Yellow Shell Challenge Cards
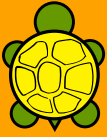
Teachers Notes:

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** area on bebras.uk.

This set of cards is for pupils who have achieved their Yellow Shell Programmer award and are now working towards their Orange Shell Programmer award.
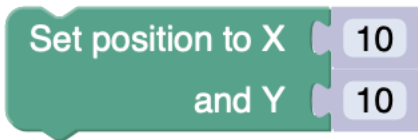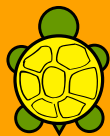
Preparation:

1. When the pupils login to their computers they should head to the **Turtle Playground - Yellow**. They should be directed to: bebras.uk -> Turtle -> click on the Yellow 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 Yellow 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 - Yellow** and the Introduction video as instructed 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 8 cards of the 18 provided, so some choice is available. They should also complete 3 of their own projects.

Code Blocks introduced in Turtle Playground - Yellow:

Set position to X `10`
and Y `10`

Hide ▾ turtle

Stamp

Set width to `10`

Draw square ▾ `10`

Set colour to

[red]

random colour

1. Show your pupils how to go to *Turtle Playground - Yellow*

2. Show your class the Introduction video (linked at the bottom left of the Playground).

3. Provide pupils who are ready with a Yellow Shell Record Card

4. Distribute the student's Challenge Cards.

Challenge:

Make the turtle go forwards.
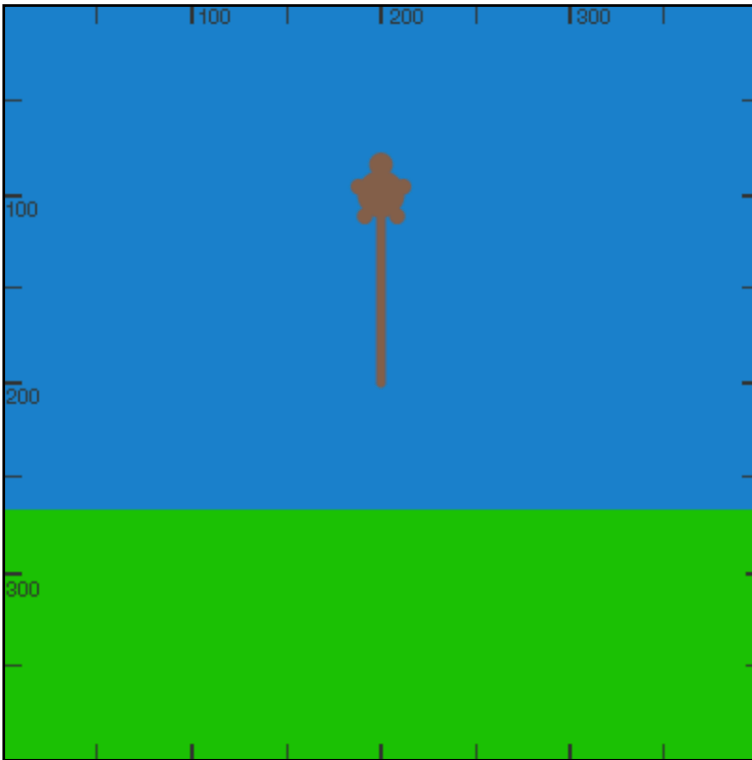
Extra:

Can you change the colour of your turtle to match your turtle shell grade? You will nee to use this code block:
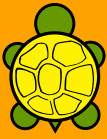
Challenge:

Make the turtle go backwards.
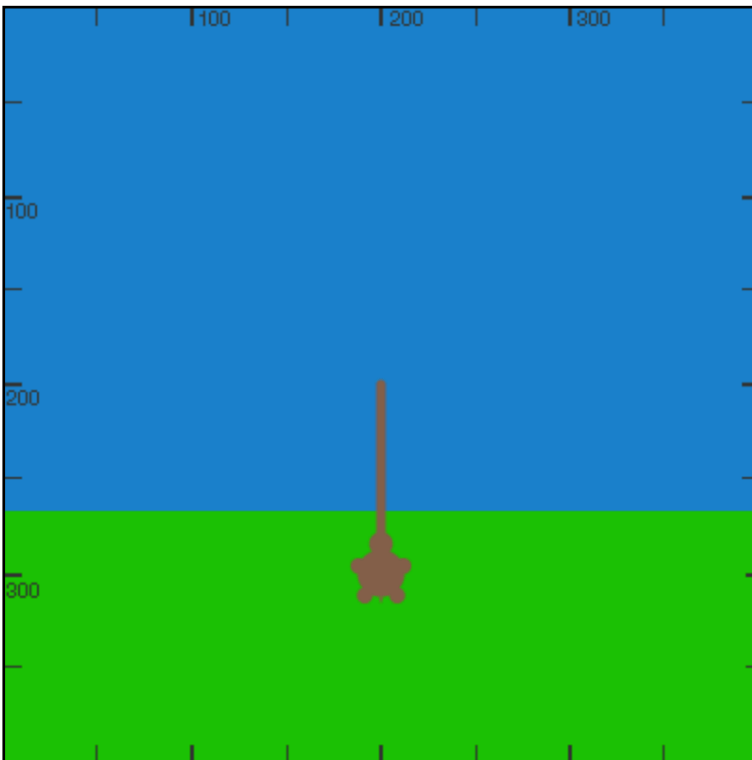
Extra:

Can you make the turtle go backwards without it drawing a line?

