

Drawing Shapes



This half term's unit in Computing is **Programming** where the children will learn to create and debug algorithms - following on from their earlier learning in Year 1 where they learnt to program Bee-Bots. The children will use the basic commands in Logo to move and draw using the turtle on screen, and then further develop algorithms using the "repeat" command. These skills will then be developed by teaching children to create algorithms in Scratch using a selection of blocks. This PowerPoint gives you information and instructions to create an algorithm to move and rotate the turtle/sprite to draw shapes. This can be done on JiT and you will find the children's usernames and passwords to access JiT in the back of their reading records.

Aim

- I can create an algorithm to move or rotate the turtle.

Success Criteria

- I can write commands in the correct order.
- I can write a variable value where required.
- I can correct any mistakes.
- I can use the commands `fd`, `lt`, `rt` to move or rotate the turtle.
- I can use `cs` to clear the screen.

Squares and Rectangles

Give instructions to a partner to walk a square or rectangle using the commands below:



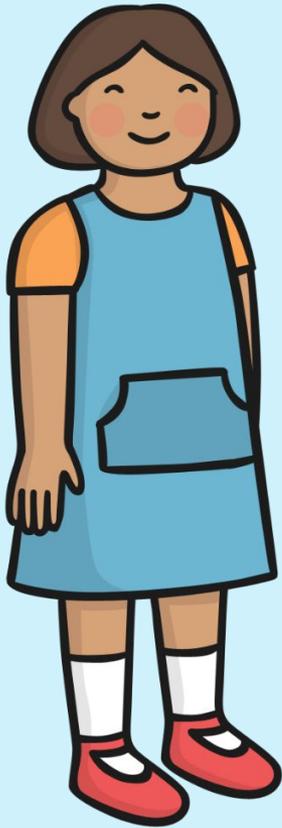
forward <steps>.

right 90 or left 90.



Walking Shapes

Can you walk a square of sides 3 steps?



fd 3

rt 90

fd 3

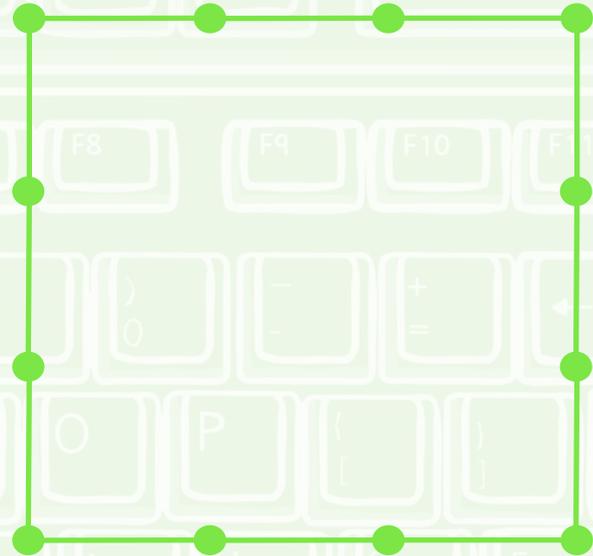
rt 90

fd 3

rt 90

fd 3

rt 90



Walking Shapes

Can you walk a rectangle of sides 4 steps and 2 steps?



