



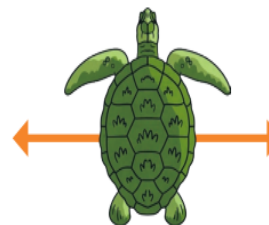
Key Vocabulary

Keyword	Definition
computational thinking	To apply knowledge from computing and computer science to solve problems.
decomposition	Braking down a problem into smaller and more manageable problems.
execute	To run or start a program on a computer.
forever	To run a program again and again without any mouse click.
loop	A sequence of instructions/actions which are repeated until a condition is met.
run	To start or launch a program.

What does 'fwd' mean?	What do you type to turn right?
How do you make a line longer?	What could you do if you want to clear the code?

What Is Turtle Logo?

Turtle Logo consists of the programming software Turtle Academy and a programming language called Logo. The programming language and software allow you to draw shapes and create different images by moving a turtle on the screen. The turtle is controlled using **commands**, such as forward 2, right 90 or left 90.



Use repeat and loop functions to write codes efficiently. Being efficient is key as it allows the programmer to provide multistep commands in short sequences,

Drawing Polygons



square

```
repeat 4 [fd 100 rt 90]
```



triangle

```
repeat 3 [fd 100 rt 120]
```



pentagon

```
repeat 5 [fd 100 rt 72]
```



hexagon

```
repeat 6 [fd 100 rt 60]
```



octagon

```
repeat 8 [fd 100 rt 45]
```

Turtle Logo Commands

repeat	To do a command more than once.
pen up (pu)	Pick up the pen, so you can move the turtle without leaving tracks.
pen down (pd)	Put the pen down, so you can move the turtle and leave tracks.
setpos	Moves the turtle to a set (x,y) coordinate .
setxy	Moves the turtle to a set (x,y) coordinate .
setpc	Changes the colour of the pen.
setx	Moves the turtle along the x-axis from its current position to a new x-coordinate without changing the y-coordinate .
sety	Moves the turtle along the y-axis from its current position to a new y-coordinate without changing the x-coordinate .
setpensize	Changes the thickness of the pen.
random	Used to generate a random number.
setcolor	Set the colour of the turtle's pen to a chosen colour.
setscreencolor	Sets the colour for the background.
arc	Draws an arc .

Debugging

When you create an **algorithm** it is important to test it to see if it works. If there is an error, the **algorithm** will not work correctly. You will need to **debug** the **algorithm** and then test it again.