Challenge:

Make a square. Your square does not need to be exactly the same as the one shown.
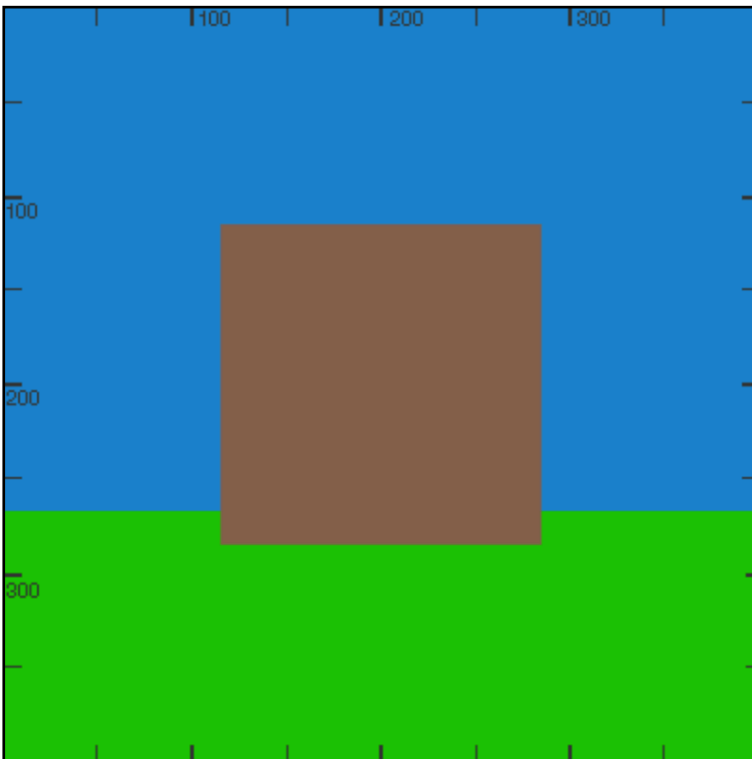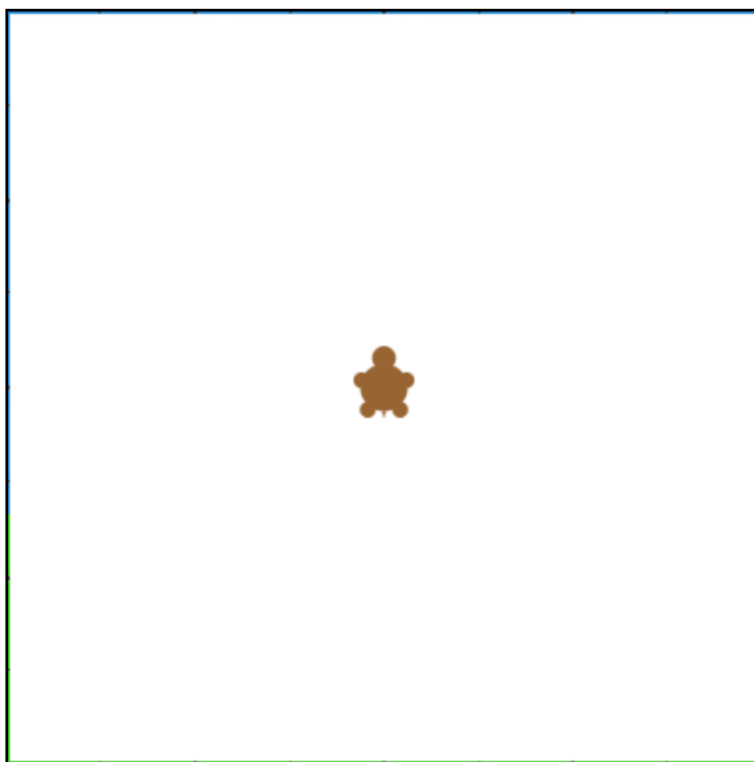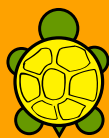

Extra:

Can you change its colour?

Challenge:

Make the whole **drawing area** white.