fd 4

rt 90

fd 2

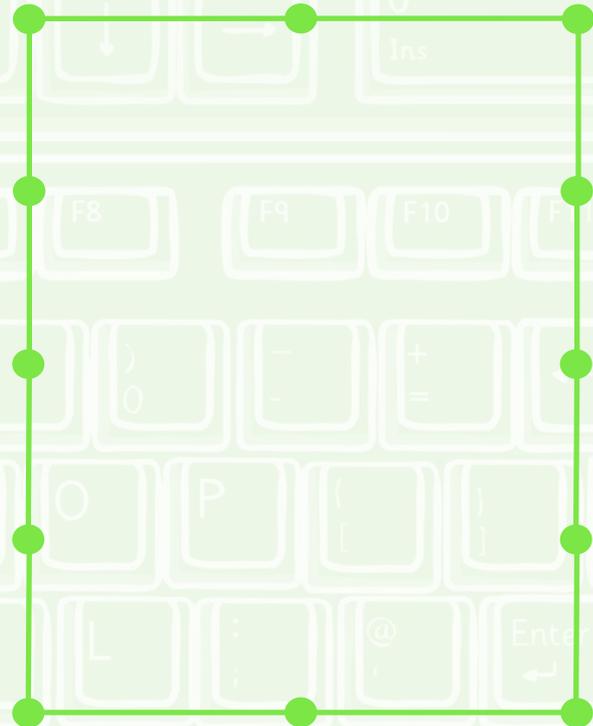
rt 90

fd 4

rt 90

fd 2

rt 90



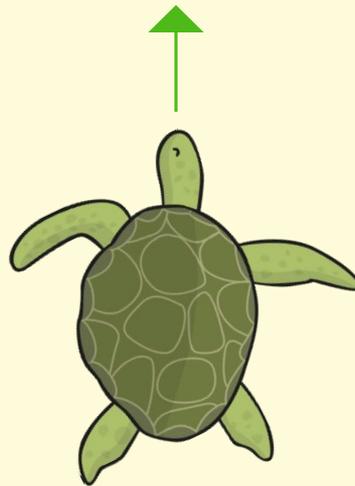
Turtle Logo Commands

Here are some of the main commands needed for these tasks:

Moving Forward



Forward 100
or
fd 100
will move the turtle
forward 100 units.



Change the
number (variable)
to move the turtle a
different distance.

fd 4

rt 90

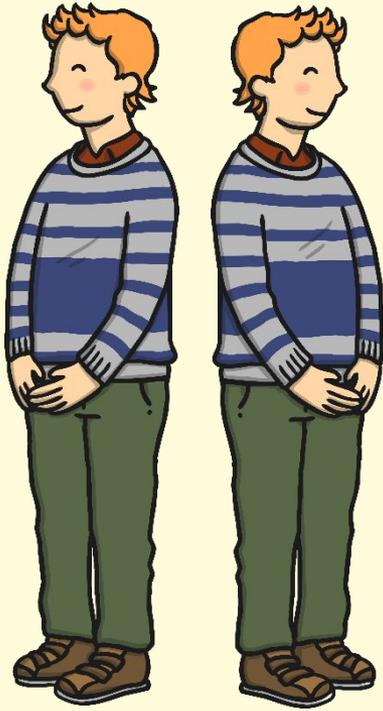


fd 4?
Or fd 5?

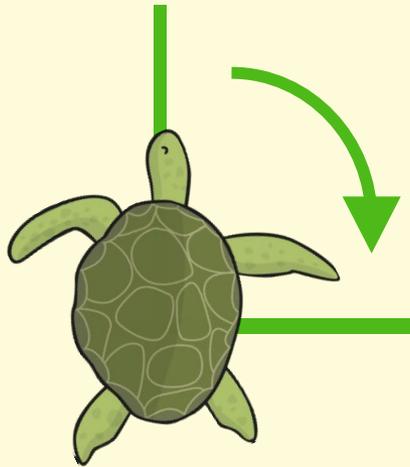
Turtle Logo Commands

Here are some of the main commands needed for these tasks:

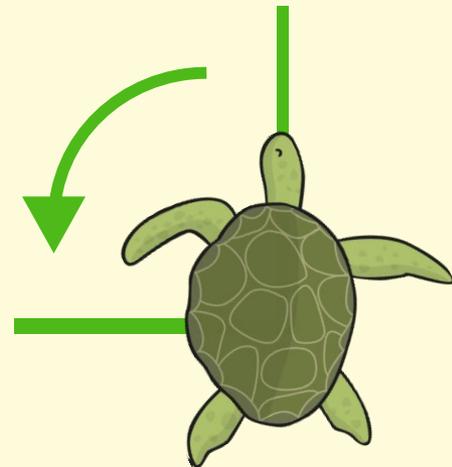
Turning left and right



Right 90 or rt 90
will turn the turtle to the
right
(quarter turn or 90°).



left 90 or lt 90
will turn the turtle to the
left
(quarter turn or 90°).

