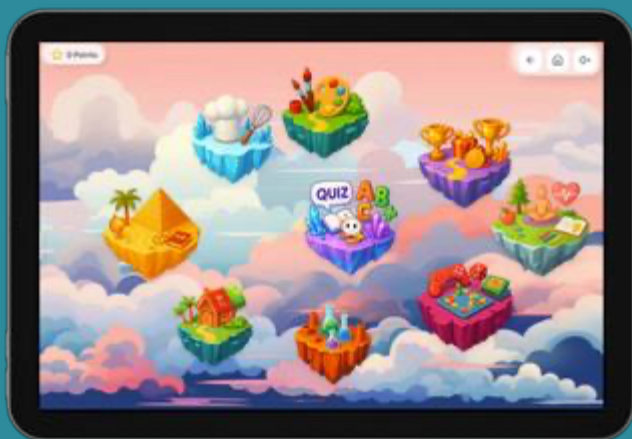




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4x Times Tables - Year 4

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4x STRATEGY STATION

1. SKIP COUNT

0, 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48



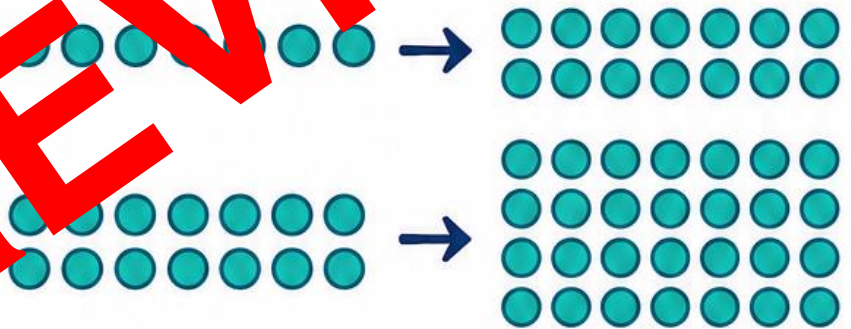
Add 4 each time.

2. DOUBLE, THEN DOUBLE AGAIN

$$7 \times 2 = 14$$

$$14 \times 2 = 28$$

$$\text{So } 7 \times 4 = 28.$$



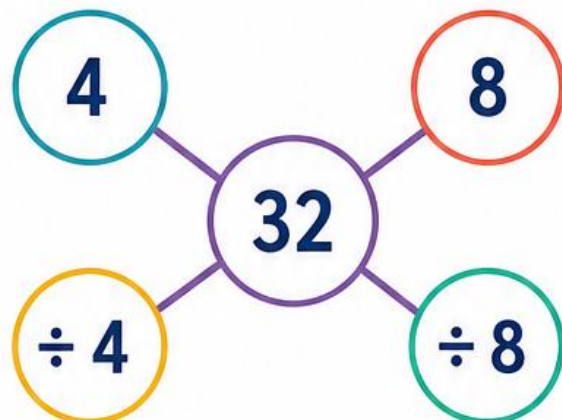
3. CHECK WITH A FACT FAMILY

$$4 \times 8 = 32$$

$$8 \times 4 = 32$$

$$32 \div 4 = 8$$

$$32 \div 8 = 4$$



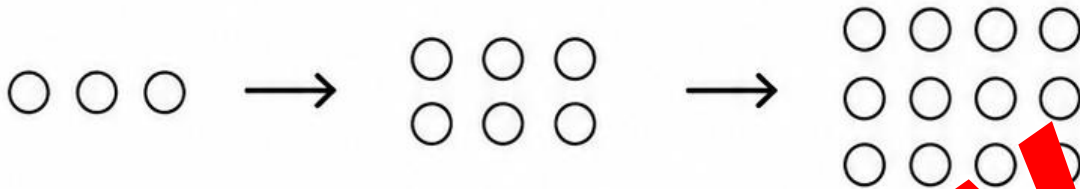
DOUBLE IT TWICE

SUPPORT

Name: _____

To multiply by 4, double the number, then double it again.

EXAMPLE: $3 \rightarrow 6 \rightarrow 12$, so $4 \times 3 = 12$.



Complete the table.

Number	Double	Double again	4 x number
1			
2			
4			
5			
6			
7			
8			
9			

Explain: How does doubling twice help you find 4×6 ?

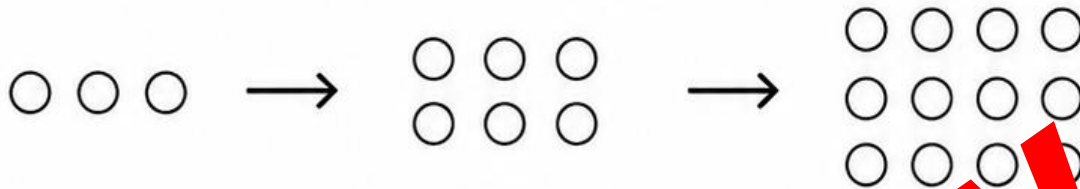
DOUBLE IT TWICE

SUPPORT

Name: **ANSWERS**

To multiply by 4, double the number, then double it again.

EXAMPLE: $3 \rightarrow 6 \rightarrow 12$, so $4 \times 3 = 12$.



Complete the table.

Number	Double	Double again	4 x number
1	2	4	$4 \times 1 = 4$
2	4	8	$4 \times 2 = 8$
4	8	16	$4 \times 4 = 16$
5	10	20	$4 \times 5 = 20$
6	12	24	$4 \times 6 = 24$
7	14	28	$4 \times 7 = 28$
8	16	32	$4 \times 8 = 32$
9	18	36	$4 \times 9 = 36$

Explain: How does doubling twice help you find 4×6 ?

