SCRATCH **Aquarium**

Register/login at https://scratch.mit.edu
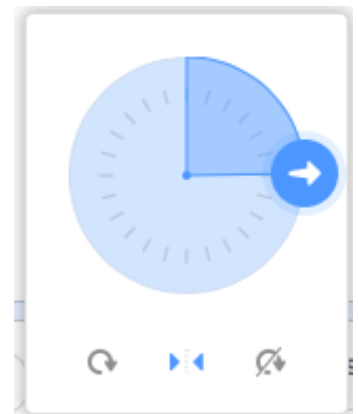
Create an aquarium and watch the fish school together.

1) Choose a fishy sprite and a suitable aquarium background.
2) Click on **Direction** and play with changing the angle. To make the fish flip between looking left and right, click on the *mirroring* button (middle).

Make the fish swim left and right

3) The code starts when you click the green flag. Add a **forever** loop.
4) Inside the loop check if the fish has hit an edge, "**if on edge, bounce**." This turns the fish around at the edge of the tank.
5) Finally, add "**move 10 steps**" to move the fish forward.
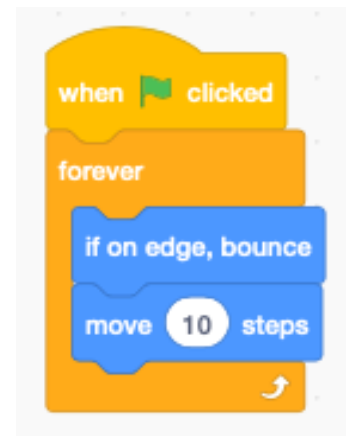
To make the fish swim together they must talk to each other.

*When the fish bump into the side of the tank,
move them closer together.*
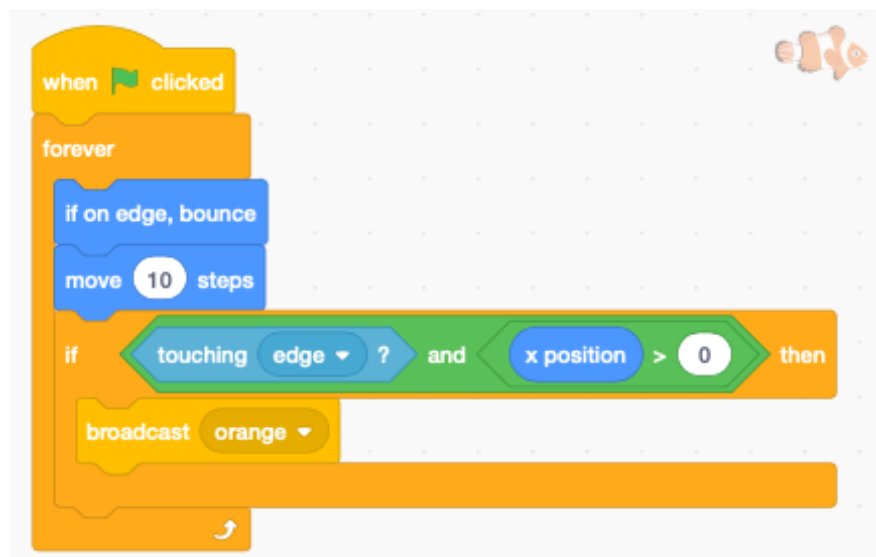
6) Insert an **if** block and add the **and** operator.

7) Check that the fish is touching one of the edges of the tank with **touching edge**.

8) Check this is on the right-hand side with **x position > 0** (the left side would be x position < 0).

9) **Broadcast** a new message with the fish colour e.g. orange.

10) Add an event to **receive** the message. Add **change x by 10** (moves it right).

11) Right-click on the fish sprite and **duplicate** it to make another.
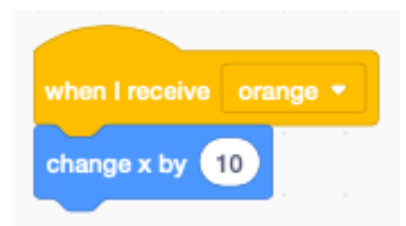
*Watch the fish eventually school together.
Add different fish and change the message colour.*

Save *your code with a good name.* **File > Save now**