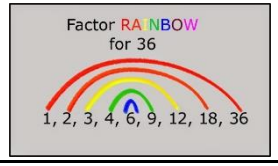
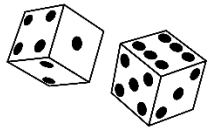
11.1 Identify pair of factors for all 2-digit numbers

Fact file: To **factor** a **number** means to break it up into **numbers** that can be multiplied together to get the original **number**. Examples: 6 = 3 X 2 so, **factors** of 6 are 3 and 2.



11.2 Know by heart all the square numbers up to 12 x 12.

E.g:
2 x 2 = 4
6 x 6 = 36
11 x 11 = 121
12 x 12 = 144



Roll a dice then multiply the number by itself. How many can you answer in 30 seconds? Once you are confident with 1 dice, try 2 dice.

11.3 Know by heart all the cube numbers up to 12 cubed.

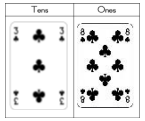
E.G:
3 x 3 x 3 = 27
7 cubed = 343
12 cubed = 1728

Use a pack of playing cards. Jack counts as 11 and Queen counts as 12. Turn over a card and cube the value. How many facts can you recall in 30 seconds?

11.4 Recognise and recall factors of numbers to 100 and corresponding multiples of 100.

Use playing cards to generate a 2-digit number. Can you name all the factors? (Factors of 68 are 1, 2, 4, 17, 34 and 68).

Next step: Which 2 numbers could you multiply together to make 6800? (E.G: 20 x 40)



The Milky Way

Colour the star when you think you have achieved that skill. **Remember, you need to answer each question under 3 seconds** (try to answer 10 or more in 30 seconds). Your teacher will let you know the next time there's an assessment.

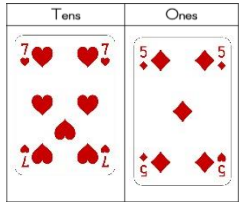
11.5 Use knowledge of place value and multiplication facts up to 12 x 12 to derive related multiplication and division facts involving decimals.

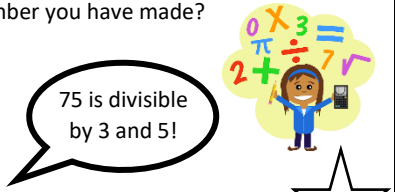
E.g.
0.6 x 8 = 4.8
3.2 ÷ 8 = 0.4

How many different decimal calculations can you think of using the number fact 7 x 8 = 56? (E.G: 5.6 ÷ 7 = 0.8 or 0.07 x 8 = 0.56)

11.6 Know by heart tests of divisibility for multiples of 2, 3, 4, 5, 6, 9 and 10

Playing cards: Remove the picture cards and 10s from the pack. Pick two cards to create a 2-digit number. What divisibility facts can you say about the number you have made?





Top tip:

Learn the divisibility number facts overleaf. Do not forget to watch out for prime numbers!

2	Integer ending in 0, 2, 4, 6, 8
3	Sum of the digits is a multiple of 3
4	The last two digits form a number which is a multiple of 4
5	Integer ending in 0 or 5
6	The number is divisible by 2 and 3
9	Sum of all the digits is a multiple of 9
10	Integer ending in 0

Try the game, hit the button, for more times table practice.

https://www.topmarks.co.uk/maths-games/hit-the-button