SESSION   : 15
CLASS   : IV
SUBJECT   : MATHEMATICS
CHAPTER NUMBER   : 14
CHAPTER NAME   : PERIMETER AND AREA
SUBTOPIC   : CONCEPT OF PERIMETER AND
                    PERIMETER OF DIFFERENT
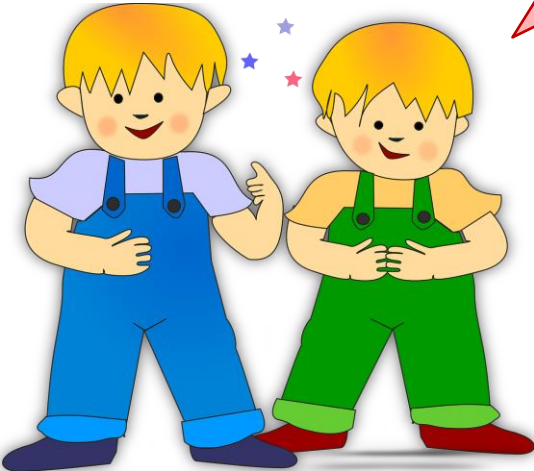   GEOMETRICAL SHAPES

- **Enable the students to understand the meaning of perimeter and the perimeter of different geometrical shapes with rules.**

PERIMETER

Do you know what is perimeter?

Yes, the **length** of the **boundary** of a **closed figure** is call its **perimeter**. It will be equal to the sum of all the sides of a **closed figure**. See the bellow picture.
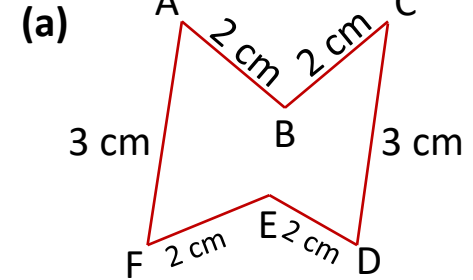
PERIMETER

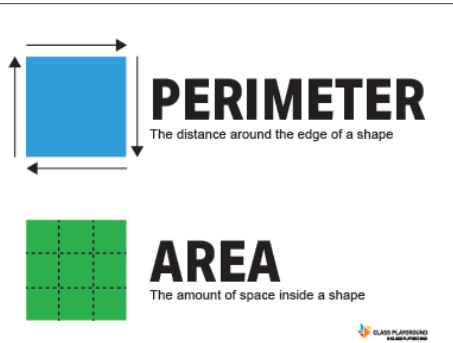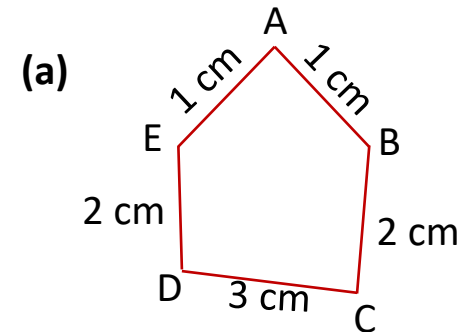**Example :** Find the perimeter of the following.

a) Its perimeter will be the sum of all sides of the figure.

Perimeter = AB + BC + CD + DE + EF + FA =

= 2 + 2 + 3 + 2 + 2 + 3 = **14 cm**

(a)

A

2 cm 2 cm

C

3 cm

B

3 cm

F 2 cm E 2 cm D

b) Its perimeter will be the sum of all sides of the figure.

Perimeter = AB + BC + CD + DE + EA =

= 1 + 2 + 3 + 2 + 1 = **9 cm**

(a)

A

1 cm 1 cm

E B

2 cm 2 cm

D 3 cm C

PERIMETER
The distance around the edge of a shape
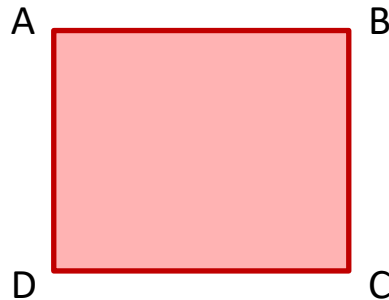
AREA
The amount of space inside a shape

CLASS PLAYGROUND

Perimeter of a square

A square is a figure in which all the sides are equal.

Perimeter of a square is the sum of all four equal sides.

