OBJECTIVE: To verify that the sum of all the three angles of a triangle is $180^\circ$ (by paper cutting and pasting method).

DESIGN AND APPROACH TO THE ACTIVITY:
1. The linear pair axiom
2. Definition and meaning of adjacent angles.

PROCEDURE:
1. Draw any triangle ABC on a white sheet of paper (fig(i)).
2. Make triblicate cut-outs of the triangle.  
3. Colour the angles A, B and C with different colours. Make cut-outs of the three angles.
4. Draw a line PQ on a sheet of paper and mark a point O on it as shown in fig(ii).
5. Paste the cut-outs of the three angles adjacent to each other along the line PQ such that the vertices of these angles fall on the point O, as shown in fig(iii).

RESULT: We observe that the straight angle PQR is exactly covered by the cut-outs of angles A, B and C.

\[ \therefore \, \angle A + \angle B + \angle C = 180^\circ. \text{ Hence Verified} \]

COROLLARY:

We observe that the cut-outs of angles A and B exactly cover \( \angle ACD \).

\[ \therefore \, \text{Ext.} \, \angle ACD = \text{sum of its two interior opposite angles} \]

A and B.