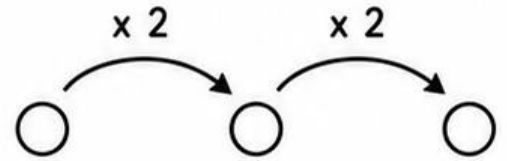
Double 6 to get 12, then double 12 to get 24.

So $4 \times 6 = 24$.

DOUBLE IT TWICE

CORE

Name: _____



A. Use double-double to solve each fact.

Fact	First double	Second double	Product
4×3			
4×5			
4×7			
4×8			
4×9			
4×12			

B. Use a known $4 \times$ fact.

1. $4 \times 6 = 24$. What is 4×7 ? _____

Explain: _____

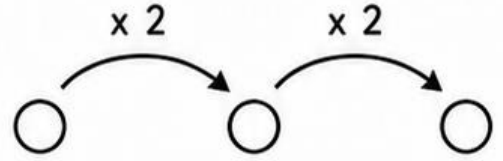
2. $4 \times 10 = 40$. What is 4×9 ? _____

Explain: _____

DOUBLE IT TWICE

CORE

Name: ANSWERS



A. Use double-double to solve each fact.

Fact	First double	Second double	Product
4×3	6	12	12
4×5	10	20	20
4×7	14	28	28
4×8	16	32	32
4×9	18	36	36
4×12	24	48	48

B. Use a known $4 \times$ fact.

1. $4 \times 6 = 24$. What is 4×7 ? 28

Explain: 4×7 is one group of 4 more than 4×6 .

$24 + 4 = 28$.

2. $4 \times 10 = 40$. What is 4×9 ? 36

Explain: 4×9 is one group of 4 less than 4×10 .

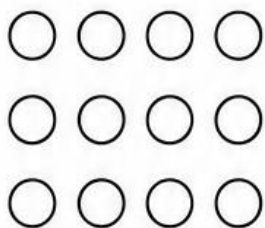
$40 - 4 = 36$.

ARRAYS TO EQUATIONS

Name: _____

Each array has 4 in every row. Count the rows, then complete the facts.

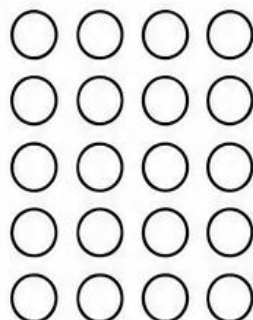
A



Rows: _____

_____ x 4 = _____

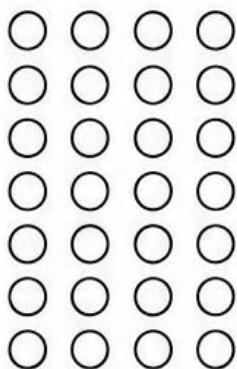
B



Rows: _____

_____ x 4 = _____

C



Rows: _____

_____ x 4 = _____

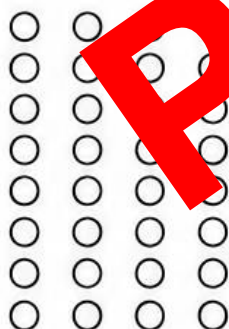
D



Rows: _____

_____ x 4 = _____

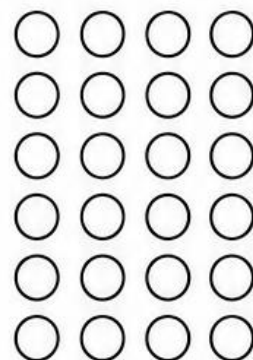
E



Rows: _____

_____ x 4 = _____

F



Rows: _____

_____ x 4 = _____

EXTENSION: Draw an array for 9×4 , then solve.

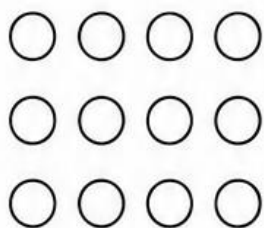
$9 \times 4 =$ _____

ARRAYS TO EQUATIONS

Name: **ANSWERS** _____

Each array has 4 in every row. Count the rows, then complete the facts.

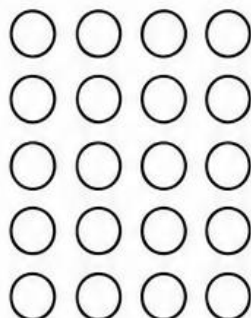
A



Rows: 3

$$\underline{3} \times 4 = \underline{12}$$

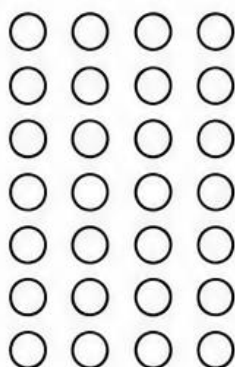
B



Rows: 5

$$\underline{5} \times 4 = \underline{20}$$

C



Rows: 7

$$\underline{7} \times 4 = \underline{28}$$

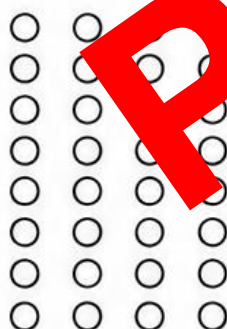
D



Rows: 2

$$\underline{2} \times 4 = \underline{8}$$

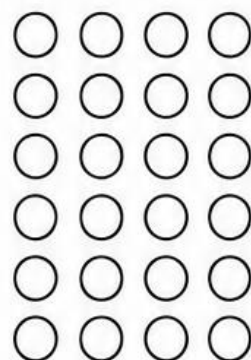
E



Rows: 8

$$\underline{8} \times 4 = \underline{32}$$

F



Rows: 6

$$\underline{6} \times 4 = \underline{24}$$

EXTENSION: Draw an array for 9×4 , then solve.



