Multiples and Factors

Multiples and Factors

Multiples are related to multiplication.

Multiples are found by multiplying a given number by a counting number.

ie multiples of 4 are found by multiplying a counting number by 4.

ie 2 x 4 = 8

3 x 4 = 12

4 x 4 = 16

8 12 and 16 are all multiples of 4.

We know that repeat addition is also the same as multiplying ..... so ..... skip counting by a given number will also make a list of multiples of that number.

4 8 12 16 20 24/

How do multiples help us in maths.

They help us when completing division problems.

As division and multiplication are related then multiples and division are related.

We know that 3 x 6 = 18.

so 18 is a multiple of 3 and 6.

because 18 is a multiple of 3 and 6 .....

it must also be divisible by 3 and 6.

18 is a multiple of 6

3 is a factor of 18

$$3 \times 6 = 18$$

6 is a factor of 18

18 is a multiple of 3

10, 20, 30, 40, 50, 60 are all multiples of

7, 14, 21, 28, 35, 42 are all multiples of

3, 6, 9, 12, 15, 18, 21, 24 are all multiples of

9, 18, 27, 36, 45, 54, 63 are all multiples of

5,10,15, 20, 25, 30, 35, 40 are multiples of

10, 20, 30, 40, 50, 60, 70 are multiples of

2, 4, 6, 8, 10, 12, 14, 16 are all multiples of

LIVEWORKSHEETS

Multiples of 2 are always numbers.

I always have a 0 in the ones place. I am a multiple of

I always have a 5 or 0 in the ones place. I am a multiple of

My digits always add to a multiple of 3, I am a multiple of

(105 – the digits 1 + 0 + 5 = 6) (36 – the digits 3 + 6 = 9) (78 – the digits 7 + 8 = 15)

Mark the multiples of 2 with an X 31 43 34 64 65 87 112 401 502 205 702

Mark the multiples of 3 with an X 31 72 34 66 35 87 104 401 402 103 501

Mark the multiples of 5 with an X 53 43 30 56 75 87 104 400 302 105 501

2 x 7 = 14 so 14 is a multiple of and .

6 x 4 = 24 so 24 is a multiple of and .

13 x 3 = 39 so factors of 39 are and .

7 x 5 = 35 so factors of 35 are and .

9 x 9 = 81 so 81 is a multiple of .

Mark with an X

Which of these numbers are divisible by 2 27 130 104 401 85 90 48 81 105

Which of these numbers are divisible by 3 27 130 104 401 85 90 48 81 105

Which of these numbers are divisible by 5 27 130 104 401 85 90 48 81 105

LIVEWORKSHEETS