Module: Professor Pythagoras' Magical Maths Theme: Maths – Data, Measurement and Geometry	Duration: 3 x 45 minutes + 15 minutes

Learning Objectives:
(Y2-3) I can identify right angles and can compare other angles stating
whether they are bigger or smaller than a right angle
(Y4) I know that angles are measured in degrees and can identify acute and obtuse angles
(Y5) I can estimate and compare acute, obtuse and reflex angles, as well as draw given angles and measure them
(Y6) I can find unknown angles in any triangle, quadrilateral and regular polygon

Summary of Activity:

Session 1: Create and play the Roman board game *rota*
Session 2: Explore the properties of triangles as discovered by Pythagoras
Session 3: Create mosaic polygons

Resources:	Differentiation:	Key vocabulary to be used:
• 3a rota.pdf • 3b Pythagoras.pdf • 3c mosaics.pdf		**angle** **polygon** **strategy** **vertex** **right angle** **mosaic** **obtuse** **bisect** **acute** **circumference** **reflex**

Session One	Task/Activity	Time:
Intro	Word Roots Challenge: English words that come from the Latin 'rota' meaning 'wheel'	**5**
Activity	(i) Thinking about the game board	**5**
	(ii) Follow instructions to create the game board	**20**
	(iii) Play the game	**10**

Plenary	(i) Board design show & tell	5
	(ii) Discussion: what strategies were successful in playing the game?	
	Tidy up, thank yous and good bye.	15 mins

Session Two	Task/Activity:	Time
Intro	Pythagoras and triangles	5
	Triangle properties quiz	
Activity	(i) demonstrate corners adding up to 180°	15
	(ii – extension) visually demonstrate Pythagoras' theorem	20
Plenary	Exchange of findings	5
	Tidy up, thank yous and good bye.	15 m

Session Three	Task/Activity:	Tin
Intro	match the name (including Ancient Greek etymology) to the polygon	10
	(extension = decipher the Greek)	
Activity	Create a mosaic polygon with title in English and/or Ancient Greek	30
Plenary	Angles in my polygon	5
	Tidy up, thank yous and good bye.	15