

#### **Teachers Notes:**

This set of Challenge cards is designed to be used with the Blockly Turtle resources. The full collection of resources for teachers is found in the **Turtle** tab on bebras.uk.

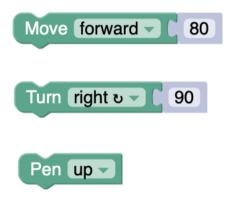
This is the first set of cards for pupils working towards their Yellow Shell Programmer award.

It is expected that pupils will have no programming experience except working as a class with a floor robot such as a Bee-Bot®.

#### Preparation:

- When the pupils login to their computers they should head to the *Turtle Playground - White*. They should be directed to: bebras.uk -> Turtle -> click on the White turtle.
- 2. These cards should be printed out (size to:100% on A4 card, or "fill the paper" on A5 card) and laminated. Each pupil also needs their own White Shell Record Card (which should not be laminated as they have to be written on). When a pupil completes a Challenge Card, its number can be written in their Record Card (in one of the clip boards).
- 3. In the first lesson, the teacher should show the students how to access *Turtle Playground White* and the Introduction video on Card 0. Note *Card 0* is for the teacher to use with the class. Pupils can start with *Card 1*.
- 4. Students should complete a minimum of 6 cards so some choice is available.

Code Blocks introduced in Turtle Playground - A:









1. Click on the link your pupils will use to access Turtle Playground - A



- 2. Check you are on *Turtle Playground White*
- 3. Show your class the video introduction here:

Videos: <u>Introduction</u>
Turtle Maze Puzzle: <u>Seaside</u>

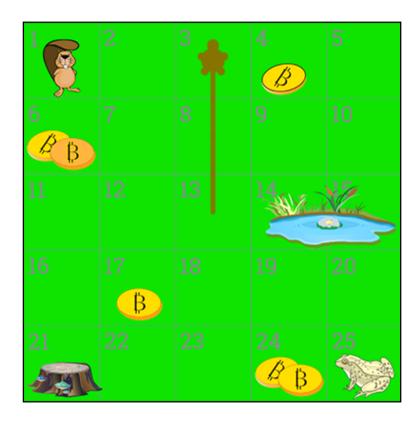
For the teacher of pupils working towards their Yellow Shell Turtle Programmer award using Turtle Playground - White





## Challenge:

Make your turtle move forward 2 squares.

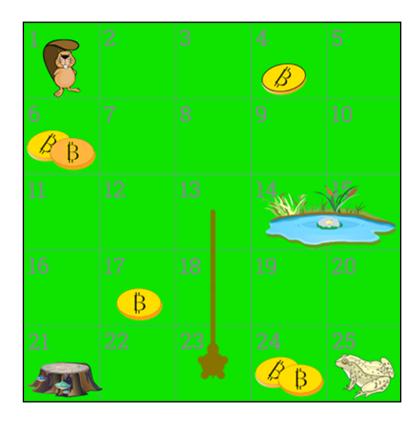






## Challenge:

Make your turtle move back 2 squares.

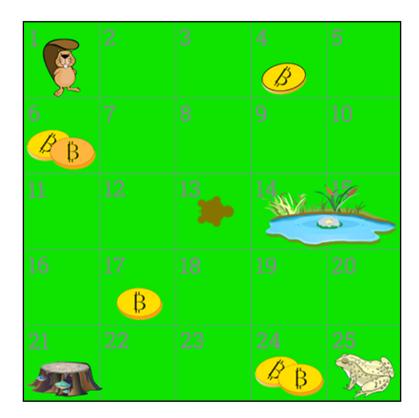






### Challenge:

Make your turtle turn to face the pond.



### Extra:

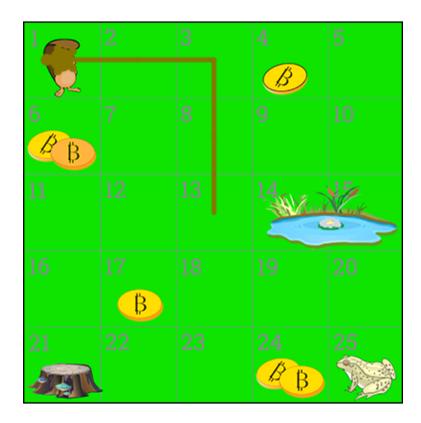
Can you make your turtle face other things?





### Challenge:

Make your turtle visit the beaver.



#### Extra:

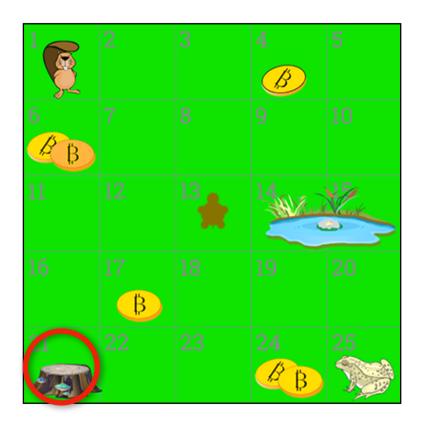
Can you get to the beaver in other ways?





### Challenge:

Make your turtle visit the log.



#### Extra:

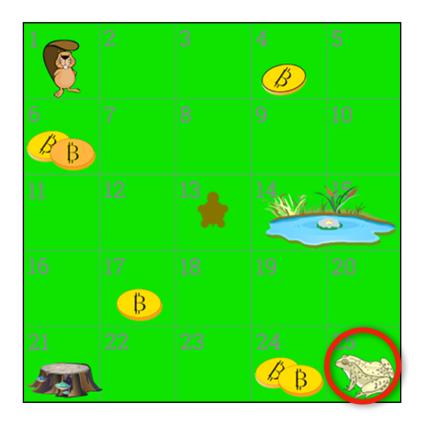
Can you get to the log by a different path?





### Challenge:

Make your turtle visit the frog.



#### Extra:

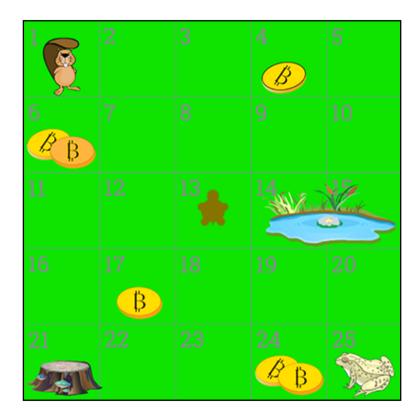
Can you make your turtle visit the frog and then continue its journey to the pond?





### Challenge:

Make your turtle visit all the squares with coins.



#### Extra:

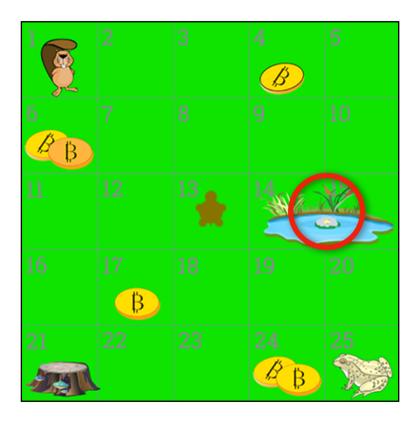
Can you make your turtle visit all the squares with money, in one journey, while NOT going on squares 1, 14, 15, 21 or 25?





### Challenge:

Make your turtle stop on the stone in the middle of the pond.



### Extra:

Can you make the turtle move without drawing a line?