Hint:

You will need to use this code block:

`Draw square ▾ 10`

Challenge:

Draw the sun. The size and position do not matter.
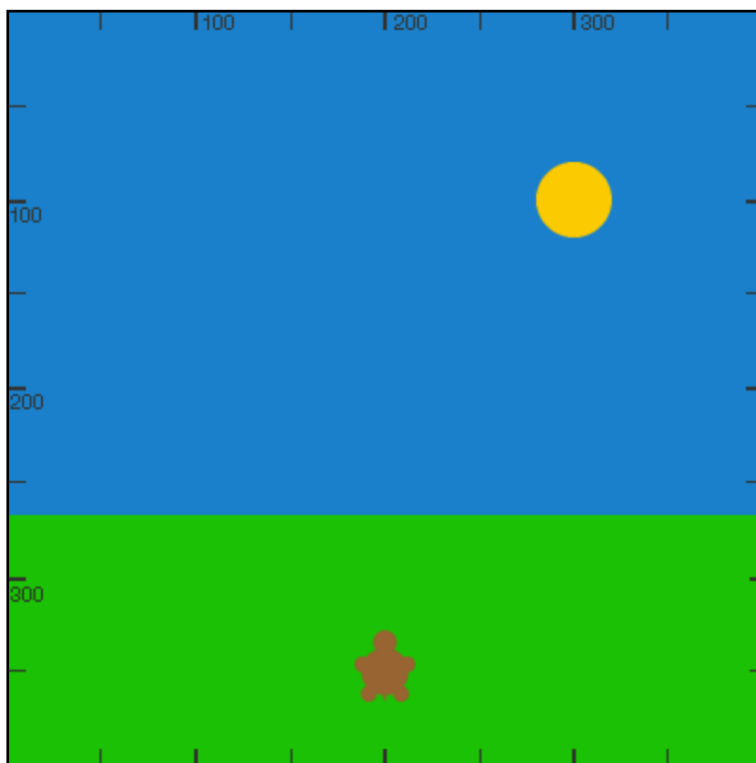
Hint:

You will need to use this code block: Pen up ▾

Challenge:

Draw an orange triangle. The size and position do not matter.
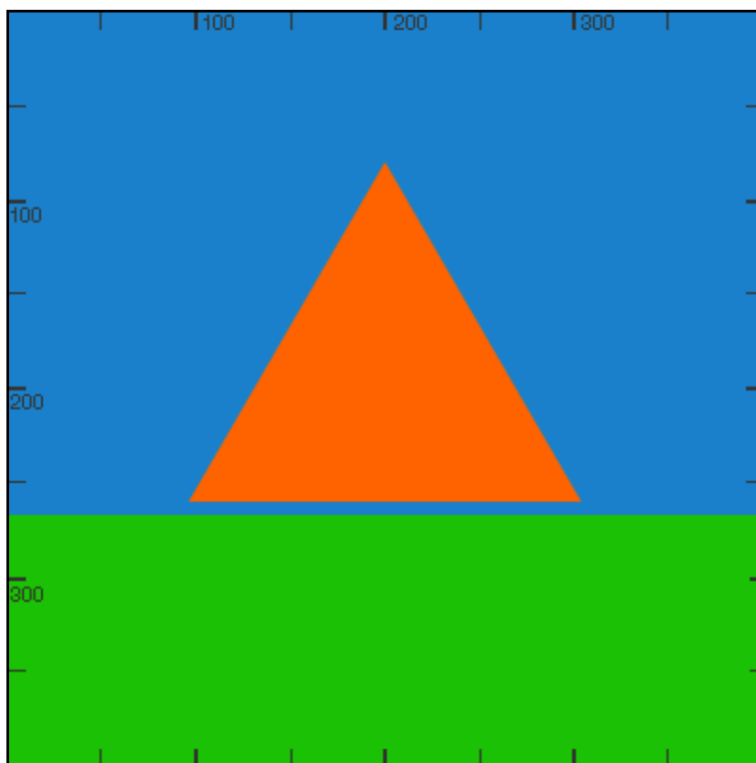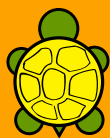
Challenge:

