

# Prime numbers

Sunday, 25 March 2018 9:48 pm

★ By the end of teaching all students will be asked to complete the following work:

## Year 7 Textbook

### Chapter 3

#### Exercise 3D

Questions: 7-8(s), 9, 11, 12, 13

### What is a prime number?

\* A prime number is a number which can be divided by only two numbers, the number 1 and itself.

### FACTORS

If we look at the following 10 numbers, we can see which are prime and which are not:

$$\begin{array}{r} \boxed{5} \\ \hline 1 \quad 5 \end{array}$$
  
$$\begin{array}{r} \boxed{7} \\ \hline 1 \quad 7 \end{array}$$

~~2~~ ~~3~~ ~~5~~ ~~7~~ ~~11~~ ~~13~~ ~~17~~ ~~19~~ ~~23~~ ~~29~~

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

EVEN

2, 3, 5, 7, 11, 13, 17, 19, 23, 29

### What is a composite number?

A composite number is a number which has more than 2 factors.

This means, it is a number which can be divided by more than one and itself.

We can talk about numbers which divide into (a whole number of times) as **factors**.

~~1~~ ~~2~~ ~~3~~ ~~4~~ ~~5~~ ~~6~~ ~~7~~ ~~8~~ ~~9~~ ~~10~~

1 2 4      1 2 3 6      1, 2, 4, 8

4    6    8    9    10    12    14    15    16    18

### What is a prime factor?

Remember:

\* **FACTOR**: A factor is a number which will divide into another number, a whole number of times.

24 : ~~1~~ ~~2~~ ~~3~~ ~~4~~ ~~5~~ ~~6~~ ~~7~~ ~~8~~ ~~9~~ ~~10~~ ~~11~~ ~~12~~ ~~13~~ ~~14~~ ~~15~~ ~~16~~ ~~17~~ ~~18~~ ~~19~~ ~~20~~ ~~21~~ ~~22~~ ~~23~~ ~~24~~

$$\begin{array}{r} 24 \\ \hline 1 \quad 24 \\ 2 \quad 12 \\ 3 \quad 8 \\ 4 \quad 6 \end{array}$$

24  
/ \ (2)  
12  
/ \ (2)  
6  
/ \ (2)  
(2) (3)

$$24 = \underline{\underline{2 \times 2 \times 2 \times 3}}$$