$$9 \times 4 = \underline{36}$$

4x FLUENCY TRAIL

Name: _____

A. QUICK FACTS

$4 \times 1 = \underline{\quad}$

$4 \times 7 = \underline{\quad}$

$4 \times 2 = \underline{\quad}$

$4 \times 8 = \underline{\quad}$

$4 \times 3 = \underline{\quad}$

$4 \times 9 = \underline{\quad}$

$4 \times 4 = \underline{\quad}$

$4 \times 10 = \underline{\quad}$

$4 \times 5 = \underline{\quad}$

$4 \times 11 = \underline{\quad}$

$4 \times 6 = \underline{\quad}$

$4 \times 12 = \underline{\quad}$

B. KEEP COUNTING

Complete the 4s sequence.

0, 4, , 12, , 20, , 28, , 36, , 44,

C. MIXED CHALLENGE

$4 \times 9 = \underline{\quad}$

$32 \div 4 = \underline{\quad}$

$4 \times \underline{\quad} = 44$

$\underline{\quad} \times 4 = 24$

$48 \div 4 = \underline{\quad}$

$4 \times 0 = \underline{\quad}$

Circle the strategy you used most:

skip count

double-double

known fact

4x FLUENCY TRAIL

Name: ANSWERS

A. QUICK FACTS

$4 \times 1 = \underline{4}$

$4 \times 7 = \underline{28}$

$4 \times 2 = \underline{8}$

$4 \times 8 = \underline{32}$

$4 \times 3 = \underline{12}$

$4 \times 9 = \underline{36}$

$4 \times 4 = \underline{16}$

$4 \times 10 = \underline{40}$

$4 \times 5 = \underline{20}$

$4 \times 11 = \underline{44}$

$4 \times 6 = \underline{24}$

$4 \times 12 = \underline{48}$

B. KEEP COUNTING

Complete the 4s sequence.

0, 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48

C. MIXED CHALLENGE

$4 \times 9 = \underline{36}$

$32 \div 4 = \underline{8}$

$4 \times \underline{11} = 44$

$\underline{6} \times 4 = 24$

$48 \div 4 = \underline{12}$

$4 \times 0 = \underline{0}$

Circle the strategy you used most:

skip count

double-double

known fact

Answers will vary.

MISSING NUMBERS

Name: _____

Use related 4x facts to complete each equation.

1. $4 \times \underline{\quad} = 12$

2. $4 \times \underline{\quad} = 28$

3. $\underline{\quad} \times 4 = 20$

4. $\underline{\quad} \times 4 = 48$

5. $4 \times 6 = \underline{\quad}$

6. $4 \times 11 = \underline{\quad}$

7. $28 \div 4 = \underline{\quad}$

8. $36 \div 4 = \underline{\quad}$

9. $\underline{\quad} \div 4 = 8$

10. $\underline{\quad} \div 4 = 5$

11. $4 \times \underline{\quad} = 8$

12. $4 \times \underline{\quad} = 40$

13. $16 \div \underline{\quad} = 4$

14. $24 \div \underline{\quad} = 4$

15. $4 \times \underline{\quad} = 44$

16. $\underline{\quad} \times 4 = 36$

REASONING

Mia says the missing number in $4 \times \underline{\quad} = 32$ is 6.

Is Mia correct? Explain.

MISSING NUMBERS

Name: **ANSWERS** _____

Use related 4x facts to complete each equation.

1. $4 \times \underline{3} = 12$

2. $4 \times \underline{7} = 28$

3. $\underline{5} \times 4 = 20$

4. $\underline{12} \times 4 = 48$

5. $4 \times 6 = \underline{24}$

6. $4 \times 11 = \underline{44}$

7. $28 \div 4 = \underline{7}$

8. $36 \div 4 = \underline{9}$

9. $\underline{32} \div 4 = 8$

10. $\underline{20} \div 4 = 5$

11. $4 \times \underline{8} = 32$

12. $4 \times \underline{10} = 40$

13. $16 \div \underline{4} = 4$

14. $24 \div \underline{6} = 4$

15. $4 \times \underline{11} = 44$

16. $\underline{9} \times 4 = 36$

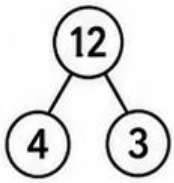
REASONING

Mia says the missing number in $4 \times \underline{8} = 32$ is 6.

Is Mia correct? Explain.

No. $4 \times 6 = 24$, but $4 \times 8 = 32$.

The missing number is 8.



FACT FAMILIES & REASONING



Name: _____

A. WRITE FOUR FACTS FOR EACH NUMBER SET.

4, 3, 12

Multiplication: _____

Division: _____

4, 8, 32

Multiplication: _____

Division: _____

4, 11, 44

Multiplication: _____

Division: _____

4, 12, 48

Multiplication: _____

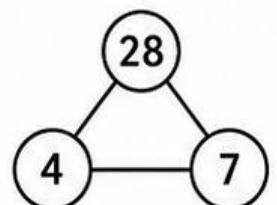
Division: _____

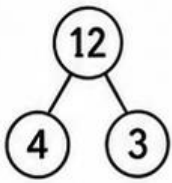
B. REASON AND EXPLAIN.

