BAL BHARATI PUBLIC SCHOOL, PITAMPURA, DELHI – 110034

CLASS V SUBJECT: Mathematics TERM II (2020-2021)

TOPIC – MEASURING SURFACES SUBTOPIC – AREA

WEEK : 11.01.2021 to 15.01.2021

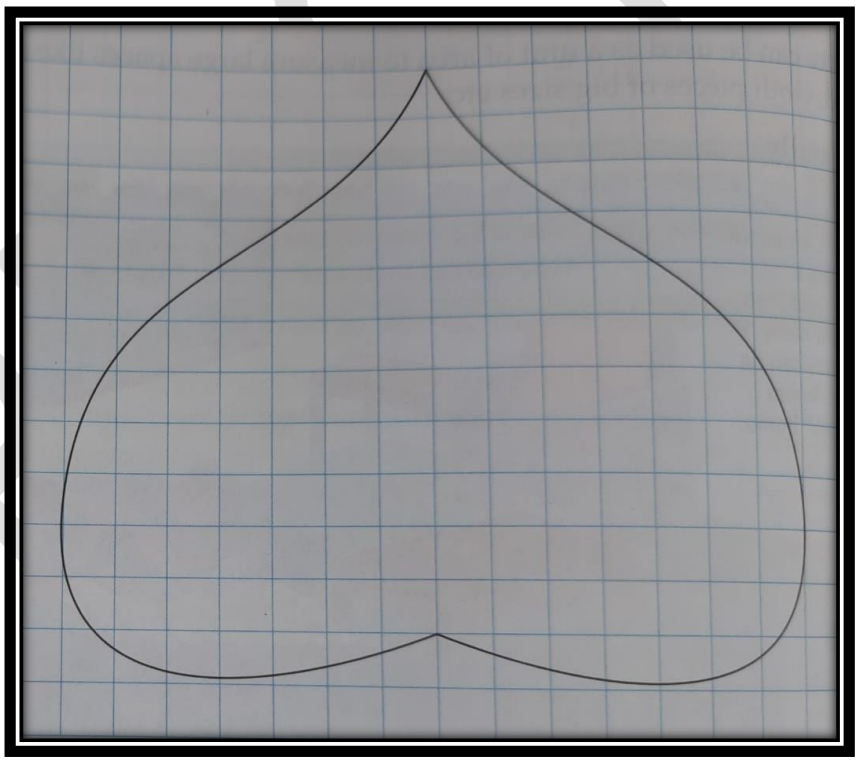
LEARNING OUTCOMES

Each child will be able to:

- Measure the area of any irregular shape using square grid paper.
- Find the area of a rectangle and square using the correct formula.

AREA OF IRREGULAR SHAPES

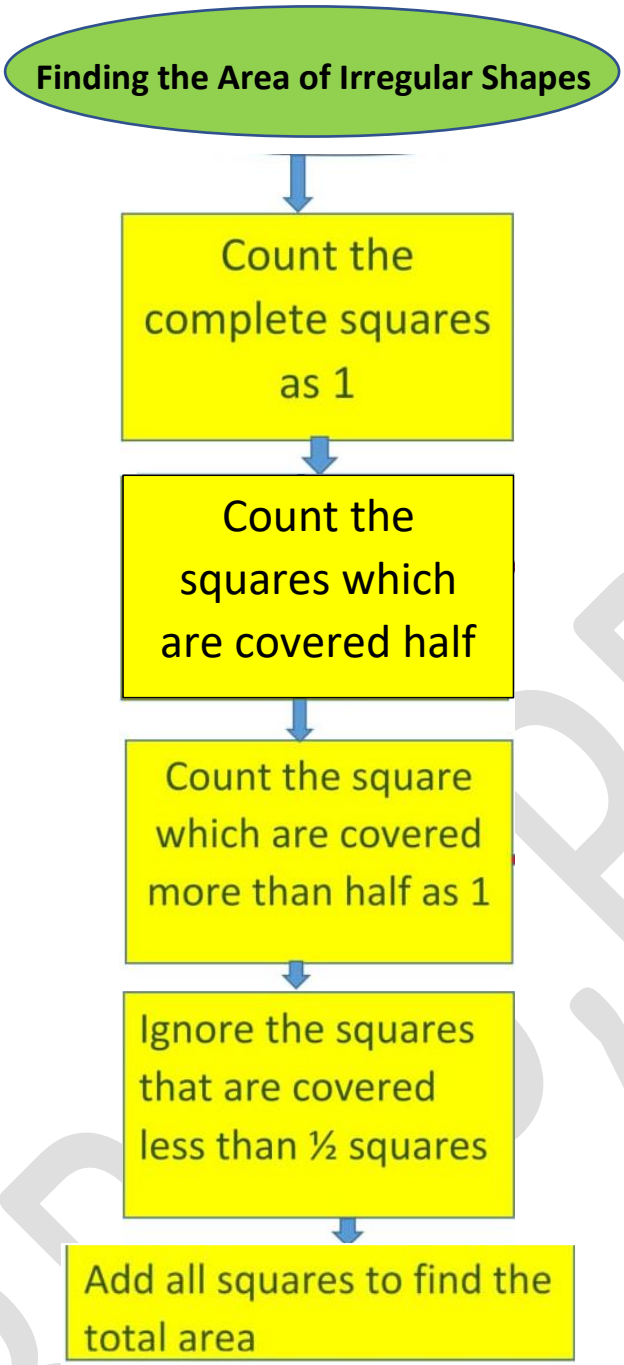
In the previous class we learnt to find out the area of closed figures by counting number of unit squares filling them. Let's try to find out the area of this leaf made on a grid paper:



