
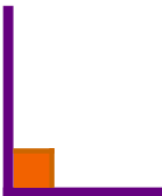
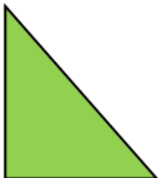
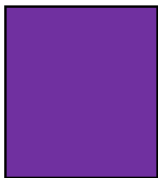
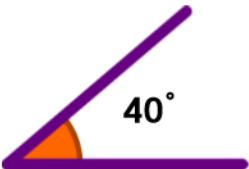
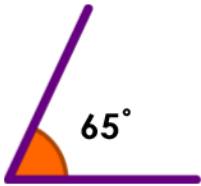


Lesson 2

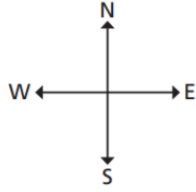
L.0 I am learning to understand angles and directions.

Fluency

Key vocabulary: Acute, Obtuse, Right, Straight line, Reflex	Your answer
<p>1a. Which of the following shows a right angle?</p> <p>A.  B. </p>	<p>1a. B</p>
<p>5a. How many right angles in these shapes?</p> <p> </p>	<p>5a. 5</p>
<p>11b. If you added the degrees both these angles together would the total be more or less than the degrees in a right angle?</p> <p> </p>	<p>11b. More ($40^\circ + 65^\circ = 105^\circ$)</p>
<p>Complete the sentences.</p> <p>There is <input type="text"/> right angle in a quarter turn.</p> <p>A quarter turn is <input type="text"/> degrees.</p> <p>There are <input type="text"/> right angles in a half turn.</p> <p>A half turn is <input type="text"/> degrees.</p> <p>There are <input type="text"/> right angles in a three-quarter turn.</p> <p>A three-quarter turn is <input type="text"/> degrees.</p> <p>There are <input type="text"/> right angles in a full turn.</p> <p>A full turn is <input type="text"/> degrees.</p>	<p>Complete the sentences.</p> <p>There is <input type="text" value="1"/> right angle in a quarter turn.</p> <p>A quarter turn is <input type="text" value="90"/> degrees.</p> <p>There are <input type="text" value="2"/> right angles in a half turn.</p> <p>A half turn is <input type="text" value="180"/> degrees.</p> <p>There are <input type="text" value="3"/> right angles in a three-quarter turn.</p> <p>A three-quarter turn is <input type="text" value="270"/> degrees.</p> <p>There are <input type="text" value="4"/> right angles in a full turn.</p> <p>A full turn is <input type="text" value="360"/> degrees.</p>

Week 1_Maths_Lesson 2

Here is a compass.

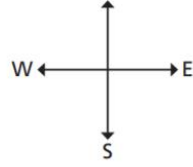


a) Huan is facing north.
He turns half a turn.
What direction is he facing now?

b) Whitney is facing east.
She turns 180°.
What direction is she facing now?

c) Alex is facing west.
She turns a quarter turn clockwise.
What direction is she facing now?

d) Amir is facing west.
He turns 90° anticlockwise.
What direction is he facing now?



South

west

north

south

Reasoning

Key vocabulary: Acute, Obtuse, Right, Straight line, Reflex

Your answer

1a. Which is the odd one out?

half turn



90°

Explain your answer.

1a. Half turn because the others represent 90°.



I did $2\frac{1}{3}$ turns.

How many degrees did Eva turn through?

840°

True or False?

A one and three quarter turn is equal to 530°

Prove it!

Reasoning 2

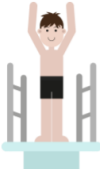
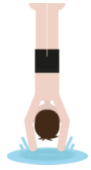
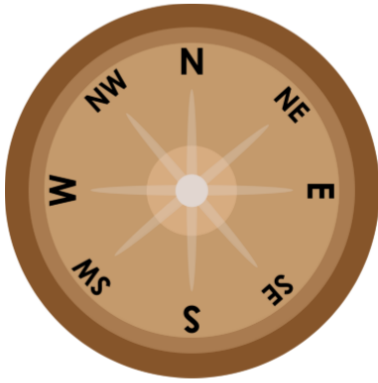
Modelled DAB Reasoning Response

D – The statement is false.

A – A one and three quarter turn is not equal to 530°.

B – A full turn is equal to 360°. A three quarter turn = $(360 \div 4) \times 3$ or $3 \times 90^\circ$ which is 270°. A one and three quarter turn = $360^\circ + 270^\circ = 630^\circ$.

Problem Solving

Key vocabulary: Acute, Obtuse, Right, Straight line, Reflex	Your answer
<p>Divers at the Olympic Games flip at least one full turn but no more than four full turns.</p> <p>They start on a platform in this position...</p> <div style="text-align: center;">  </div> <p>They end in the water in this position...</p> <div style="text-align: center;">  </div> <p>How many turns can they make? What are they in quarters? What are they in degrees?</p>	<p>Children should work systematically to find all possibilities. There are three in total. They should recognise that the diver enters the water in a position 180° or a half turn from his starting position. Using this information, they can recognise that there are a limited number of turns he can make between a full turn and four full turns:</p> <p>1 and a half turn which is 6 right angles or 540°.</p> <p>2 and a half turn which is 10 right angles or 900°.</p> <p>3 and a half turn which is 14 right angles or 1260°.</p>
<p>Halfway between two compass points, for example northeast, is called an intercardinal point.</p> <div style="text-align: center;">  </div> <p>The difference between two intercardinal points on a compass is 270° or a three quarter turn.</p> <p>What could the two points be?</p>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;">northeast and northwest</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;">southeast and northeast</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;">southwest and northwest</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;">northwest and southwest</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;">northeast and southeast</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;">southeast and southwest</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;">southwest and southeast</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;">northwest and northeast</p> </div>

Extension

Key vocabulary: Acute, Obtuse, Right, Straight line, Reflex	Your answer
<p>Complete the statements.</p> <p>a) $\frac{1}{2}$ of a full turn = <input style="width: 80px;" type="text"/></p> <p>b) $\frac{1}{4}$ of a full turn = <input style="width: 80px;" type="text"/></p> <p>c) $\frac{3}{4}$ of a full turn = <input style="width: 80px;" type="text"/></p> <p>d) $1\frac{1}{4}$ turns = <input style="width: 80px;" type="text"/></p> <p>e) $5\frac{3}{4}$ turns = <input style="width: 80px;" type="text"/></p>	<p>Complete the statements.</p> <p>a) $\frac{1}{2}$ of a full turn = <input style="width: 80px; border: 1px solid blue;" type="text" value="180°"/></p> <p>b) $\frac{1}{4}$ of a full turn = <input style="width: 80px; border: 1px solid blue;" type="text" value="90°"/></p> <p>c) $\frac{3}{4}$ of a full turn = <input style="width: 80px; border: 1px solid blue;" type="text" value="270°"/></p> <p>d) $1\frac{1}{4}$ turns = <input style="width: 80px; border: 1px solid blue;" type="text" value="450°"/></p> <p>e) $5\frac{3}{4}$ turns = <input style="width: 80px; border: 1px solid blue;" type="text" value="2,070°"/></p>