Draw an orange triangle that points to the right.
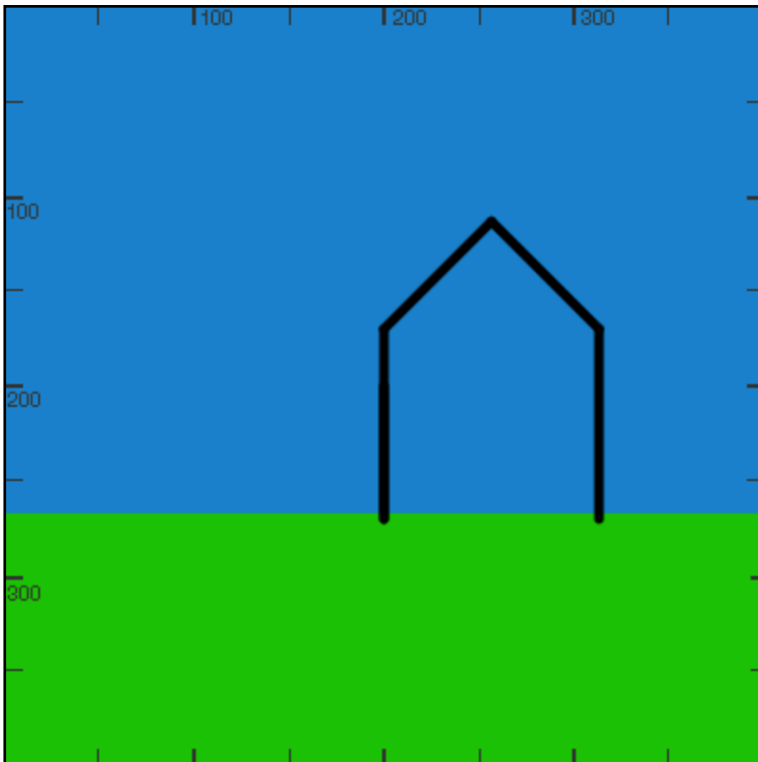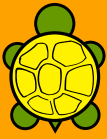The size and position do not matter.
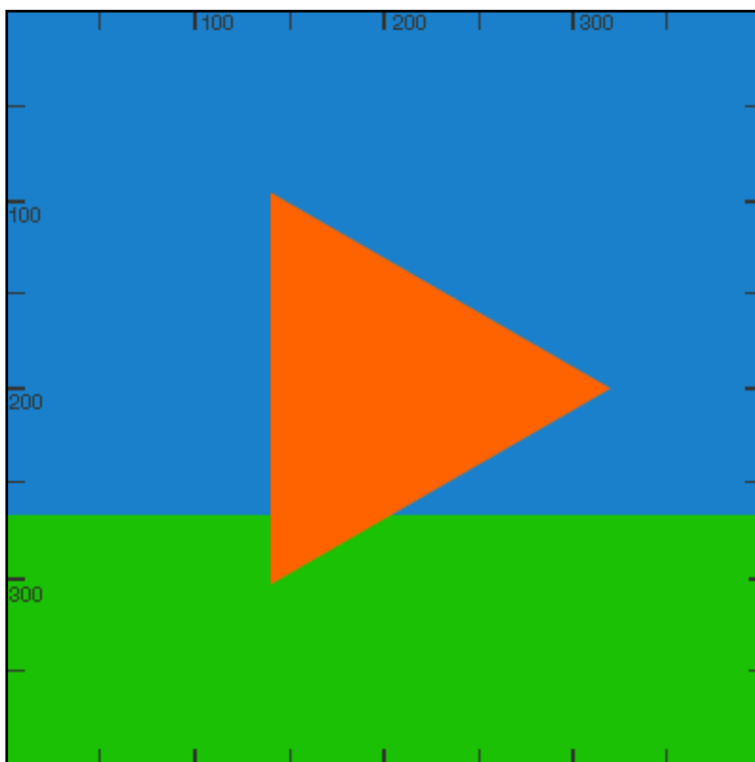
Challenge:

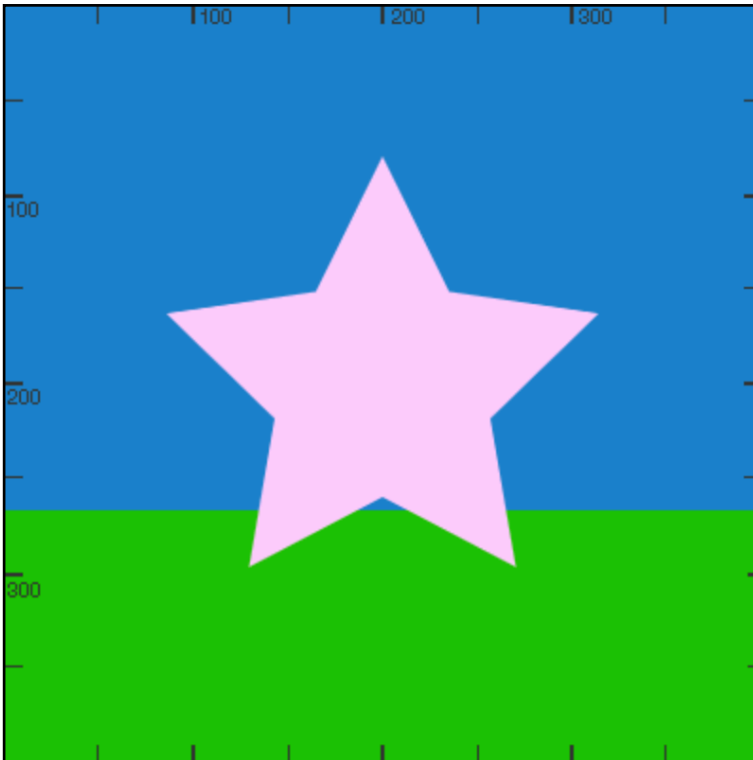Write a **program** so the turtle draws a house like the one shown.

