

Multiples and factors

Multiples revision: watch the clip, read the information, complete the question and quiz
<https://www.bbc.co.uk/bitesize/topics/zqbg87h/articles/zgbpnbk>

Factors revision: watch the clip, read the information, complete the question and quiz
<https://www.bbc.co.uk/bitesize/topics/zfq7hyc/articles/zp6wfcw>

1.

Roll 2 dice (1-6), and multiply the numbers the you roll.

List all the numbers that this number is a multiple of.

Repeat the dice roll.



e.g – If I rolled 2 and 6, my calculation would be $2 \times 6 = 12$

so 12 is a multiple of 2 and 6.

$3 \times 4 = 12$ and $1 \times 12 = 12$ so,

12 is a multiple of (is in the times tables of) 2 and 6, 3 and 4 and 1 and 12

Show 4 examples.

If you do not have a dice, write 1 – 6 on small, separate pieces of paper (twice)

Keep in 2 separate piles. Pick 1 number from each pile to complete the above.

2.

Fill in the missing factors of 24

$$1 \times \underline{\quad} \quad \underline{\quad} \times 12$$

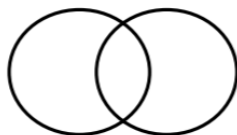
$$3 \times \underline{\quad} \quad \underline{\quad} \times \underline{\quad}$$

What do you notice about the order of the factors?

Use this method to find the factors of 42

3.

Fill in the Venn diagram to show the factors of 20 and 24



Where are the common factors of 20 and 24?

Use a Venn diagram to show the common factors of 9 and 15

Hint: list all the factors for 20, then list all the factors of 24.

Then you can easily see which factors they have in common.

4.

1	36
2	18
3	12
4	9
5	X
6	6

This is Anne's method for finding factor pairs of 36.

When do you put a cross next to a number?

How many factors does 36 have?

Use Annie's method to find all the factors of 64.

ANSWERS

1. Various answers

2. 1×24 , 2×12

3×8 , e.g. 4×6 or 6×4

They go in number order

Factors of 42

1×42 , 2×24 , 3×14 , 4 – can't do, 5 - can't do, 6×7 ,

3. $24 - 1, 2, 3, 4, 6, 8, 12, 24$

$20 - 1, 2, 4, 5, 10, 20$

Common factors – 1, 2, 4 – go in the middle where the 2 circles intersect.

4.

Here is Annie's method for finding factor pairs of 36

1	36
2	18
3	12
4	9
5	X
6	6

When do you put a cross next to a number?

How many factors does 36 have?

Use Annie's method to find all the factors of 64

If it is not a factor, put a cross.

36 has 9 factors.

Factors of 64:

1	64
2	32
3	X
4	16
5	X
6	X
7	X
8	8