

Numbers, Factors & Multiples

Numbers



On a mobile
phone



On a remote
control



On a
calculator

Types of Numbers

1. Even numbers
2. Odd numbers
3. Prime numbers
4. Composite numbers
5. Square numbers
6. Triangular numbers

Even Numbers

- ▶ Even numbers are numbers which are exactly divisible by 2.
- ▶ Even numbers are numbers which end with 0, 2, 4, 6, and 8.

Examples of even numbers are:

10, 22, 68, 46, 1004 and so on.

Example

Ring the even numbers from
the list given below:

34, 67, 88, 100, 54, 103,
145, 90, 52

Example

Ring the even numbers from
the list given below:

34, 67, 88, 100, 54, 103,
145, 90, 52

Example

Ring the even numbers from
the list given below:

34, 67, 88, 100, 54, 103,
145, 90, 52

Example

Ring the even numbers from
the list given below:

34, 67, 88, 100, 54, 103,
145, 90, 52

Example

Ring the even numbers from
the list given below:

34, 67, 88, 100, 54, 103,
145, 90, 52

Example

Ring the even numbers from
the list given below:

34, 67, 88, 100, 54, 103,
145, 90, 52

Example

Ring the even numbers from
the list given below:

34, 67, 88, 100, 54, 103,
145, 90, 52

Odd Numbers

- ▶ Odd numbers are numbers which are **not** exactly divisible by 2.
- ▶ They leave a remainder of 1 when divided by 2.

Odd Numbers

- ▶ Odd numbers end with 1, 3, 5, 7 or 9.
- ▶ Examples are 3, 15, 27, 39, 61 and so on.

Example

Circle the correct odd numbers from the list given.

123, 456, 789, 1 009, 561,

394, 555, 20 357

Example

Circle the correct odd numbers from the list given.

123, 456, 789, 1 009, 561,

394, 555, 20 357

Example

Circle the correct odd numbers from the list given.

123, 456, 789, 1 009, 561,

394, 555, 20 357

Example

Circle the correct odd numbers from the list given.

123, 456, 789, 1 009, 561,

394, 555, 20 357

Example

Circle the correct odd numbers from the list given.

123, 456, 789, 1 009, 561,

394, 555, 20 357

Example

Circle the correct odd numbers from the list given.

123, 456, 789, 1 009, 561,

394, 555, 20 357

Example

Circle the correct odd numbers from the list given.

123, 456, 789, 1 009, 561,
394, 555, 20 357

Prime Numbers

A prime number is a number that is divisible by 1 and itself.

In other words, it has only 2 distinct factors.

Examples are 13, 29, 37, ...

Is 2 a prime number?

2 is a prime number since it is divisible by 1 and 2.

2 has only 2 distinct factors.

2 is the only even number which is prime.

Example:

Circle the prime numbers below:

19, 29, 39, 49, 59, 69, 79, 89, 99

Example:

Circle the prime numbers below:

19, 29, 39, 49, 59, 69, 79, 89, 99

Example:

Circle the prime numbers below:

19, 29, 39, 49, 59, 69, 79, 89, 99

Example:

Circle the prime numbers below:

19, 29, 39, 49, 59, 69, 79, 89, 99

Example:

Circle the prime numbers below:

19, 29, 39, 49, 59, 69, 79, 89, 99

Example:

Circle the prime numbers below:

19, 29, 39, 49, 59, 69, 79, 89, 99

Composite Numbers

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

Examples are 16, 44, 65, 100 and so on.

Do you think 0 and 1 are prime numbers?

0 and 1 are neither prime nor composite numbers

Example:

Which of the following are composite numbers?

1, 6, 9, 13, 15, 19, 28,

31, 51, 79, 91

Example:

Which of the following are composite numbers?

1, 6, 9, 13, 15, 19, 28,

31, 51, 79, 91

Example:

Which of the following are composite numbers?

