

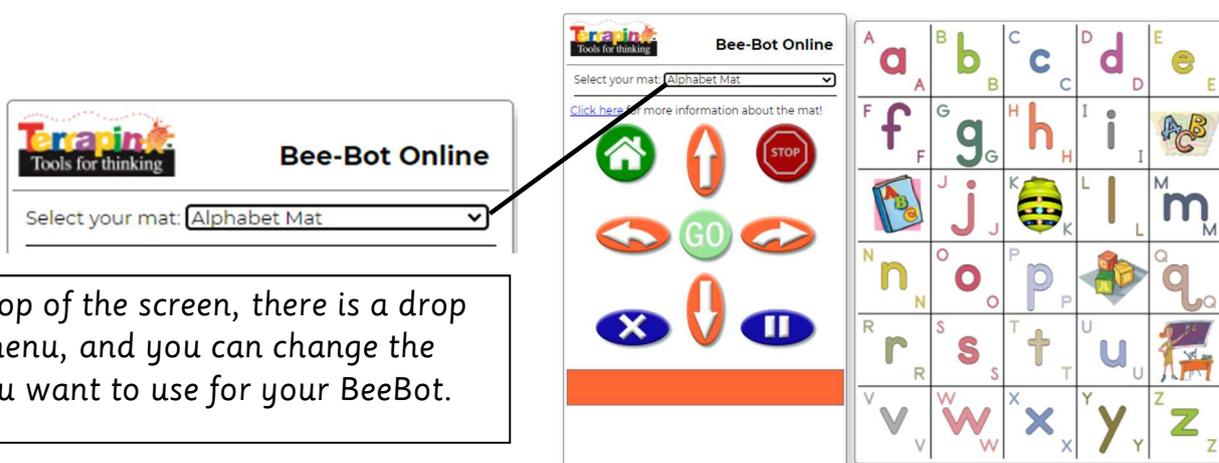
Monday 1st February 2021

Computing – Algorithms

Learn to understand what algorithms are; how they are implemented as programs on digital devices and that programs execute by following precise and unambiguous instructions.

This week we will be building on your learning about how BeeBots move. This time you will predict how they would move using this program (again this program can be accessed on a laptop or mobile device):

<https://beebot.terrapiinlogo.com/>



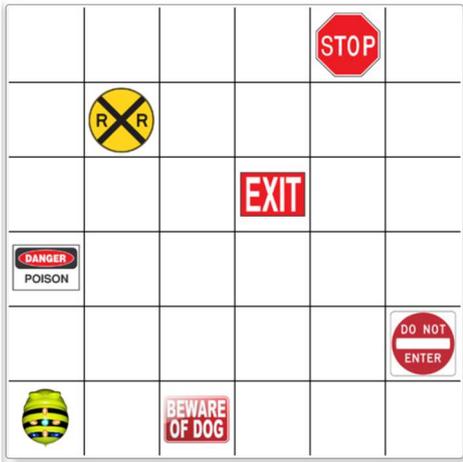
This is what the screen looks like when you follow the link above. Here are instructions on how to use the program for the virtual BeeBot.

Program a virtual Bee-Bot to traverse the mat.

- Select a mat from the dropdown menu.
- Use the mouse to drag Bee-Bot to the preferred starting position.
- Click , , and  to code a path for Bee-Bot to follow across the mat.
- Commands appear in the orange bar as you select them.
- Click  to watch Bee-Bot follow the commands step by step.
- Click  to stop Bee-Bot during a program.
- Click  to start over and create a new program.
- Click  to move Bee-Bot to the original starting position.

Have a little play around to get used to the program before you start the tasks.

Task 1: Change the mat on the drop down (shown above) to 'BeeBots lessons example', which looks like this:



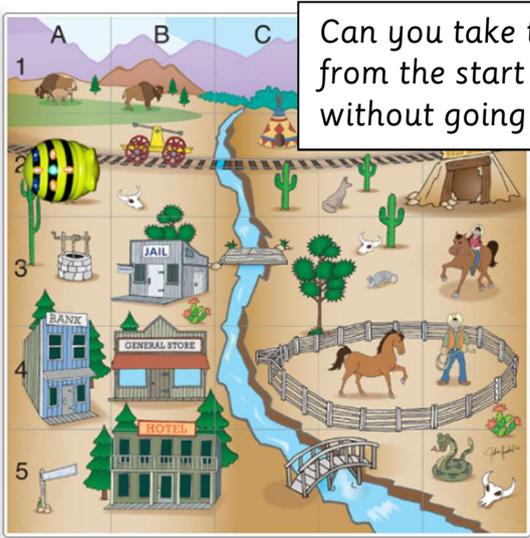
Program the BeeBot to go from the start to the  sign.
 Can you get the BeeBot there and avoid all the obstacles?
 Try just a few movements at once, test it out and then you can add to your sequence. If it was not correct, debug your sequence and try again.

Task 2: Change the mat again to 'Go Cart Rally mat'

Program the BeeBot to go from the start line all the way round the track to the finish.
 Again, if the BeeBot did not go where you hoped it would, debug your sequence and try again.



Task 3: Change the mat to one of your choice and challenge yourself to move the BeeBot around obstacles and to different areas on the mat. There are lots of fun mats to choose from. You don't have to try these, they are examples of challenges you can set yourself.



Can you take the BeeBot from the start to the Hotel without going over the Jail?

Can you take the BeeBot to the large blue triangle without travelling over the small green circle?