We observe that there are some complete unit squares inside the leaf, while some unit squares are not complete. Let us watch the following video for better understanding:

https://youtu.be/wixL5pf-T1A

Now, let's follow the steps to find out the area of the leaf.



Area of the leaf = Number of complete unit squares inside the leaf

+ Number of squares which are more than half

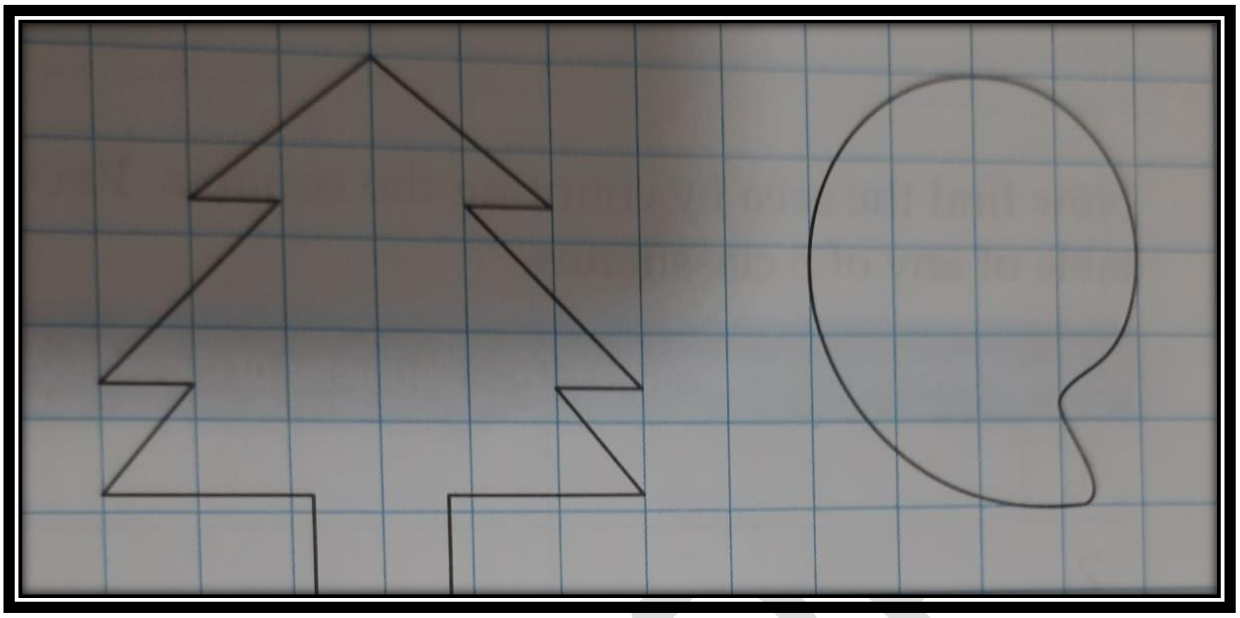
+ Number of squares which are half / 2

= _____ + _____ + _____

= _____ + _____

= _____ square units

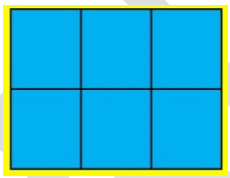
Ques1. Find the area of the following figures made on the grid:



Area of Rectangle / Square

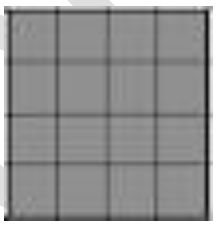
Ques2. Observe the following figures made on grid paper and find out their area by counting squares: (Area of each small square = 1cm^2)

(a)



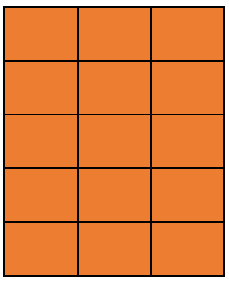
Area = ____ cm^2

(b)



Area = ____ cm^2

(c)



Area = ____ cm^2

What do you observe:

Area of rectangle **(a)** = Number of complete squares inside the rectangle

= 6 cm^2

= Number of unit squares on one side x Number of unit squares on other sides

= 3 x 2 = 6 cm^2

Hence we can say:

Area of a Rectangle = Product of measure of its two adjacent sides.

Check and verify for figures (b) and (c) also:

Figure	Number of unit squares on one side	Number of unit squares on other side	Area
(b)			
(c)			

In figure **(b)** which is a square: (Both sides are equal)
Number of squares on one side = Number of squares on other side
Because its adjacent sides are equal.

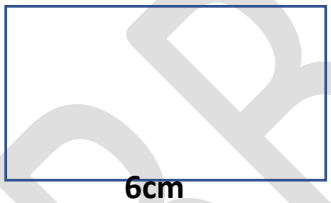
Hence we can say that:
Area of a Square = Side x side

Watch the following video for better understanding:

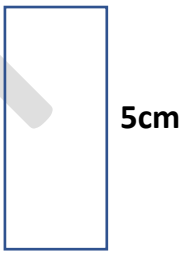
https://youtu.be/E3xWiVYba3A

Ques3. Find out the area of the following using the correct formula:

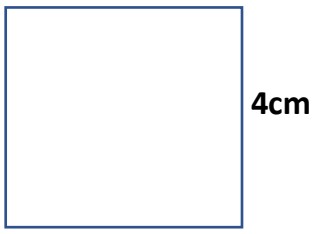
a)



b)



c)



Ques4. Find out the area of the rectangle if measure of the two adjacent sides is:

a) 9cm, 4cm b) 4m, 3m c) 13cm, 7cm

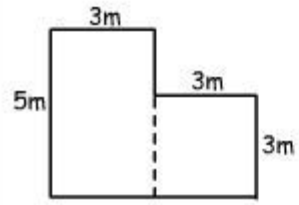
Ques5. Find out the area of the square whose each side measures:

a) 25cm b) 9m c) 60cm

LET'S HAVE SOME FUN

Find out area of the following figures splitting them into rectangles and squares:

(a)

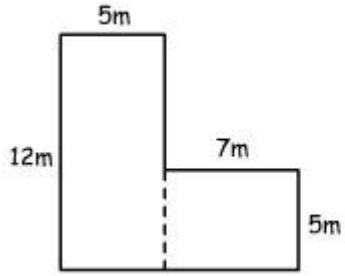


A 1 = _____ x _____

A 2 = _____ x _____

Total Area = _____

(b)

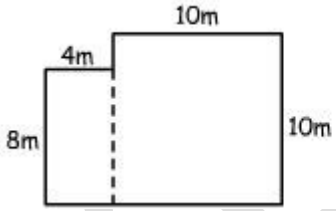


A 1 = _____ x _____

A 2 = _____ x _____

Total Area = _____

(c)



A 1 = _____ x _____

A 2 = _____ x _____

Total Area = _____