Extra:

Can you add a door?
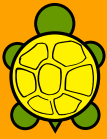
Challenge:

Write a **program** so the turtle draws a pink star.

The size and position do not matter.

Challenge:

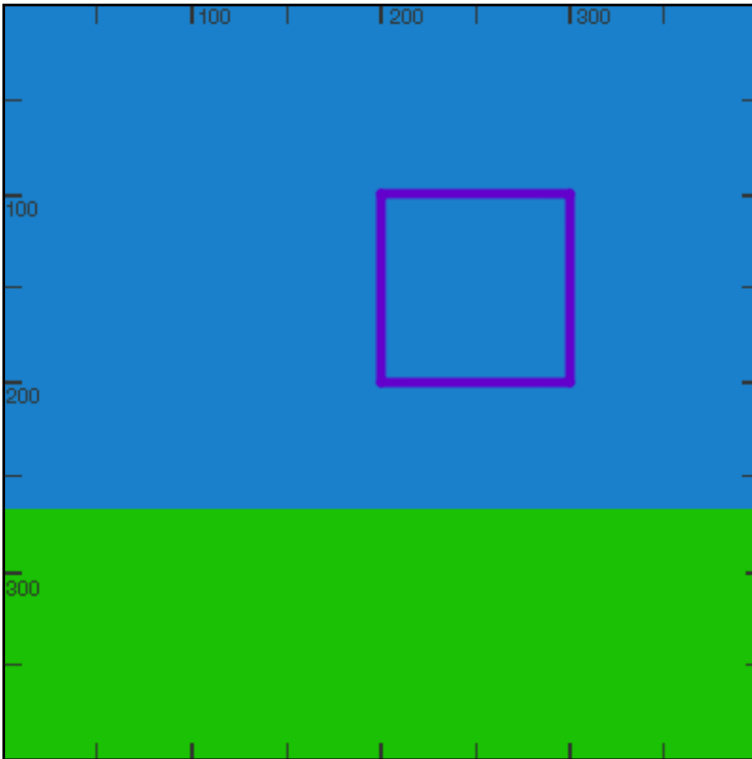Write a **program** so the turtle draws a purple square.
The size and position do not matter.
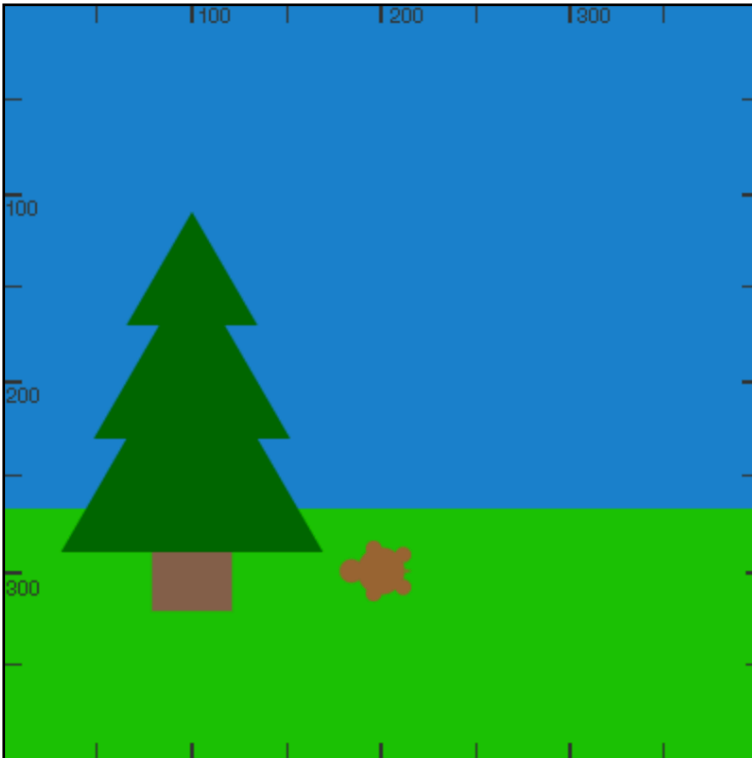
Challenge:

Draw a tree. Use a square and triangles to make the tree. Your tree does not need to be exactly like the one shown.