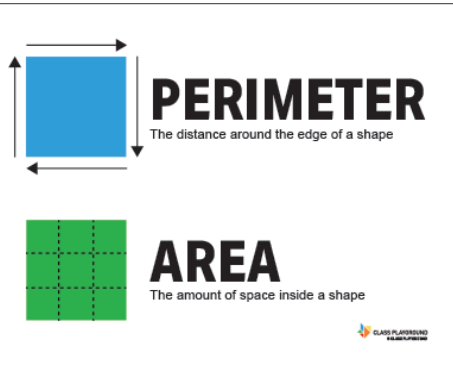∴ Perimeter of a square = **4 × length of one side.**

PERIMETER
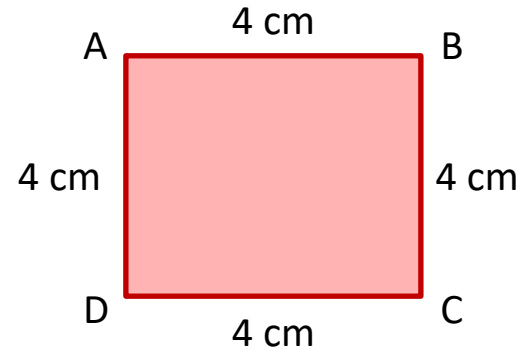The distance around the edge of a shape

AREA
The amount of space inside a shape

Perimeter of a square

Example : 1 Find the perimeter of a square of side 4 cm.

Solution : Length of one side = 4 cm

Perimeter = 4 × length of one side

= 4 × 4

= **16 cm**

4 cm
A ——— B
4 cm   4 cm
D   C
4 cm

PERIMETER
The distance around the edge of a shape

AREA
The amount of space inside a shape

CLASS PLAYGROUND

Perimeter of a square

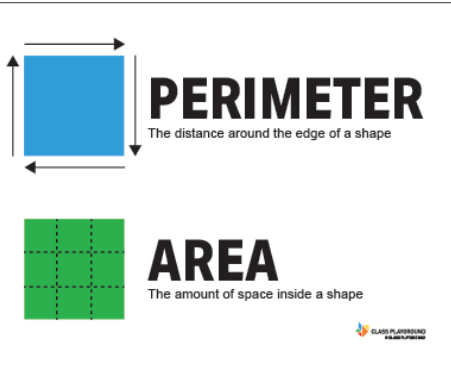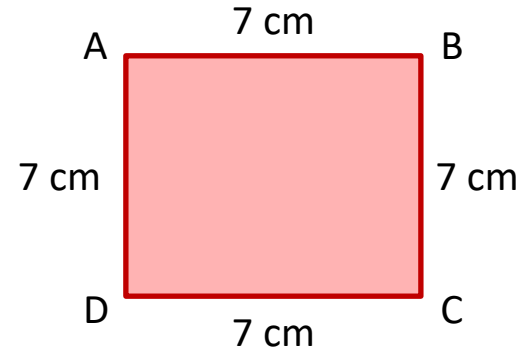**Example : 2** Find the perimeter of a square of side 7 cm.

Solution :   Length of one side = 7 cm

Perimeter = 4 ✖ length of one side

= 4 ✖ 7

= **28 cm**

7 cm

A   B

7 cm   7 cm

D   C

7 cm

PERIMETER
The distance around the edge of a shape

AREA
The amount of space inside a shape

PERIMETER
Perimeter of a rectangle
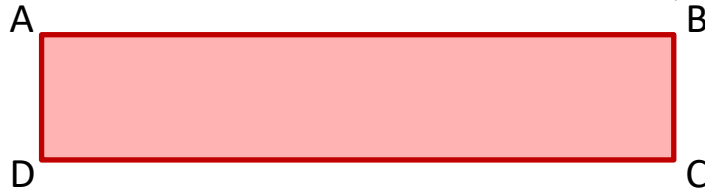
Rectangle is a closed figure having **equal opposite sides**. The longer side is known as **length** and the smaller side is known as **breadth**.

Perimeter of a rectangle = AB + BC + CD + DA

= AB + AB + BC + BC (as CD = AB and AD = BC)

= 2 AB + 2 BC **= 2 (AB + BC)**

Perimeter = **2 × (length + breadth)**

PERIMETER
The distance around the edge of a shape

AREA
The amount of space inside a shape

A _____ B

D _____ C

Perimeter of a rectangle

Example : 1 Find the perimeter of a rectangle of length 6 cm and breadth 2 cm.

Solution : Length = 6 cm, breadth = 2 cm

Perimeter = 2 × (length + breadth)

= 2 × (6 + 2)

= 2 × 8

= **16 cm**

PERIMETER
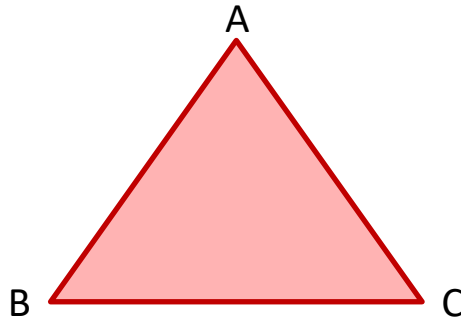The distance around the edge of a shape

AREA
The amount of space inside a shape

Perimeter of a triangle

Triangle is a three sided closed figure. Perimeter of triangle will be the sum of all its side.