1, 6, 9, 13, 15, 19, 28,

31, 51, 79, 91

Example:

Which of the following are composite numbers?

1, 6, 9, 13, 15, 19, 28,

31, 51, 79, 91

Example:

Which of the following are composite numbers?

1, 6, 9, 13, 15, 19, 28,

31, 51, 79, 91

Example:

Which of the following are composite numbers?

1, 6, 9, 13, 15, 19, 28,

31, 51, 79, 91

Example:

Which of the following are composite numbers?

1, 6, 9, 13, 15, 19, 28,

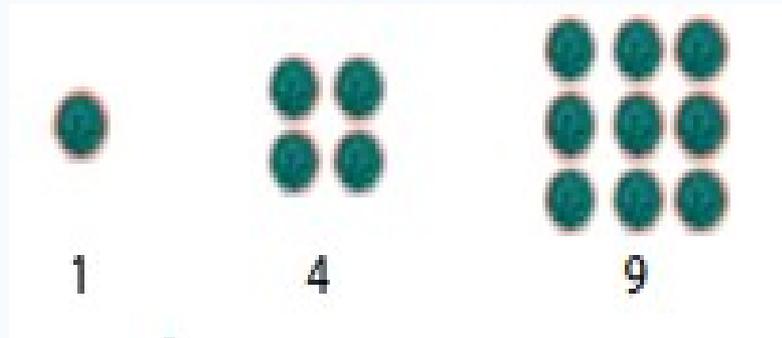
31, 51, 79, 91

Square Numbers

- ▶ When a whole number is multiplied by itself, the resulting answer is said to be a square number.
- ▶ For example, $1 \times 1 = 1$, $2 \times 2 = 4$,
 $3 \times 3 = 9$, $8 \times 8 = 64$ and so on.
- ▶ So 1, 4, 9 and 64 are said to be square numbers.

- ▶ We can arrange a square number as a square array of dots.

For example,



Example:

Ring the square numbers from the list below.

45, 121, 64, 241, 1, 16,

169, 400, 2 000

Example:

Ring the square numbers from the list below.

45, 121, 64, 241, 1, 16,

169, 400, 2 000

Example:

Ring the square numbers from the list below.

45, 121, 64, 241, 1, 16,

169, 400, 2 000

Example:

Ring the square numbers from the list below.

45, 121, 64, 241, 1, 16,

169, 400, 2 000

Example:

Ring the square numbers from the list below.

45, 121, 64, 241, 1, 16,

169, 400, 2 000

Example:

Ring the square numbers from the list below.

45, 121, 64, 241, 1, 16,

169, 400, 2 000

Example:

Ring the square numbers from the list below.

45, 121, 64, 241, 1, 16,

169, 400, 2 000

Example:

Which 1-digit square number is even?

Have a look at this picture.





Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Figure	1	2	3	4	5
Number of cans	1	$1 + 2$	$1 + 2 + 3$	$1 + 2 + 3 + 4$	$1 + 2 + 3 + 4 + 5$
Triangular numbers	1	3	6	10	15

