Lesson 2 - Block Turtle I





Learning Outcomes:

- Working out different locations for Tina to get to on a map.
- Drawing multiple circles and different x & y coordinates

Have you washed your hands before using your devices?

Game Time

For the first few minutes, have a go at whatever games you didn't try in last week's warm up.

- BBC Dancemat
 - https://www.taoc.ie/bbcdm1
 - https://www.taoc.ie/bbcdm2
 - https://www.taoc.ie/bbcdm3
- Keyboard Climber
 - https://www.taoc.ie/keyboardclimber
- Typing Attack
 - https://taoc.ie/typeattack



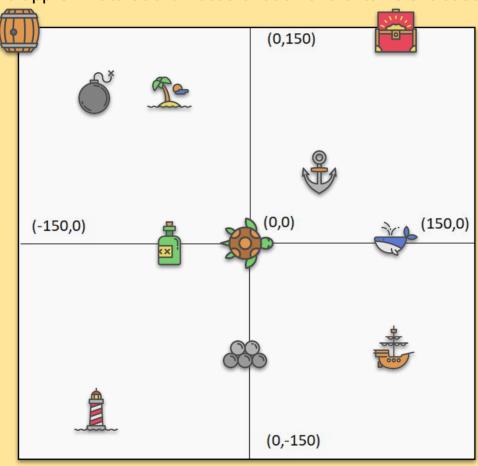
- Code Combat (above)
 - www.codecombat.com/play/dungeon

Drawing Location - coordinates

Sometimes we may wish to move the turtle before we start drawing something so we can draw shapes in different locations on the screen.

Drawing Location - Treasure Hunt

Remember this map? We used it for Scratch before. As a class, try and guess the approximate **coordinates** of each of the items of treasure for Tina.





Barrel of Oil (-150,____)



Bottle of Poison (-50,____)



Whale (100,____)



Lighthouse (-100,___)



Ship (____, -75)



Desert Island



Cannonballs



Bomb



Treasure (____, 150)

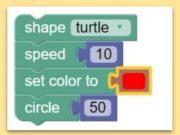


Anchor

Task 1 - Drawing Two Circles

www.bit.ly/blankblocktrinket

Set up Tina the Turtle as before being sure to include **shape**, **speed**, **colour** and **circle**.



Now we want to move her to a different location.

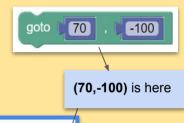
We need to use **Pen up** to make sure Tina does not draw lines while moving to a different location.

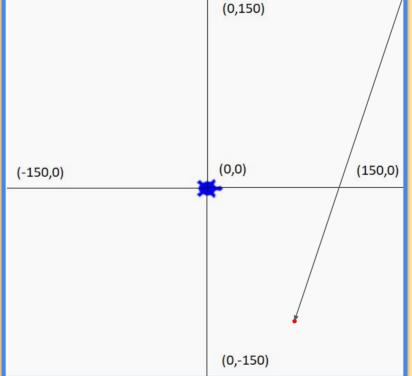


Tell Tina to go to a particular point on the screen

by telling her the **x-coordinate** (horizontal/ left right)

and the **y-coordinate** (vertical/up-down)

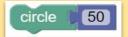




Put the pen back down on the screen using **Pen Down** so that Tina can start drawing again.



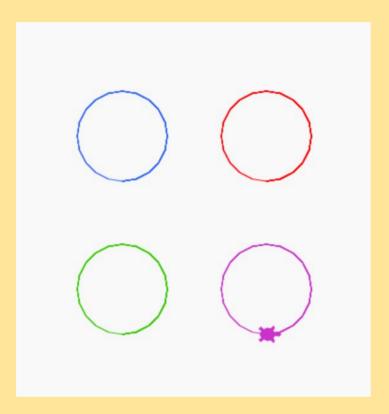
5 Start drawing your shape.





Task 2 - Drawing Four Circles

Finish the code on the right so that it makes four circles similar to the drawing below.

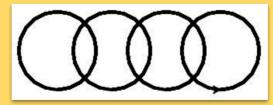


```
shape turtle
speed 10
set color to
pen up
goto -80 , 20
pen down
circle 50
set color to
pen up
goto 80 , 20
pen down
circle 50
set color to
pen up
pen up
pen up
pen up
pen up
pen up
```

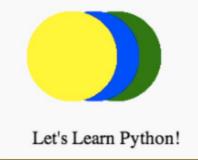


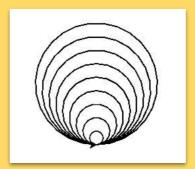
Challenge

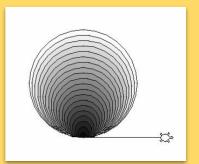
Try making the image these images.







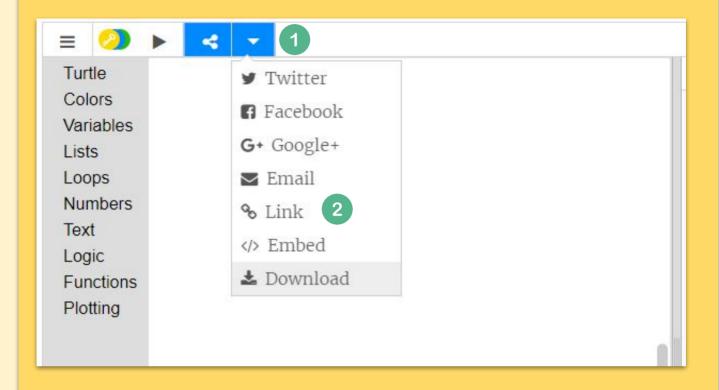






Now it's time to Save our Work

Make sure you do this properly, you'll need it next week!



To save your Python project:

- 1 Open the drop down menu.
- 2 Click Link
- Paste the Link into Notepad and save to your USB If you're not sure to do any of this, **ask your tutor.**





Extra Challenge

If you're teacher is happy with your work and when you've saved it properly, play the *Basics* section (Part 1) of Lightbot at this <u>LINK</u>.