Leo wrote $36 \div 4 = 8$. Is Leo correct? Explain.

$$4 \times \underline{\quad} = 28$$

$$28 \div 4 = \underline{\quad}$$





FACT FAMILIES & REASONING



Name: **ANSWERS**

A. WRITE FOUR FACTS FOR EACH NUMBER SET.

4, 3, 12

Multiplication:

$$4 \times 3 = 12$$

$$3 \times 4 = 12$$

Division:

$$12 \div 4 = 3$$

$$12 \div 3 = 4$$

4, 8, 32

Multiplication:

$$4 \times 8 = 32$$

$$8 \times 4 = 32$$

Division:

$$32 \div 4 = 8$$

$$32 \div 8 = 4$$

4, 11, 44

Multiplication:

$$4 \times 11 = 44$$

$$11 \times 4 = 44$$

Division:

$$44 \div 4 = 11$$

$$44 \div 11 = 4$$

4, 12, 48

Multiplication:

$$4 \times 12 = 48$$

$$12 \times 4 = 48$$

Division:

$$48 \div 4 = 12$$

$$48 \div 12 = 4$$

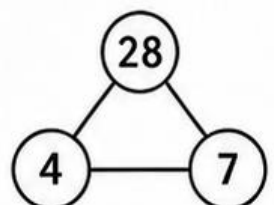
B. REASON AND EXPLAIN.

Leo wrote $36 \div 4 = 8$. Is Leo correct? Explain.

No. $36 \div 4 = 9$, so Leo is not correct.

$$4 \times \underline{7} = 28$$

$$28 \div 4 = \underline{7}$$



SPIN, SOLVE & COVER



HOW TO PLAY

Players: 2

You need: a pencil, a paper clip and counters.

1. Place the paper clip on the spinner centre. Hold it with the pencil.
2. Spin, solve the fact and say the product.
3. Cover the matching product on your player mat.
4. First to cover six products wins.



SPIN, SOLVE & COVER



Cover a product after you solve the matching 4x fact. First to cover six wins.

PLAYER 1

28	4	44	16
36	12	48	20
8	32	24	40

PLAYER 2

20	48	8	36
4	28	40	12
32	16	44	24

FACT FAMILY MATCH-UP

FACTS 1-6

Cut out the cards. Shuffle. Match each multiplication fact, product and related division fact.

4×1

4

$4 \div 4 = 1$

4×2

8

$8 \div 4 = 2$

4×3

12

$12 \div 4 = 3$

4×4

16

$16 \div 4 = 4$

4×5

20

$20 \div 4 = 5$

4×6

24

$24 \div 4 = 6$

FACT FAMILY MATCH-UP

FACTS 7-12

Cut out the cards. Shuffle. Match each multiplication fact, product and related division fact.

$$4 \times 7$$

$$28$$

$$28 \div 4 = 7$$

$$4 \times 8$$

$$32$$

$$32 \div 4 = 8$$

$$4 \times 9$$

$$36$$

$$36 \div 4 = 9$$

$$4 \times 10$$

$$40$$

$$40 \div 4 = 10$$

$$4 \times 11$$

$$44$$

$$44 \div 4 = 11$$

$$4 \times 12$$

$$48$$

$$48 \div 4 = 12$$

4x TIMES TABLES ASSESSMENT

PAGE 1 — FLUENCY & RELATIONSHIPS



Name: _____

A. QUICK FACTS

1. $4 \times 3 = \underline{\quad}$	2. $4 \times 6 = \underline{\quad}$
3. $4 \times 8 = \underline{\quad}$	4. $4 \times 9 = \underline{\quad}$
5. $4 \times 11 = \underline{\quad}$	6. $4 \times \underline{\quad} = \underline{\quad}$
7. $28 \div 4 = \underline{\quad}$	8. $\underline{\quad} \div 4 = \underline{\quad}$

B. COMPLETE THE SEQUENCE

4, 8, , 16, , 24, , 32, , 40, , 48

C. FIND THE MISSING NUMBER

1. $4 \times \underline{\quad} = 36$	2. $\underline{\quad} \times 4 = 28$
3. $32 \div 4 = \underline{\quad}$	4. $\underline{\quad} \div 4 = 6$

D. SHOW YOUR STRATEGY

Use double-double to show how you know 4×7 .

4x TIMES TABLES ASSESSMENT

PAGE 1 — FLUENCY & RELATIONSHIPS



Name: ANSWERS

A. QUICK FACTS

1. $4 \times 3 = \underline{12}$	2. $4 \times 6 = \underline{24}$
3. $4 \times 8 = \underline{32}$	4. $4 \times 9 = \underline{36}$
5. $4 \times 11 = \underline{44}$	6. $4 \times 10 = \underline{40}$
7. $28 \div 4 = \underline{7}$	8. $44 \div 4 = \underline{11}$

B. COMPLETE THE SEQUENCE

4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48

C. FIND THE MISSING NUMBER

1. $4 \times \underline{9} = 36$	2. $\underline{7} \times 4 = 28$
3. $32 \div 4 = \underline{8}$	4. $\underline{24} \div 4 = 6$

D. SHOW YOUR STRATEGY

Use double-double to show how you know 4×7 .

$7 \times 2 = 14$

$14 \times 2 = 28$

So $4 \times 7 = 28$.

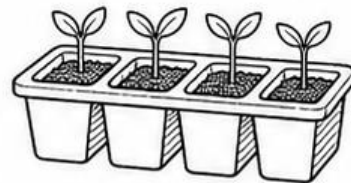
4x TIMES TABLES ASSESSMENT

PAGE 2 — SCHOOL GARDEN PACKS



Name: _____

The school garden team packs 4 seedlings in each tray.



