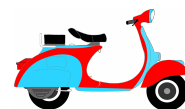
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7 x 5
1 x 35
35 x 1

①

There were 26 motorbikes
parked yesterday.
How many motorbike wheels is
that altogether?



$$26 \times 2 = 52$$



②

Harold and Lily read a 10-page article. Harold
had read 7 articles. Lily had read 40 pages.
How many articles did Lily have to read to be
the same with Harold?

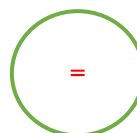


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5s that go into
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Number of feet
3 people have.

④



Leanna thinks that
 $5 \times 5 = 55$.

Do you agree with her?

Draw a picture to explain your answer.

Rosie and Tia have some packs of crayons.



Rosie's crayons come in packs of 2.

Tia's crayons come in packs of 10.



They have 20 crayons in total.



Which combinations are possible?
Investigate and explain your answers.

Rosie has 10 packs and Tia has 0 packs ☐

Rosie has 10 packs and Tia has 10 packs ☐

Rosie has 1 pack and Tia has 5 packs ☐

Rosie has 3 packs and Tia has 0 packs ☐



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Rosie has 3 packs and Tia has 0 packs ☐



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Draw a picture to explain your answer.

I disagree with her.
 $5 \times 5 = 25$

25				
5	5	5	5	5

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Draw a picture to explain your answer.

Will the answer change if we write 5×10 ? Why?

Rosie and Tia have some packs of crayons.



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They have 30 crayons in total.



How many packs do they each have?

Is there more than one option? Explain.



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Leanna thinks that
 $10 \times 5 = 55$.

Do you agree with her?

Draw a picture to explain your answer.

I disagree with her.

$$10 \times 5 = 50$$

50				
10	10	10	10	10

Will the answer change if we write 5×10 ? Why?

The answer doesn't change because of commutativity of multiplication.

Rosie and Tia have some packs of crayons.

Rosie's crayons come in packs of 2.

Tia's crayons come in packs of 10.



They have 30 crayons in total.



How many packs do they each have?

Possible answers:

Tia 0 packs and Rosie 15 packs;

Tia 1 pack and Rosie 10 packs.

Tia 2 packs and Rosie 5 packs,

Tia 3 packs and Rosie 0 packs,



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Tia 3 packs and Rosie 0 packs,



Leanna thinks that multiplying a number by 5 the answer ends in 5.

Do you agree with her?

Give at least five examples to prove your answer.

What do you notice?

Rosie and Tia have some packs of crayons.



Rosie's crayons come in packs of 2.

Tia's crayons come in packs of 10.

They have less than 80 crayons in total.

Rosie has 10 crayons more than Tia.



How many packs do they each have?

Is there more than one option? Explain.



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Do you agree with her?

Give at least five examples to prove your answer.

What do you notice?

I disagree with her.

Multiplying an odd number by 5 the answer ends in 5.

Multiplying an even number by 5 the answer ends in 0.

E.g. $1 \times 5 = 5$; $2 \times 5 = 10$; $3 \times 5 = 15$;

$4 \times 5 = 20$; $5 \times 5 = 25$ etc.

Rosie and Tia have some packs of crayons.



Rosie's crayons come in packs of 2.

Tia's crayons come in packs of 10.

They have less than 80 crayons in total.

Rosie has 10 crayons more than Tia.



They could have:

- 1) Tia 0 crayons (0 packs) and Rosie 10 crayons (5 packs);
- 2) Tia 10 crayons (1 pack) and Rosie 20 crayons (10 packs);
- 3) Tia 20 crayons (2 packs) and Rosie 30 crayons (15 packs);
- 4) Tia 30 crayons (3 packs) and Rosie 40 crayons (20 packs);

How many packs does each of them have?

Is there more than one option? Explain.



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- 4) Tia 30 crayons (3 packs) and Rosie 40 crayons (20 packs);

How many packs does each of them have?

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