Challenge:
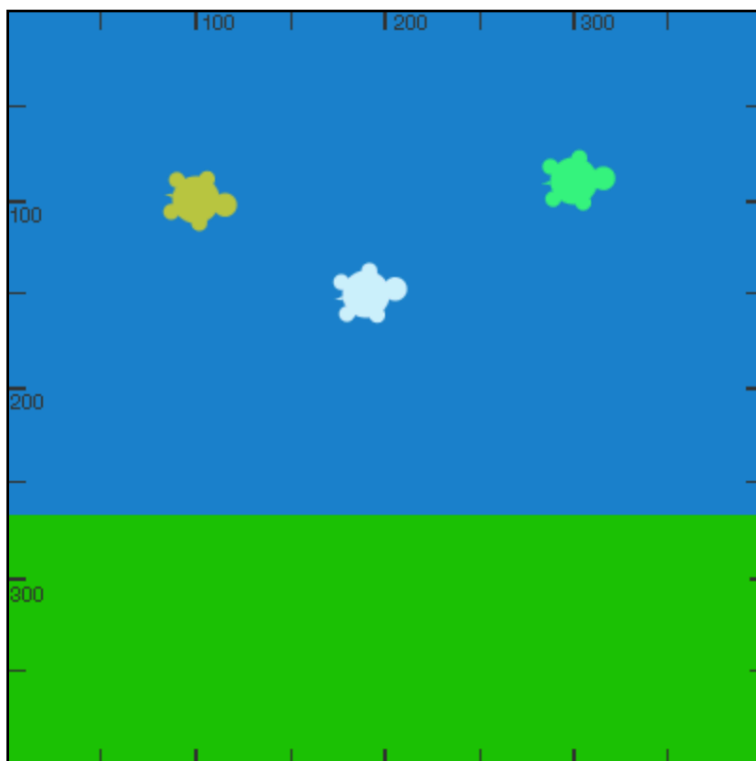
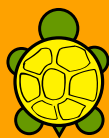Write a **program** that draws 3 flying turtles.

The colour and positions do not matter.

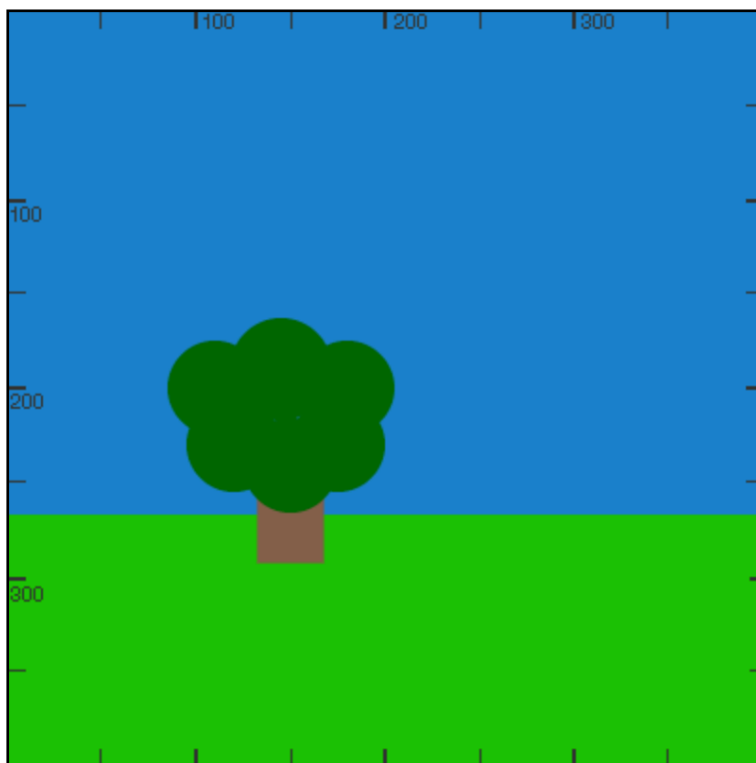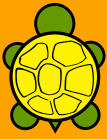**Hint**:

You will need to use this **code block**: Stamp

Challenge:

Draw a tree. Use a square and circles to make the tree. Your tree does not need to be exactly like the one shown.

Challenge:

