

Maths Lesson

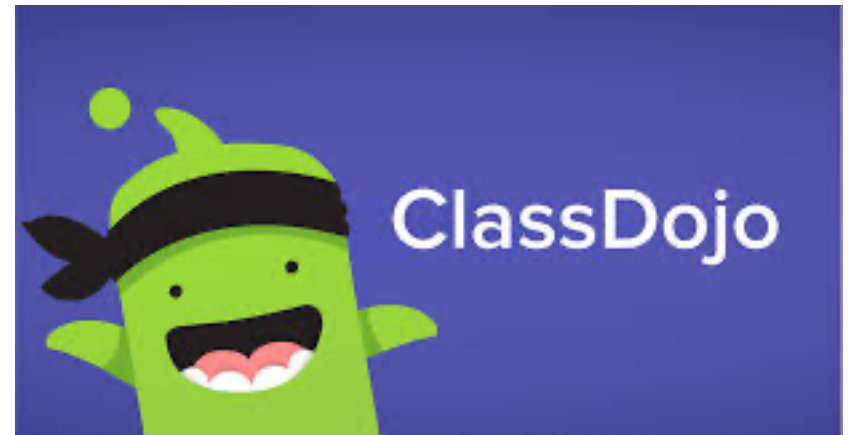
Year 3

Write your date and title
in your exercise book.

25.2.21

Can I divide by 4 by halving twice?

Don't forget to take a
photo of your work and
post it on class dojo.





Warm up



Practise dividing by 4 using your times tables

1. $12 \div 4 =$ _____

2. $20 \div 4 =$ _____

3. $8 \div 4 =$ _____

4. $36 \div 4 =$ _____

5. $24 \div 4 =$ _____

6. $4 \div 4 =$ _____

7. $16 \div 4 =$ _____

8. $28 \div 4 =$ _____

9. $40 \div 4 =$ _____

10. $32 \div 4 =$ _____

11. $44 \div 4 =$ _____

12. $48 \div 4 =$ _____

Main Lesson: Today we are going to learn about using mental strategies in division.

- divide by 4 by halving twice.

How can multiply any
number by 4?

We double and
double again.

To find 6×4 we can
double 6 then double 12.

That's 24.

I want to find $24 \div 4$.

We can **divide by 4** by
halving and **halving**
again!

Half of 24 is 12.

... and **half** of 12 is 6.

Mental strategies in division: divide by 4 by halving twice.

Try these:

$$28 \div 4,$$

$$44 \div 4$$

$$36 \div 4$$

Strategy: halving and
halving again.



Answers on the next slide.
No peeking!

Half of 28 is ____

Half of 14 is ____

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

Half of 44 is ____

Half of 22 is ____

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

Half of 36 is ____

Half of 18 is ____

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

Mental strategies in division: divide by 4 by halving twice.

Try these:

$$28 \div 4,$$

$$44 \div 4$$

$$36 \div 4$$

Strategy: halving and
halving again.



Answers below!

Half of 28 is **14**

Half of 14 is **7**

$$28 \div 4 = 7$$

Half of 44 is **22**

Half of 22 is **11**

$$44 \div 4 = 11$$

Half of 36 is **18**

Half of 18 is **9**

$$36 \div 4 = 9$$

Mental strategies in division: divide by 4 by halving twice.

Teacher Examples:

With larger numbers
we can **partition** to
help find half.

Set your work out as
shown on the right.



Half of 64

30 2

$$30 + 2 = 32$$

Half of 32

15 1

$$15 + 1 = 16$$

Half of 56

25 3

$$25 + 3 = \underline{\quad}$$

Half of 58

25 4

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

Half of 84

40 2

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

Half of 82

40 1

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

Short Task: Fill in the gaps
to finish off these questions.

Main Task:

Print/Draw these tables in your exercise book. Fill in the tables by halving, then halving again.

Easier

Number	÷2	÷2	Number sentence
28	14	7	$28 \div 4 = \square$
24			$24 \div 4 = \square$
40			$40 \div 4 = \square$
16			$16 \div 4 = \square$
48			$48 \div 4 = \square$
20			$20 \div 4 = \square$

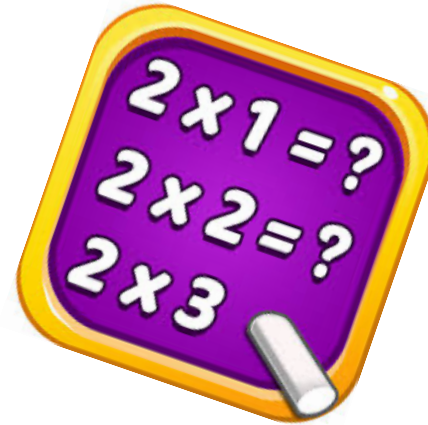
Harder

Number	÷2	÷2	Number sentence
64	32	16	$64 \div 4 = \square$
68			$68 \div 4 = \square$
52			$52 \div 4 = \square$
76			$76 \div 4 = \square$
84			$84 \div 4 = \square$
92			$92 \div 4 = \square$

Challenge



Can you think how you might use a similar mental strategy to divide 128 by 8?



If you have time...

Try a times tables game on this website.

<https://www.topmarks.co.uk/maths-games/7-11-years/times-tables>

Don't forget to take a photo of your work and post it on class dojo.