A. COMPLETE THE TABLE

Trays	Seedlings
3	
5	
7	
9	

B. SOLVE AND SHOW YOUR WORKING

1. How many seedlings are in 6 trays? Show an equation.

2. There are 32 seedlings. How many trays are needed?

3. The team needs 44 seedlings. How many full trays are needed?

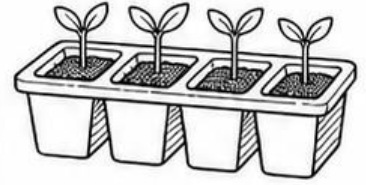
4. Explain how you could use 10 trays to work out the number of seedlings in 9 trays.

4x TIMES TABLES ASSESSMENT

PAGE 2 — SCHOOL GARDEN PACKS



Name: **ANSWERS**



The school garden team packs 4 seedlings in each tray.

A. COMPLETE THE TABLE

Trays	Seedlings
3	12
5	20
7	28
9	36

B. SOLVE AND SHOW YOUR WORKING

1. How many seedlings are in 6 trays? Show an equation.

$$6 \times 4 = 24 \text{ seedlings.}$$

2. There are 32 seedlings. How many trays are needed?

$$32 \div 4 = 8 \text{ trays.}$$

3. The team needs 44 seedlings. How many full trays are needed?

$$44 \div 4 = 11 \text{ trays.}$$

4. Explain how you could use 10 trays to work out the number of seedlings in 9 trays.

10 trays hold 40 seedlings.

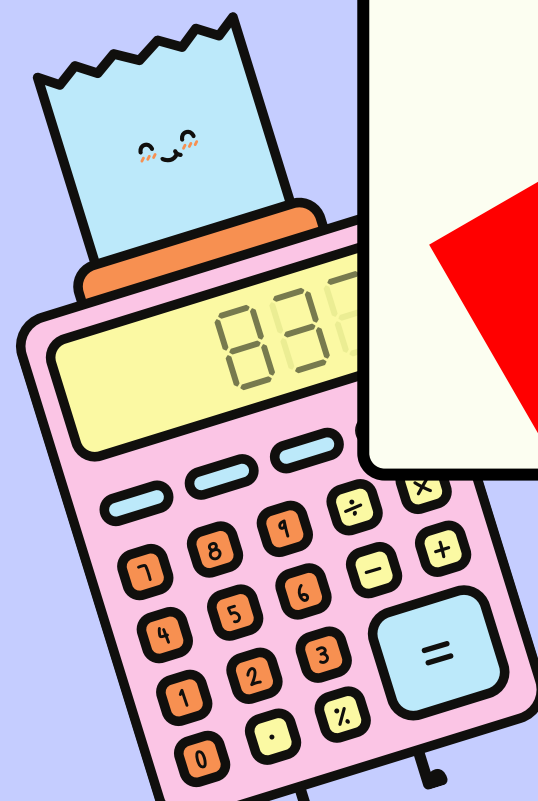
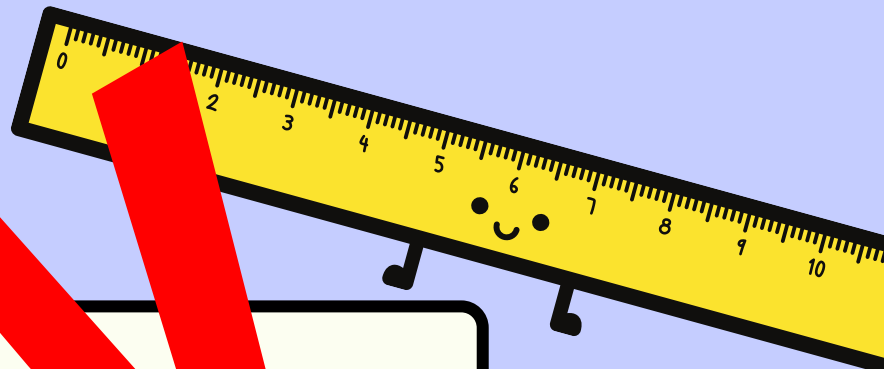
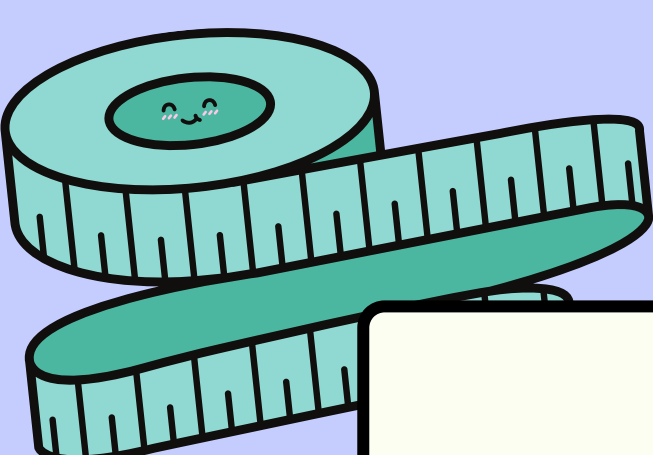
Subtract one tray: $40 - 4 = 36$ seedlings.



