



Strengthen Activities

MISCONCEPTION

Children may not understand the concept of angles as pictorial representations of a degree of turn.

STRENGTHENING UNDERSTANDING

1. Give children plenty of practical experiences turning quarter, half and whole turns. Ask them predict the direction they will face if they turn a quarter turn to the left, etc.
2. Link this to an analogue clock face. Ask: *When the hour hand starting at 12 turns a quarter turn in either direction, which number will the hand be pointing to? How do you know that this is a quarter turn?* Encourage children to then draw the angle that they see and label it as a right angle.
3. Now ask children about acute and obtuse angles. Continue to use the clock face and draw out angles. Encourage children at all stages to explain the difference between acute, right and obtuse angles.

ASSESSMENT CHECKPOINT

Can children create a poster explaining what an angle is and the difference between acute, right and obtuse angles?

RESOURCES

Analogue clock, whiteboards and pen

MISCONCEPTION

Children may struggle to identify the different types of triangles when their orientation is unfamiliar.

STRENGTHENING UNDERSTANDING

1. Recap the properties of the different triangles – equilateral, isosceles, right-angled and scalene. Ensure children have sound knowledge of these. Now give children various 2D triangles to sort using definitions to justify their decisions. Encourage children to rotate the shapes around and ask if the triangle properties have changed. Ask: *Why not? What has changed?*
2. Now give children a sheet of triangles drawn in different orientations and ask them to sort and label the different types of triangles using properties they know. Encourage children to rotate the page to help them identify the triangles if they need to.

ASSESSMENT CHECKPOINT

Can children accurately complete Q1 on Practice book p102?

RESOURCES

Various 2D triangles, prepared sheet with triangles in different orientations, Practice book

MISCONCEPTION

Children may think that any line which splits a shape into halves is a line of symmetry.

STRENGTHENING UNDERSTANDING

1. Establish what a line of symmetry means (a line of reflection). Ask: *Will a line of symmetry always cut a shape into halves? If a line cuts a shape into halves, will it always be a line of symmetry?*
2. Give children a square piece of paper to investigate and notice that the horizontal, vertical and diagonal lines are all lines of symmetry.
3. Now give children a piece of rectangular paper to investigate. Ask: *Are the diagonals also lines of symmetry? Why not?* Encourage children to use a mirror to help and check answers. Investigate other regular and irregular shapes (plastic and paper versions).

ASSESSMENT CHECKPOINT

Can children correctly identify the lines of symmetry in some shapes in the classroom?

RESOURCES

Mirrors, paper and plastic regular and irregular shapes including squares and rectangles