**Profile: Thales of Miletus**

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| thales2 | Name: ThalesBorn: c. 624 BCDied: c. 546 BCLived: Miletus (now in Turkey)Job: Philosopher and MathematicianKnown for: * Proving Thales’ Theorem and sacrificing an ox
* Stopping a war by predicting an eclipse of the sun
* Being the ‘Father of Science’
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**The Theorem**

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|  | Look at the diagram on the left.A, B and C are points on a circle.If AC is a diameter then angle ABC is a right-angle.Sometimes, this is remembered as ‘*the angle in a semicircle is a right angle*’. |

**Set-square challenge**

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| 39_set_squares | How can you use a set-square to find the centre of this circle?*Hint: Thales’ Theorem will help you!* |  |

**Prove it!**

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| This diagram to show Thales’ Theorem has had an extra line, OB, drawn in.Now look at the eight statements below. Place them in an order which **prove** that Thales’ Theorem is true |  |

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| so x + (x+y) + y = 180˚ |
| Now, angles in a triangle sum to 180˚ |
| so x + y = 90˚ |
| Also, ∠OBC = ∠OCB. Label these ‘y’. |
| Therefore triangles OAB and OBC are isosceles. |
| OA, OB and OC are radii of the circle. |
| so 2x + 2y = 180˚ |
| This means that ∠OAB = ∠OBA. Label these ‘x’. |