4x Times Tables - Year 4 Rubric

4x

CRITERION	BEGINNING	DEVELOPING	ACHIEVING	CONFIDENT	EXCEEDING
4x fact fluency	Recalls few facts, even with support.	Recalls some facts with prompts.	Recalls most 4x facts accurately.	Recalls facts accurately and efficiently.	Uses facts flexibly in unfamiliar tasks.
Strategies	Needs support to use a strategy.	Uses skip counting or doubling with prompts.	Uses an effective strategy independently.	Selects and explains an efficient strategy.	Compares strategies and justifies a choice.
Related facts	Needs support to connect multiplication and division.	Completes some related facts.	Uses multiplication to solve related division problems.	Builds and checks complete fact families.	Applies inverse relationships to missing numbers.
Application & reasoning	Needs support to interpret a problem.	Solves simple problems with prompts.	Solves 4x problems and shows working.	Explains and checks reasoning clearly.	Solves unfamiliar problems accurately.



PREVIEW

4x Times Tables - Year 4

Our Learning Focus

We are learning to recall 4x facts and use them to solve related division problems.

Success looks like:

- I can explain a strategy.
- I can solve and check problems.
- I can use 4x facts to solve a problem.



What Does $\times 4$ Mean?

4×6 means 4 groups of 6.

It also means 6 groups of 4.

Both arrays contain 24 objects.

$$4 \times 6 = 6 \times 4 = 24$$



Count in Fours

0, 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48

Each product is 4 more than the one before it.

Try it: say the sequence forwards, then backwards.



Double-Double Strategy

To find 4×7 :

1. Double 7: $7 \times 2 = 14$

2. Double again: $14 \times 2 = 28$

So $4 \times 7 = 28$.

Double double works because 4 is double 2.



Use a Nearby Fact

If you know $4 \times 8 = 32$, then 4×9 is one more group of 4.

$$32 + 4 = 36$$

$$\text{So } 4 \times 9 = 36.$$

This strategy helps you find nearby facts.



Turn It Around

Multiplication can be turned around:

$$4 \times 11 = 11 \times 4$$

Both products are 44

Use the commutative property to picture or calculate.



Spot the Product Pattern

Look at the ones digits:

4, 8, 2, 6, 0 – then the pattern repeats.

The products are even.

What ones digit will 13 have?



Find a Missing Number

Use a known fact and the inverse.

$$4 \times \square = 36$$

Think: $36 \div 4 = 9$

So the missing number is 9.

Check: $4 \times 9 = 36$.



Multiplication and Division

Multiplication and division are inverse operations.

If $4 \times 8 = 32$, then:

$$32 \div 4 = 8$$

$$32 \div 8 = 4$$

Use multiplication to check a division answer.



Build a Fact Family

Numbers: 4, 7, 28

$$4 \times 7 = 28$$

$$7 \times 4 = 28$$

$$28 \div 4 = 7$$

$$28 \div 7 = 4$$

All four facts describe the relationship.



School Garden Packs

The garden team packs 4 seedlings in each tray.
How many seedlings are in 9 trays?

$$9 \times 4 = 36$$

There are 36 seedlings.

Check: $9 \times 4 = 36$



Choose an Efficient Strategy

Which strategy would you choose?

- 4×6 : skip count, array, or double
- 4×11 : use 4×10 , then add 4
- $44 \div 4$: think of the $4 \times$ multiplication fact

Explain why your choice is efficient.



Mixed Practice & Reflection

Solve, then explain one strategy:

$4 \times 12 = \underline{\quad\quad}$

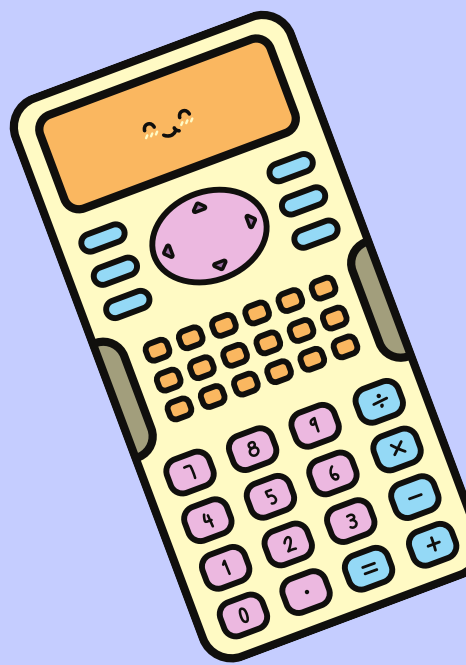
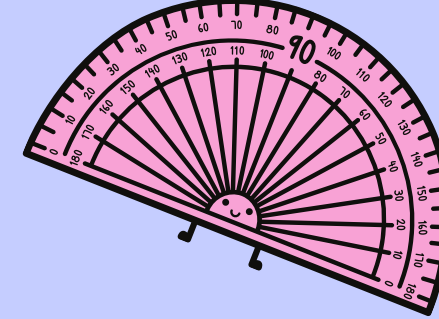
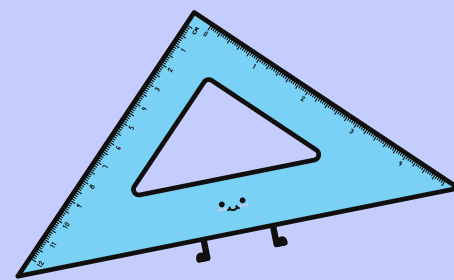
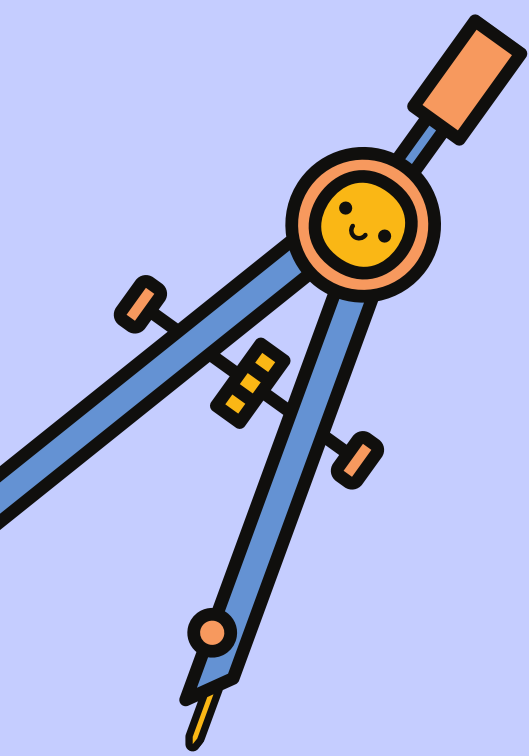
$7 \times 4 = \underline{\quad\quad}$

