

High Tunstall College of Science Curriculum Intent

Topic:	Application of Computational Thinking	Year:	10	Half Term:	6
	Topic 6: Problem Solving with Programming				
	Python Turtle				

	Progress		
Key Ideas	R	Α	G
I can use turtle graphics to provide graphical output			
I can use Cartesian coordinates			
I can incorporate selection, repetition, and iteration into programs using turtle graphics			
I can use turtle pens of different colours			
I can use turtle pens of different sizes			
I can use turtle fill to colour in closed shapes			
I can draw circles using python turtle			
I can create turtle graphics, given a set of working subprograms			
I can decompose a problem into smaller parts			
I can combine subprograms effectively into a solution			

Lesson	Learning Focus	Assessment	Key words
1 (CT31)	Use turtle graphics	Evidence in Teams End of topic assessment	Function, Graphics, Import, Lines, Pens, pendown(), penup(), Turtle,
2 (CT32)	Use Cartesian coordinates Incorporate selection, repetition, and iteration into programs using turtle graphics	Evidence in Teams End of topic assessment	Cartesian coordinates, Function, Graphics, Grid, Import, Lines, Loop, Pens, pendown(), penup(), Turtle, setheading(), Subprograms, Turtle, Two-dimensional
3 (CT33)	Use turtle pens of different colours Use turtle pens of different sizes Use turtle fill to colour in closed shapes Draw circles	Evidence in Teams End of topic assessment	Cartesian coordinates, Function, Graphics, Grid, Import, Layers, Lines, Loop, Pens, pendown(), penup(), pensize(), Sequence, setheading(), Shapes, Subprograms, Turtle, Two- dimensional
4 (CT34)	Create turtle graphics, given a set of working subprograms	Evidence in Teams End of topic assessment	Cartesian coordinates, Decomposition, Function, Graphics, Grid, Import, Lines, Loop, Pens, pendown(), penup(), pensize(), setheading(), Shapes, Subprograms, Turtle, Two- dimensional
5 (CT35)	Decompose a problem into smaller parts Combine subprograms effectively into a solution	Evidence in Teams End of topic assessment	Cartesian coordinates, Decomposition, Function, Graphics, Grid, Import, Lines,

			Loop, Pens, pendown(), penup(), pensize(), setheading(), Shapes, Subprograms, Turtle, Two- dimensional
6 (CT36)	Revision lesson All of the above	Evidence in Teams End of topic assessment	All of the above
7 (CT36)	End of topic Assessment	End of topic assessment	All of the above
8 (CT36)	Assessment feedback lesson	Evidence in Teams	All of the above