



Moving sprites to draw shapes (Turtle Graphics)

Turtle graphics is a term used to describe programming the computer to draw various shapes.

To change the looks of the sprite, click on the costume tab and then on import.

Beginning Script - lock these blocks together to easily reset the sprite.

- (control) when flag is clicked
- (motion) go to x 0 y 0
- (looks) set size to 20%
- (motion) point in direction 90
- (pen) clear
- (pen) put pen down

Draw a square - New Script - Do not lock these blocks to the above.

(motion) move 60 steps

(motion) turn 15 degrees

Change the 15 to 90 degrees. Double-click this set of blocks 4 times to make square.

To save clicks, use a (control) repeat 10 times block. Change the 10 to 4 and drage the two motion comands inside this block. Double-click the block to draw a square.

Click the green flag to clear the screen.

Draw a triangle.

Change the repeat block so that it says repeat 3 times.

Change the turn 90 degrees block so that it says turn 120 degrees.

Double-click the repeat block.

The inside angles of a closed object equal 360 degrees. Replace the 120 with (numbers) ___ / ___. Change the first blank to 360 and the second blank to 3.

Now you can change both 3s to 5s to create a pentagon, 8s to create an octagon, etc.

Draw a star - New Script - Do not lock these blocks to the above.

- (control) repeat 12 times
 - Inside the repeat block
 - move 60 steps
 - move -60 steps
 - turn 30 degrees

Another star

repeat 12 times
move 60 steps
turn 150 degrees

Flower - a square Square with turn 15 on the end of it repeated

(control) repeat 4 times

 Inside repeat block

 move 60 steps

 turn 360 / 4

 Underneath the repeat block

 add turn 15 degrees

Put the entire group of commands inside a repeat 24 block

Squirals

Create a variable

 (variables) make a variable

 name the variable move

Draw a square using variables - lock the following blocks together

(variable) set move to 60

(control) repeat 25 times

 Inside the repeat 25 times block

 (control) repeat 4 times

 Inside the repeat 4 times block

 (motion) move 60 steps. Replace the 60 with (variable) move

 (motion) turn 90 degrees

 (variable) change move by 5

Change the 4s to make other shapes.

Star Squirrel

(variable) set move to 60

(control) repeat 50 times

 Inside the repeat 50 times block

 (motion) move move steps

 (motion) turn 150 degrees

 (variable) change move by 5