$32 \div 4 = \underline{\quad\quad}$

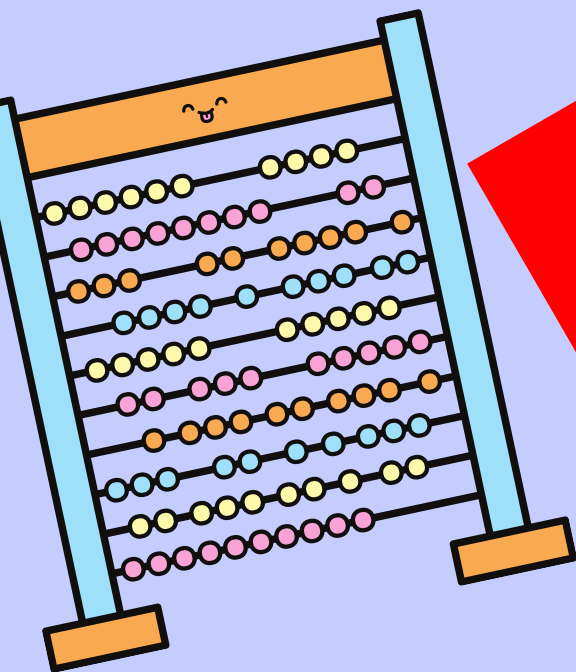
$4 \times \underline{\quad\quad} = \underline{\quad\quad}$

Reflect: Which fact do you know most confidently?

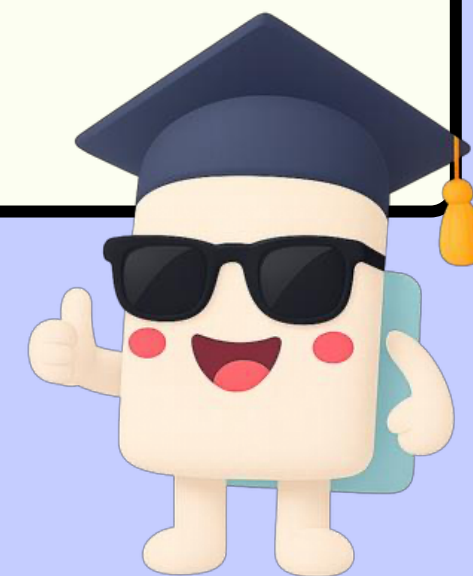
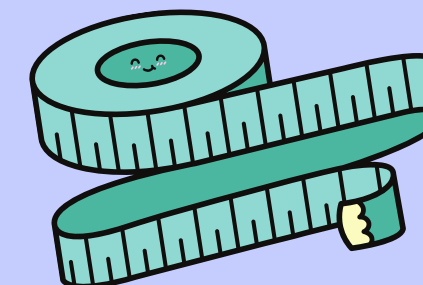
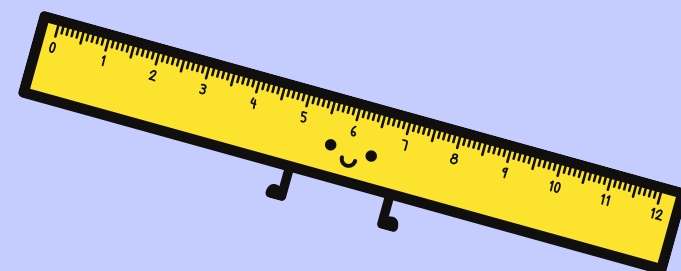




Well Done!



PREVIEW



4x Times Tables Quiz

PREVIEW



Question 1 — Multiple Choice

What is 4×6 ?

- A. 20
- B. 22
- C. 24
- D. 28



Answer 1

C. 24

4 groups of 6 make 24.



Question 2 — True or False

True or false?

$$4 \times 7 = 32$$



Answer 2

False.

$$4 \times 7 = 28.$$



Question 3 — Short Answer

Complete the equation:

$$4 \times \underline{\hspace{2cm}} = 36$$



Answer 3

9

$$4 \times 9 = 36.$$



Question 4 — Multiple Choice

Which calculation shows double-double for 4×8 ?

A. $8 + 4$

B. $8 \times 2 = 16$, then $16 \times 2 = 32$

C. $8 + 8 + 8$

D. 4×8



Answer 4

B. $8 \times 2 = 16$, then $16 \times 2 = 32$

Double 8, then double the result



Question 5 — Short Answer

Write the next three multiples of 4:

4, 8, 12, 16, 20, _____, _____, _____



Answer 5

24, 28, 32

Each number is 4 more than the previous number.



