Algorithm & Flow chart

Problem Solving

The problem needs to be analyzed well before solving it. The process of problem solving

- **Input** - Things to be need to solve problem
- **Process** - Guideline to solve the problem
- **Output** - The result of problem

Example 01

Problem -   How to preparing fruit salad.

Input   -   Variety of fruits

Process -   Washing , cutting , mixing fruits

Output   -   Fruit salad

Activity 01

Find and write the Input , Process and Output for the following problem

Problem - How to find the area of Rectangle (area= length*width)

Input

Process

Output

Algorithm

Algorithm is

Include the all the steps of solving problem in orderly.

When writing algorithm , every algorithm has **Start** and **End.**

Example 01

Write the algorithm for preparing a cup of tea.

- Step 01   : Put the teabag in a cup.
- Step 02   : Fill the kettle with water.
- Step 03   : Boil the water in the kettle.
- Step 04   : Pour some of the boiled water into the cup.
- Step 05   : Add milk to the cup.
- Step 06   : Add sugar to the cup.
- Step 07   : Stir the tea.
- Step 08   : Drink the tea

Activity 02

Prepare the algorithm steps in orderly by putting the correct number.

Problem – Write the algorithm for find the area of Rectangle

(Rectangle= length*width)

Get the length of rectangle

End

Get the width of rectangle
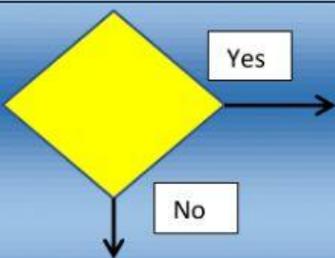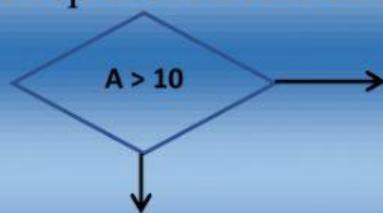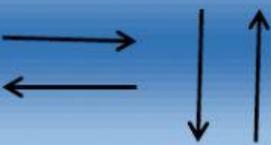
Area=width*length

Area of rectangle

Start

1 2

3 4

5 6

Flow chart

Flow chart symbols

Symbols	Usage
	Used to represent **Start** and **End** Start End
	Used to **Input** and **Output** data Enter student marks
	Used to represent **process** Area = length*width
Yes No	Used to represent **decision** making A > 10
	Used to represent the **data flow**

Example 01

Draw the flow chart to calculate area of rectangle.

```
        ( Start )
            |
            v
   / Input length of  /
  /    rectangle     /
            |
            v
   / Input width of   /
  /    rectangle      /
            |
            v
   [ Area = length*width ]
            |
            v
   / Display the Area  /
            |
            v
         ( End )
```

Refer the video for more details

Match the flow chart symbol with the correct name .
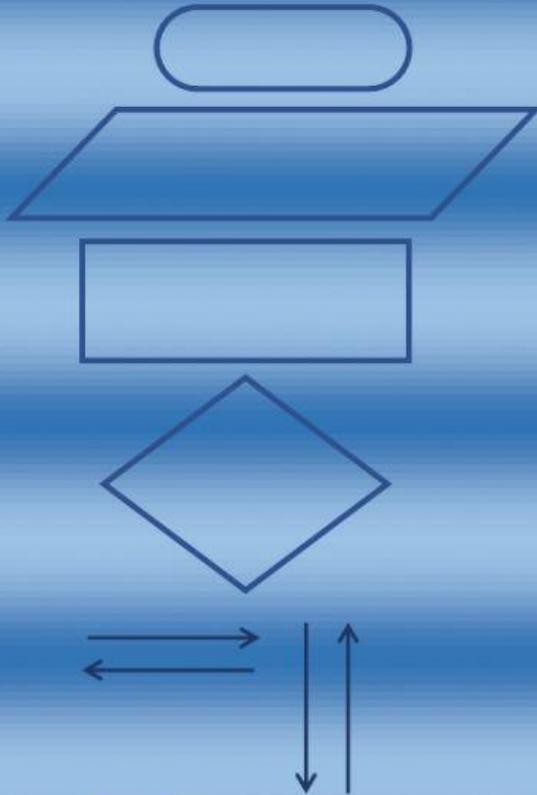
Input / Output

Data flow

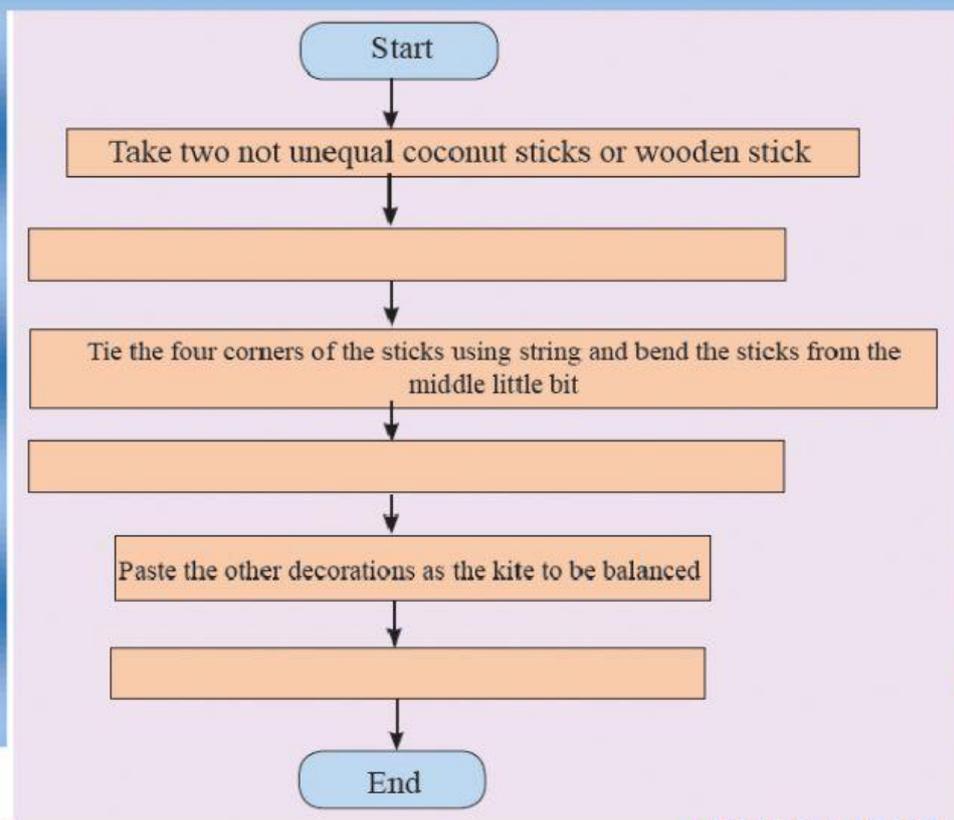Decision

Start/End

Process

Find the correct answer and select the answer to prepare the flow chart to make a kite.

Start

Take two not unequal coconut sticks or wooden stick

Tie the four corners of the sticks using string and bend the sticks from the middle little bit

Paste the other decorations as the kite to be balanced

End

Activity 05

Click to Interactive activity

Activity 05

Click to interactive activity