

ACTIVITY - QUADRILATERAL

1. **What we have to do?**

To show that the figure obtained by joining the mid-points of consecutive sides of the quadrilateral is a parallelogram.

2. **What is required?**

Coloured paper, a pair of scissors, gum.

3. **What do you need to know?**

Finding mid-points of the line segments by paper folding

If in a quadrilateral, both pairs of opposite sides are equal, it is a parallelogram.

4. **How will you proceed?**

- Cut off quadrilateral ABCD of paper .
- Mark the mid-points P,Q, R and S of the sides AB, BC, CD and DA respectively by folding the sides appropriately.
- Cut off the quadrilateral PQRS.
- Cut the quadrilateral PQRS along the diagonal PR into two triangles PQR and PSR.
- Superimpose the triangle PSR on triangle PQR such that PS falls on QR .

5. **What have you observed?**

What happens when PSR is superimposed on PQR?

6. **What have you learnt?**

7. **What would you be interested in doing?**

Show that the figure obtained by joining the mid-points of consecutive sides of the parallelogram is a rectangle.

Real life application :- A parallelogram can be obtained using this concept easily without drawing parallel lines and measuring angles.