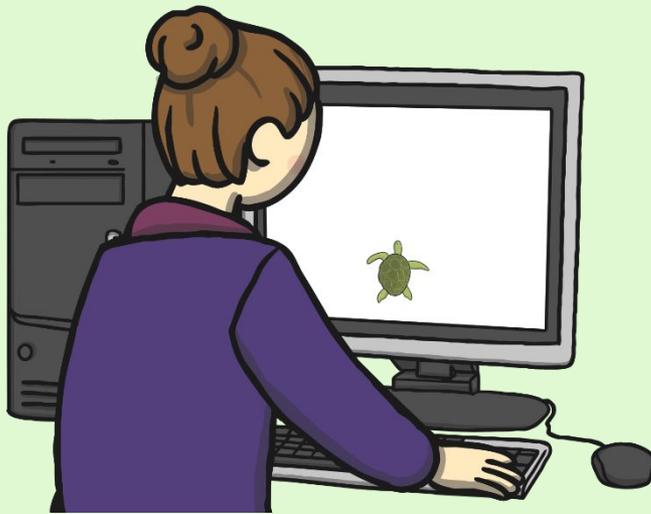


Turtle Logo Commands

Here are some of the main commands needed for these tasks:

Clearing the Screen

'Clearscreen' or 'cs' will clear the screen and return the turtle to the starting position.



Using the Up Arrow

You can use the up arrow to scroll back through previous commands. This can save time by not having to type out commands again.

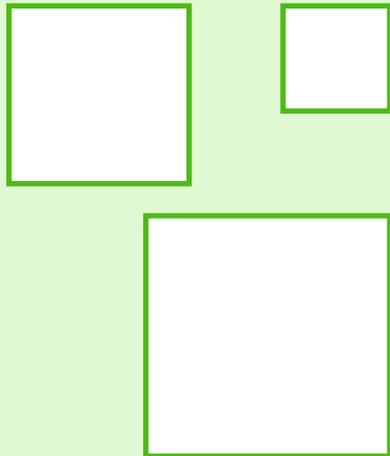


Drawing Squares and Rectangles

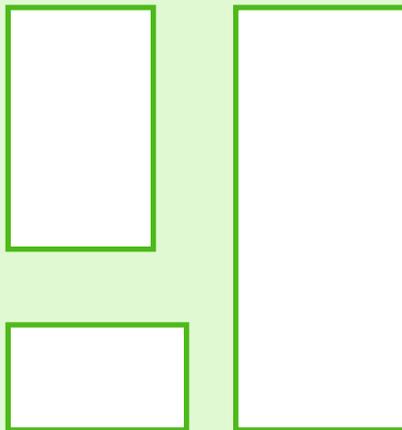


Using a Turtle Logo programme on a computer or tablet,
draw some different squares and rectangles.

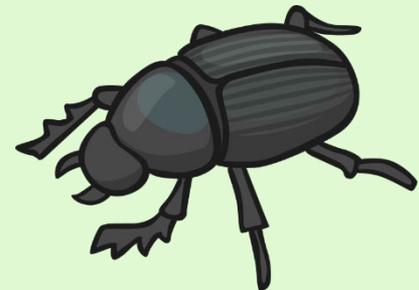
Can you write
algorithms to draw
squares of different
sizes?



Can you write
algorithms to draw
rectangles of different
sizes?



What happens if your
algorithm has a
mistake?



Check

Let's look at some of the algorithms you have used:

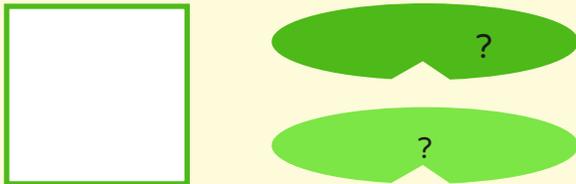
Are the commands in the correct order?



Are the commands used correctly?



Have we used different algorithms that draw the same shape?



Can we debug any that don't work?