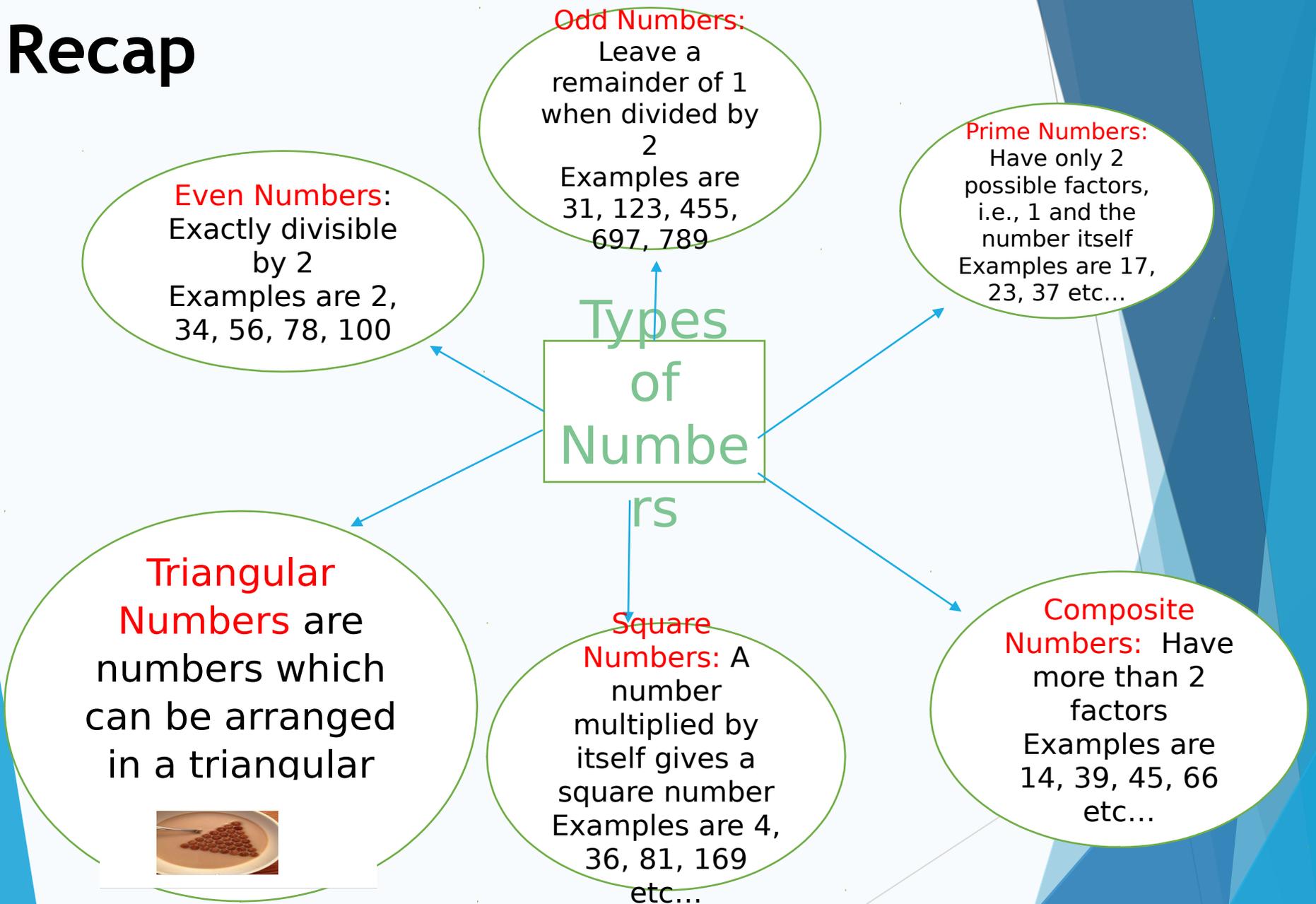
Triangular Numbers



Arrangements of oranges



Recap



Practice Exercises

1. Ring the even numbers from the list:
98, 475, 358, 3 000, 699, 12 034,
1 978, 642.
2. Ring the odd numbers from the list
below.
6, 15, 12, 27, 347, 2 153, 3 598,
4 559, 2 680, 27 681.

Practice Exercises

3. Ring the numbers which are **not** prime : 11, 21, 31, 41, 51, 61, 71, 81, 91.

4. Ring all the numbers which are **not** composite.

1, 5, 8, 10, 17, 22, 25,
29, 31, 38, 42

Practice Exercises

5. Which even number is also a prime number?
6. Write down 5 consecutive prime numbers with 23 in the middle.
7. What is the smallest 2-digit composite number?
8. What is the largest 2-digit composite number?