Question 6 — Multiple Choice

What is $32 \div 4$?

- A. 6
- B. 7
- C. 8
- D. 9



Answer 6

C. 8

Because $4 \times 8 = 32$.



Question 7 — True or False

True or false?

$$4 \times 9 = 9 \times 4$$



Answer 7

True.

Both products are 36.



Question 8 — Short Answer

Use 4, 7 and 28 to write:

- one multiplication fact
- one division fact



Answer 8

One possible answer:

$$4 \times 7 = 28$$

$$28 \div 4 = 7$$



Question 9 — Multiple Choice

Six trays hold 4 muffins each. How many muffins are there?

- A. 10
- B. 20
- C. 24
- D. 28



Answer 9

C. 24 muffins

$$6 \times 4 = 24.$$



Question 10 — Error Analysis

A student says $4 \times 12 = 44$.

What is the error? Write the correct fact.

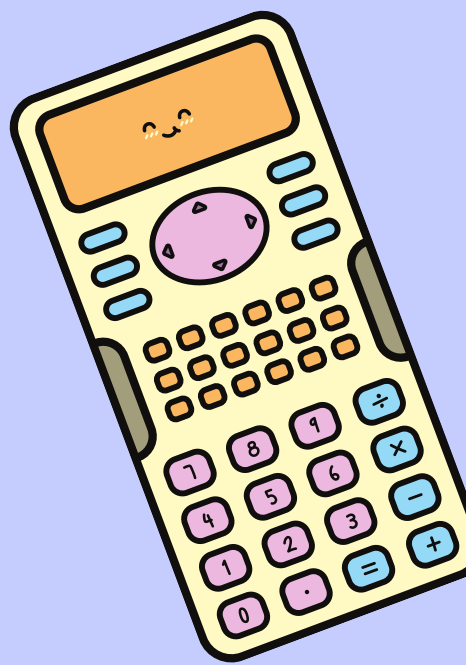
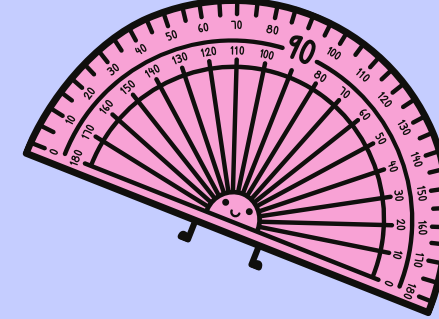
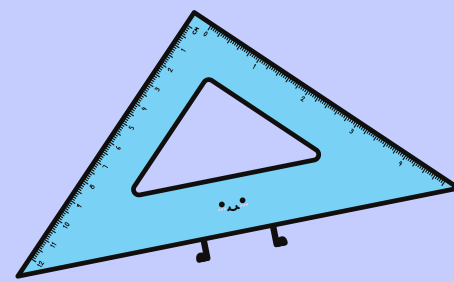
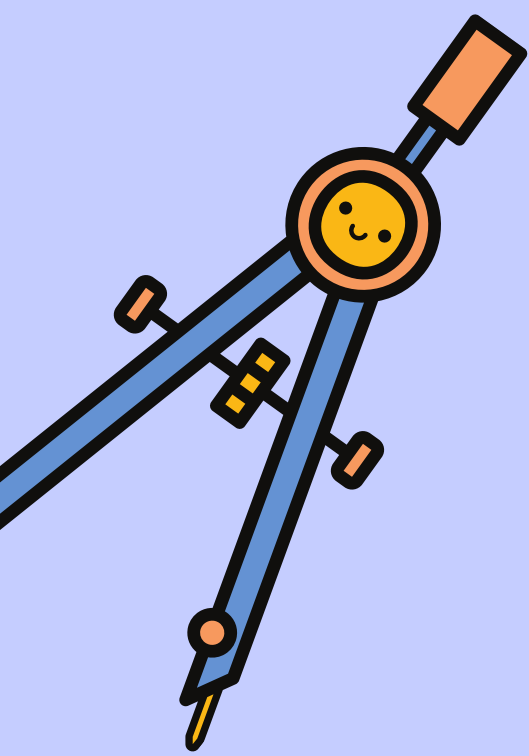


Answer 10

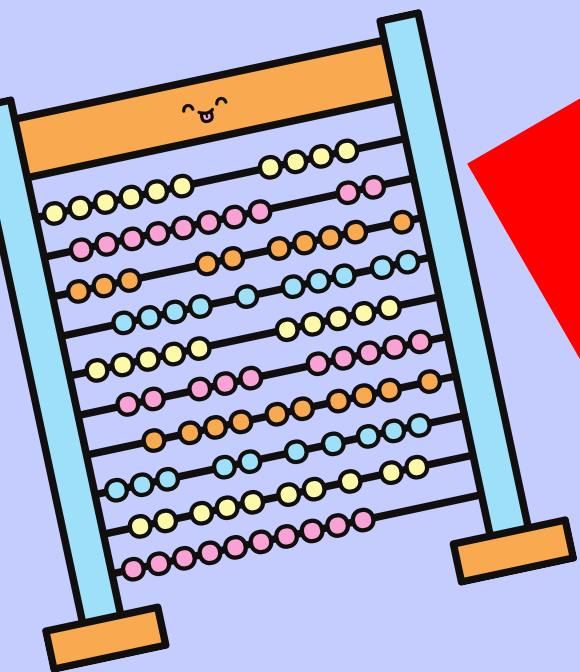
The student stopped one group of 4 too soon.

$$4 \times 12 = 48.$$





Well Done!



PREVIEW