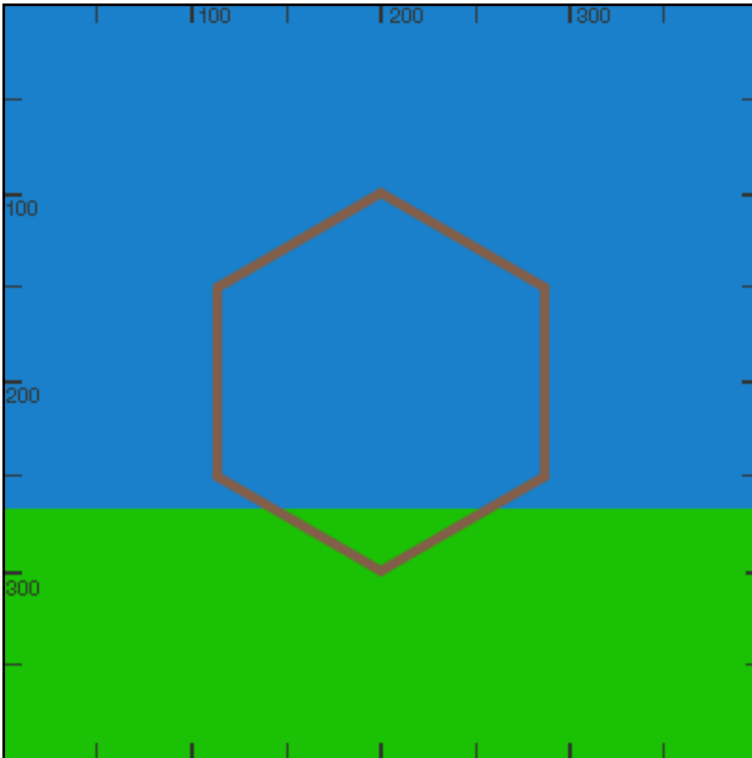Draw a hexagon.

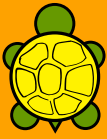The size and position do not matter.

Hint:
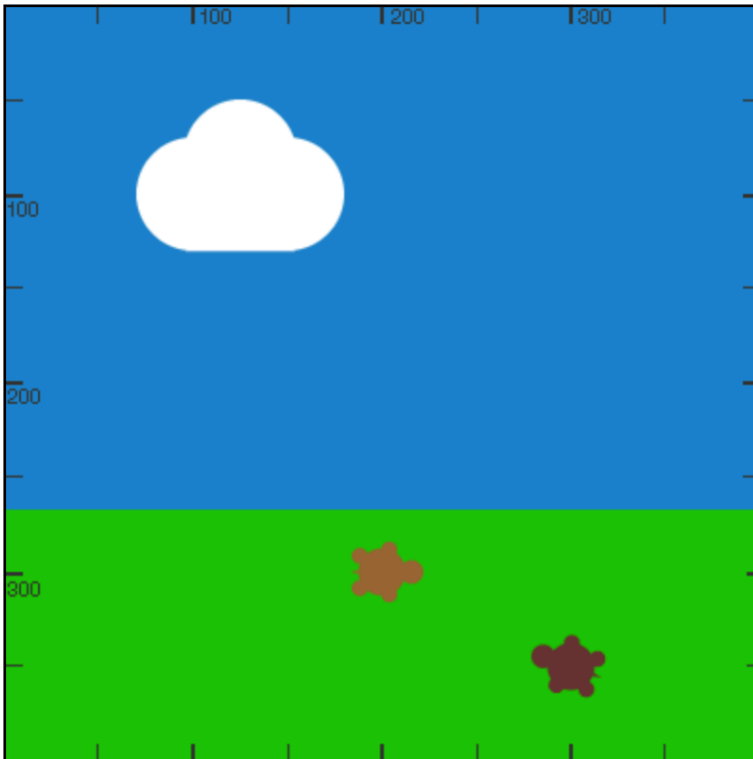
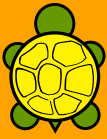You will need to turn the turtle 60^0 several times.

Challenge:

Draw a cloud.

The size and position do not matter.

Extra:
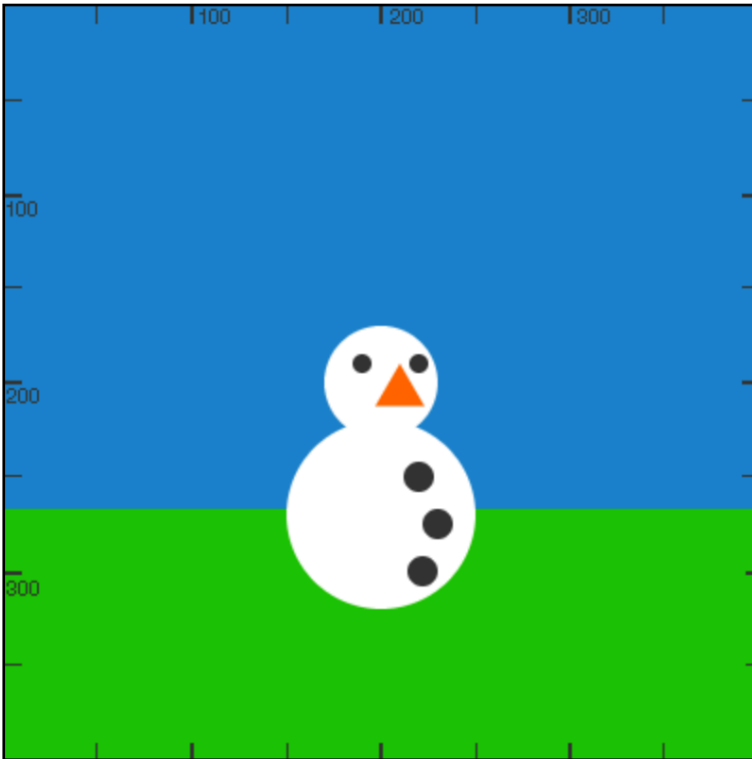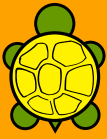
Can you also add two turtles on the grass?

