

ACTIVITY NO. - 4

Subject	MATHEMATICS
Class	VI
Chapter/Unit	Basic Geometrical Ideas
Topic	Triangles
Time	30 minutes
Nature of Activity	Individual

What will I learn (Learning outcome)?

To establish the fact that triangle is the most rigid figure.

Skills:- Psychomotor Coordination, Differentiating, Assimilating, Identifying, Examining

What I have to do?

To establish the fact that triangle is the most rigid figure by activity method.

What do I require?

Toothpicks and straws.

What do I need to know?

Meaning of rigidity

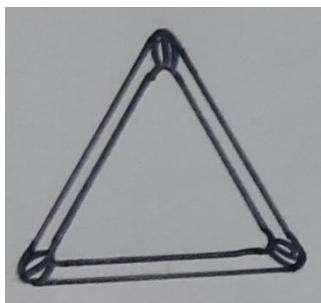
➤ Teacher's Activity

Teacher will discuss about rigidity and will explain the steps of the activity.

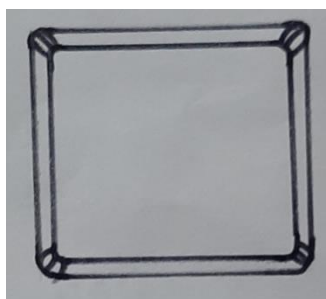
How will I proceed?

➤ Student's Activity

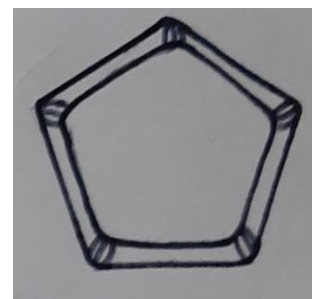
- Take a sufficient number of toothpicks of any convenient length.
- Cut straws into several pieces each of length, say 3 cm.
- Now, join the toothpicks with the help of straw pieces to make different shapes such as triangle, quadrilateral and pentagon as shown in Fig.1.



Triangle



Quadrilateral



Pentagon

Fig.1

- Press any vertex or any side of each shape made of toothpicks and examine its shape.

What have I observed?

Complete the following table:

Number of sticks used	Shape formed	Change shape after pushing at a vertex (Yes/No)
3	Triangle	
4	Quadrilateral	
5	Pentagon	

What have I learnt?

To establish the fact that _____ is the most rigid figure among all other polygons.

What am I curious to know?

Show the above activity for a 6-sided polygon and examine its shape.

Let me evaluate myself

1. Which figure shows property of rigidity: a rhombus or an equilateral triangle?

2. Is there any shape other than triangle which shows property of rigidity?

3. Why the triangle is the strongest shape?

4. Write the names of any five objects from your surroundings which show property of rigidity of triangles.

(a) _____

(b) _____

(c) _____

(d) _____

(e) _____

5. Write any three real life applications for the property of rigidity of triangles.

(a) _____

(b) _____

(c) _____