Maths Lesson
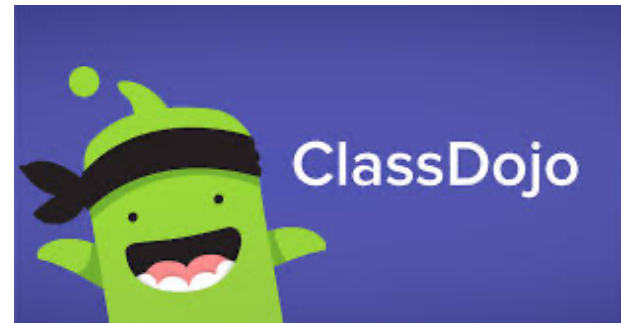# Year 3

Write your date and title in your exercise book.

24.2.21

Can I use my x tables to work out related facts?

Don't forget to post a photo of your work on class dojo!

ClassDojo

Warm Up 🔥

A bit like yesterday!
Learn your 8 x tables

8 x 0   = _____

8 x 1   = _____

8 x 2   = _____

8 x 3   = _____

8 x 4   = _____

8 x 5   = _____

8 x 6   = _____

8 x 7   = _____

8 x 8   = _____

8 x 9   = _____

8 x 10 = _____

Multiplication

8 x 0 = _____	8 x 10 = _____
8 x 1 = _____	8 x 11 = _____
8 x 2 = _____	8 x 12 = _____
8 x 3 = _____	10 x 8 = _____
8 x 4 = _____	9 x 8 = _____
8 x 5 = _____	8 x 8 = _____
8 x 6 = _____	7 x 8 = _____
8 x 7 = _____	6 x 8 = _____
8 x 8 = _____	5 x 8 = _____
8 x 9 = _____	4 x 8 = _____

Main Lesson: More solving x by 2, 4 and 8 by doubling

- 2 x 5 = ____   Double the 5.

- 4 x 5 = ____   Double the 5 then double it again.

- 8 x 5 = ____   Double the 5, double it again, then double it again.

- 2 x 30 = ____   Double the 30.

- 4 x 30 = ____   Double the 30 then double it again.

- 8 x 30 = ____   Double the 30, double it again, then double it again.

Answers on the next page – no peeking!

Answers

Solving x by 2, 4 and 8 by doubling

- 2 x 5 = __10__   Double the 5.

- 4 x 5 = __20__   Double the 5 then double it again.

- 8 x 5 = __40__   Double the 5, double it again, then double it again.

- 2 x 30 = __60__   Double the 30.

- 4 x 30 = __120__   Double the 30 then double it again.

- 8 x 30 = __240__   Double the 30, double it again, then double it again.

Solving ÷ by 2, 4 and 8 by halving

- $40 \div 2 = $ _____ Halve the 40.

- $40 \div 4 = $ _____ Halve the 40 then halve it again.

- $40 \div 8 = $ _____ Halve the 40, halve it again, then halve it again.

- $80 \div 2 = $ _____ Halve the 80.

- $80 \div 4 = $ _____ Halve the 80 then halve it again.

- $80 \div 8 = $ _____ Halve the 80, halve it again, then halve it again.

Answers on the next page – no peeking!

Answers
Solving ÷ by 2, 4 and 8 by halving

- 40 ÷ 2 = __20__   Halve the 40.

- 40 ÷ 4 = __10__   Halve the 40 then halve it again.

- 40 ÷ 8 = __5__   Halve the 40, halve it again, then halve it again.

- 80 ÷ 2 = __40__   Halve the 80.

- 80 ÷ 4 = __20__   Halve the 80 then halve it again.

- 80 ÷ 8 = __10__   Halve the 80, halve it again, then halve it again.

TARGET To connect the 2, 4 and 8 times tables by doubling and halving.

Example 1 30 × 8
Double 30, double and double again to multiply by 8.
30 → 60 → 120 → 240
Answer *240*

Example 2 1000 ÷ 8
Halve 1000, halve and halve again to divide by 8.
1000 → 500 → 250 → 125
Answer *125*

A

Double and double again to multiply each number by 4.

1. 3
2. 40
3. 15
4. 7
5. 12
6. 25
7. 90
8. 21

Halve and halve again to divide each number by 4.

9. 40
10. 28
11. 120
12. 32
13. 20
14. 44
15. 24
16. 60

Use squared paper. Draw each shape half the size of the measurements shown.

17.

10 cm
14 cm

18.

16 cm
4 cm
4 cm
8 cm
8 cm
8 cm
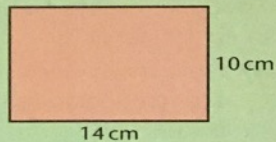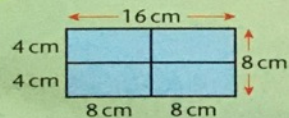
B

Double, double and double again to multiply each number by 8.

1. 8
2. 13
3. 25
4. 70
5. 6
6. 20
7. 55
8. 18

Halve, halve and halve again to divide each number by 8.

9. 600
10. 88
11. 40
12. 480
13. 120
14. 640
15. 360
16. 112

17. Use squared paper. Draw the flag half the size of the measurements shown.

32 cm
10 cm
10 cm
20 cm
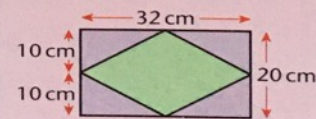
18. Now draw the flag one quarter the size of the measurements shown.

C

Copy and complete.

1. ☐ × 8 = 4000
2. ☐ × 8 = 248
3. ☐ × 8 = 296
4. ☐ × 8 = 280
5. ☐ ÷ 8 = 60
6. ☐ ÷ 8 = 23
7. ☐ ÷ 8 = 95
8. ☐ ÷ 8 = 17

Double the first answer to work out the second.

9. 20 × 6
   20 × 12
10. 5 × 9
    5 × 18
11. 7 × 8
    7 × 16
12. 11 × 7
    11 × 14

13. Use squared paper. Draw the flag one quarter the size of the measurements shown.

8 cm   8 cm
8 cm   8 cm   8 cm
24 cm
8 cm
8 cm
8 cm
40 cm
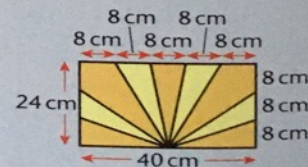
14. Now draw the flag one eighth size.

Now have a go at these

A = Easiest
C = Medium
C = Hardest

If you have time...

Try a multiplication and division **game**.

https://www.topmarks.co.uk/maths-games/7-11-years/multiplication-and-division

Don't forget to put your work on Class Dojo!