

Learning Remotely Practical Solar STEM

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Up-skilling in renewable energy technologies

TRIANGULATION - finding the centre of a circle using maths skills

1. Find the perpendicular bisector of line BC

2. Measure line **BC** and open compass to a width more than half the length of **BC**.

3. Measure the distance you set for your compass to maintain the same width of the compass. This length should not change.

4. Put the pointed end of compass on point **B** and mark 2 arcs, one above line **BC** and one below line **BC**. The arcs should be roughly above and below the halfway point of line **BC**.

5. Put the pointed end of the compass on point **C** and mark 2 arcs above and below line **BC**. The arcs from point **C** should cross ones drawn from point **B**.

NOTE: If the arcs do not cross then make the arcs longer until they cross. Join your points diagonally with a straight line.

6. The point where the perpendicular bisector of **BC** crosses the perpendicular bisector of **AB** is the **CENTRE POINT OF THE CIRCLE**.

7. Repeat steps on the wheel material.

8. Make a small hole with the pointed end of the compass - at the centre point of the circle/wheel.

9. Push through the smaller end of the reducer into the hole.

10. Before placing the wheels onto the axle of the motor tidy the edge of the wheel so it is perfectly smooth.