Challenge:

Write a **program** so your turtle draws a snowman.

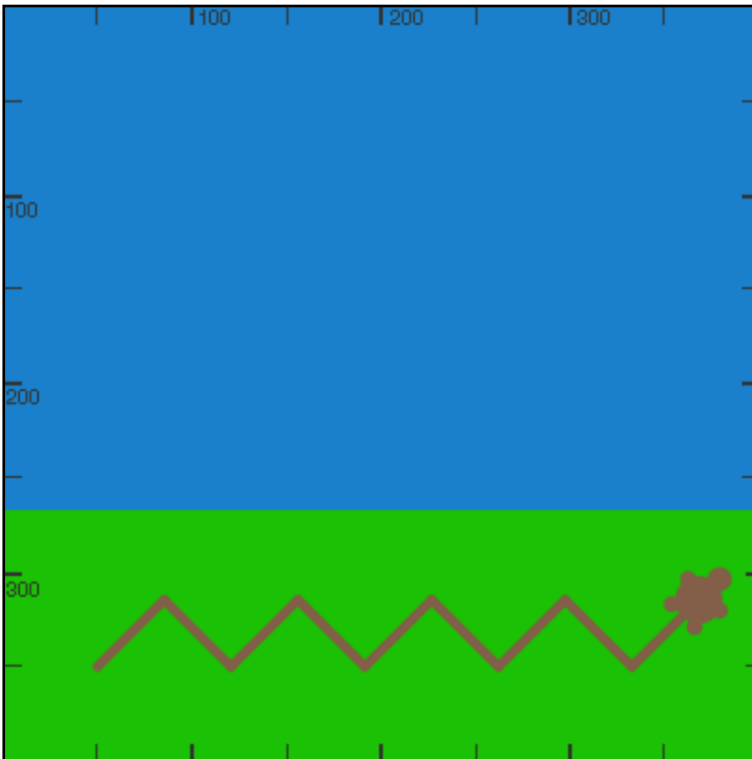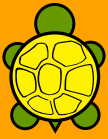Your snowman does not need to be exactly like this one.

Challenge:

Write a **program** so your turtle draws a zig-zag line.
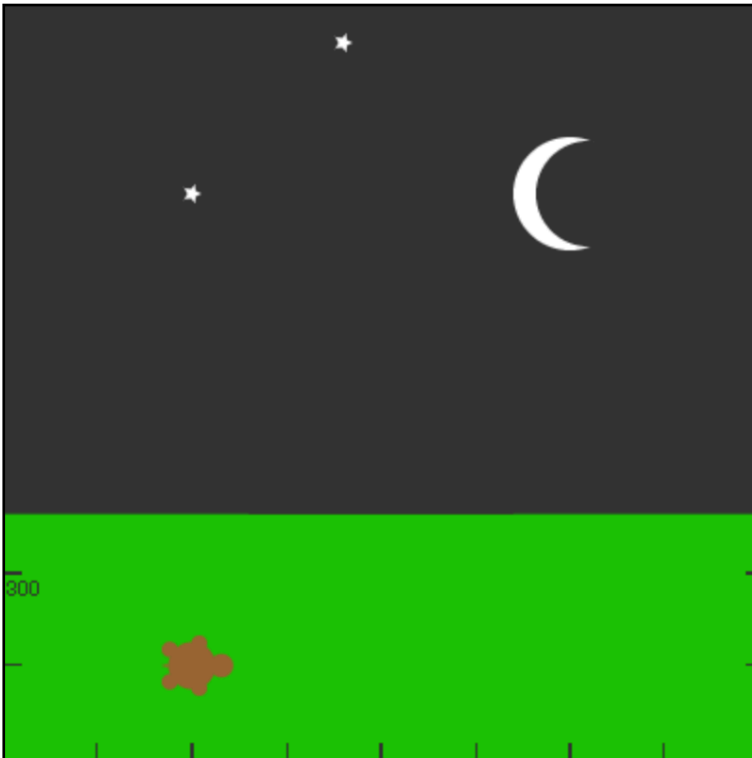Size, position and how many zigs and zags there are do not matter.

Extra:

Can you hide the turtle after finishing the zig-zag line?

Challenge:

Write a **program** so your turtle draws a crescent moon and some stars.

Your picture does not need to be an exact copy of this one.