Name:

Username:

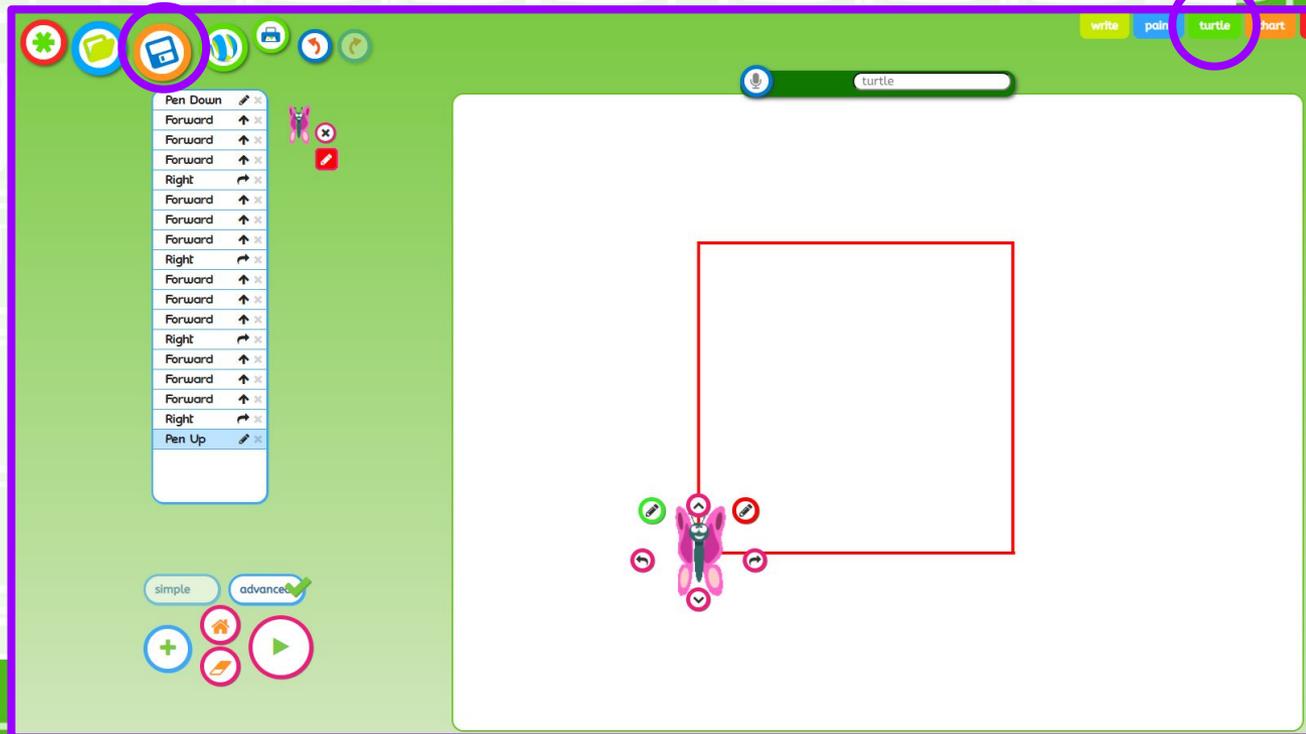
Keyboard Skills

Password:

save

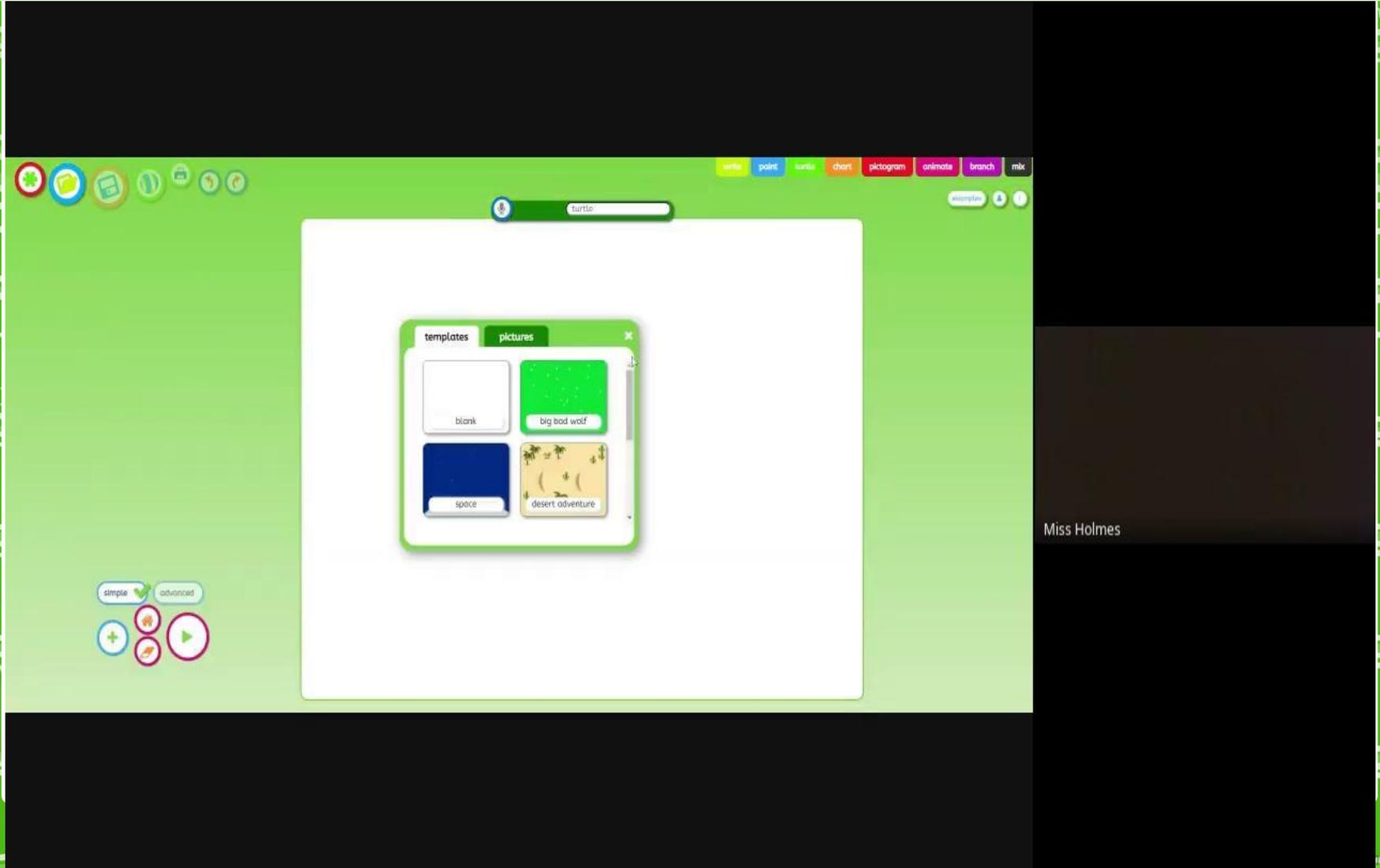


A screenshot like this could be how you upload your work to Tapestry/Google Classroom if you wish.



You will find children's usernames and passwords to access Jit5 stuck in the back of their reading records. Please see the next slide for instructions.

I have filmed a little video to hopefully help you navigate your way around JiT. Please feel free to pause the video at any time so that you have time to follow along or find the right icons to click. Do remember to click the 'save' button (3rd in from the top left) once you've finished. You may click on 'new' (1st top left) to move on and draw a different shape. Maybe you can challenge yourself to draw a square and a rectangle on the same screen by lifting the pen up to move across and start drawing again! I can't wait to see your squares and rectangles of different sizes! :)



Here are some prompts the children follow at school:

1. Turn your computer and screen on. 

2. Log on

3. Click on the Internet Icon - Chrome 

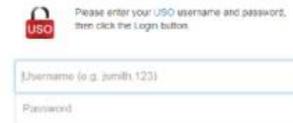
4. www.lgfl.net



5. Click on 'Login'



6. Type in your Username and Password and Enter



7. Type 'jit' in the search bar.



8. Click on the Icon for JiT



JiT - j2e Infant Tools
The EYFS tools from the makers of the j2e Tool Suite

9. Launch Resource



10. Normal USO Login



11. Click on the JiT5 Icon



Aim



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