Perimeter of a triangle = AB + BC + CA

∴ Perimeter = **sum of length of all three sides.**

PERIMETER
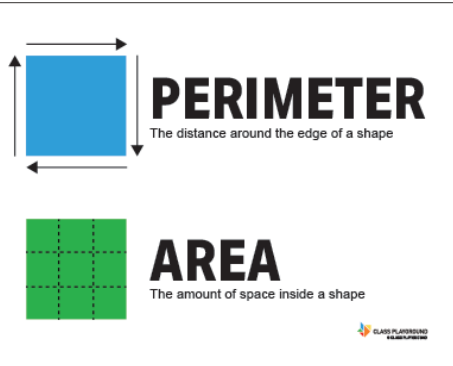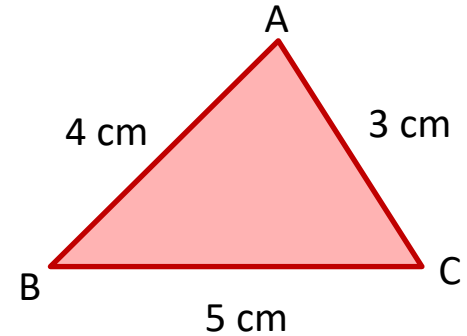The distance around the edge of a shape

AREA
The amount of space inside a shape

A

B   C

Perimeter of a triangle

Example : 1 Find the perimeter of the given triangle.

Solution : Perimeter = AB + BC + CA

= 4 + 5 + 3

= **12 cm**

A

3 cm

4 cm

B   C

5 cm

PERIMETER
The distance around the edge of a shape

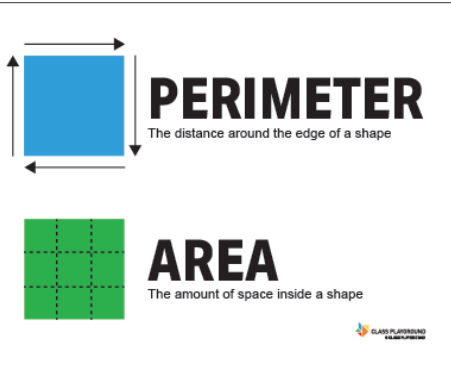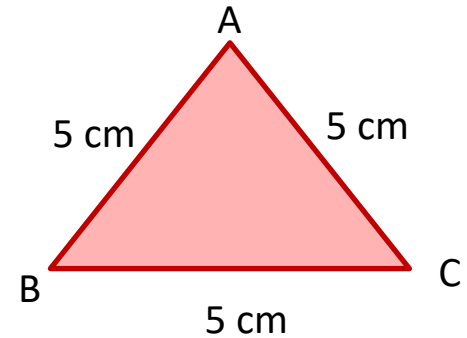**AREA**
The amount of space inside a shape

Perimeter of a triangle

Example : 2 Find the perimeter of the given triangle.

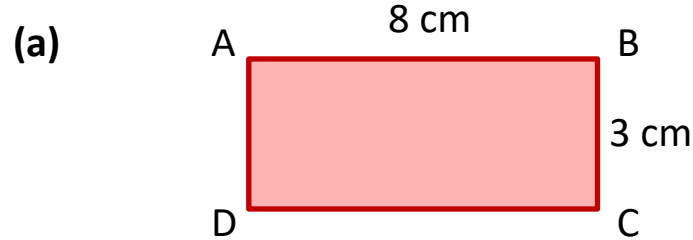**Solution :** Side = 5 cm

Perimeter = AB + BC + CA

= 5 + 5 + 5

= **15 cm**

PERIMETER
The distance around the edge of a shape

AREA
The amount of space inside a shape

EXERCISE – 14 (A)

1. Find the perimeter of the figures given below.

(a)

8 cm

A ——————— B

3 cm

D ——————— C

Length = 8 cm, breadth = 3 cm

Perimeter = 2 × (length + breadth)

= 2 × (8 + 3)

= 2 × 11

= **22 cm**

PERIMETER
The distance around the edge of a shape

AREA
The amount of space inside a shape

EXERCISE – 14 (A)

1. Find the perimeter of the figures given below.

(b)

A ——— 6 cm ——— B

6 cm   6 cm

D ——— 6 cm ——— C

Length of one side = 6 cm

Perimeter = 4 × length of one side

= 4 × 6

= **24 cm**

PERIMETER
The distance around the edge of a shape

AREA
The amount of space inside a shape

PERIMETER

EXERCISE – 14 (A)

1. Find the perimeter of the figures given below.

(c)

Perimeter = AB + BC + CA

= 2 + 4 + 3

= **9 cm**

HOME ASSIGNMENT:

➢ **Complete Exercise – 14 A Q. NO. 1 in your note book.**

Students are able to understand the meaning of perimeter
and perimeter of different geometrical shapes with rules.

THANKING YOU
ODM EDUCATIONAL GROUP