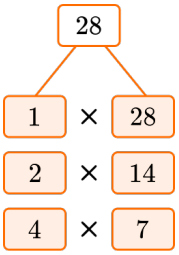
Reeth and Gunnerside Schools

Exemplification for maths target sheet 11 – Milky Way

Milky Way

Identify pairs of factors for all 2-digit whole numbers

(Hint: A factor pair is a pair of numbers that give a particular product when multiplied together. For example, 2 × 5 = 10, so 2 and 5 are a factor pair of 10.
Remember to work systematically starting with 1, identifying the factor pairs.)



Find the factor pairs for each of the following numbers:

45 88 70 63 56 91

Milky Way

Know by heart all the squares of numbers up to 12 x 12

(Hint: $2^2 = 2 \times 2 = 4$)

$3^2 =$

$4^2 =$

$5^2 =$

$6^2 =$

$7^2 =$

$8^2 =$

$9^2 =$

$10^2 =$

$11^2 =$

$12^2 =$

Milky Way

Know by heart all the cubes numbers up to 12^3

(Hint: $2^3 = 2 \times 2 \times 2 = 8$)

$3^3 =$

$4^3 =$

$5^3 =$

$6^3 =$

$7^3 =$

$8^3 =$

$9^3 =$

$10^3 =$

$11^3 =$

$12^3 =$

Milky Way

Recall all prime numbers less than 100

(Hint: a prime number is a whole number greater than 1 that cannot be exactly divided by any whole number other than itself and 1.)

To help, you can rule out the following numbers:

- *Even numbers (apart from 2)*
- *Multiples of 5 (apart from 5)*
- *Multiples of 3 (apart from 3)*
- *Multiples of 7 (apart from 7)*

Here are the first few prime numbers: 2, 3, 5, 7, ___

Can you work out all the prime numbers up to 100? There are 25 in total.

Milky Way

Recall quickly division facts of all tables up to 12 x 12 and use them to divide pairs of multiples of 10 and 100

240 ÷ 40 =

180 ÷ 6 =

360 ÷ 90 =

720 ÷ 80 =

480 ÷ 60 =

270 ÷ 30 =

560 ÷ 70 =

1440 ÷ 120 =

630 ÷ 9 =

1100 ÷ 11 =

1080 ÷ 120 =

810 ÷ 90 =

Milky Way

Calculate simple percentages

(Hint: divide the number by 10 to find 10% first. For example, find 15% of 120
10% = 12
5% = 6
15% = 18)

25% of 140 =

15% of 160 =

30% of 180 =

25% of 200 =

15% of 400 =

20% of 150 =

5% of 80 =

30% of 250 =

40% of 220 =

60% of 200 =

Milky Way

Know ways to work out if a number is a multiple of 7 or 8

(Hint: to work out if a number is divisible by 7, work up in blocks of 70. For example, when testing 238, first go in blocks of 70.
70, 140, 210 then carry on in 7s
210, 217, 224, 231, 238 Yes, 238 is a multiple of 7.

To test for divisibility by 8, work up in blocks of 80 or halve, halve and halve again. If the answer is a whole number, then the original number must be a multiple of 8.)

Test to see if the following numbers are divisible by 7 or 8:

176
217
295
308
336

Milky Way

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

(Hint: a number is divisible by 3 if the sum of its digits is divisible by 3.
A number is divisible 6 if it is divisible by both 2 and 3.
A number is divisible by 9 if the sum of its digits is divisible by 9.
A number is divisible by 4 if the number's last two digits in the same order - ten's digit and one's digit - is divisible by 4.)

Work out if any of the following numbers are divisible by 2, 3, 4, 5, 6, 9 or 10:

2652
9855
8640
6478
7632