



Scratch Card - Movement

Activity Checklist

As your monster will be made up of lots of sprites you will need to make sure that all sprites move together at once. Rather than adding move commands to all your sprites you can simply attach your controls to your body sprite and use **broadcast** to control any other sprite. When our Tentacle sprite (or any other sprite for that matter!) receives a **moved right** broadcast, we can move it to the right too.

```
when rightarrow key pressed
change x by moveSpeed
broadcast moved right
when leftarrow key pressed
change x by moveSpeed ---
broadcast moved left
on Tentacle

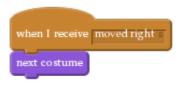
when I receive moved right
change x by moveSpeed
when I receive moved left
change x by moveSpeed
```

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Using **broadcast** also means if we want to change the way our movement commands work, we only have to change one set of scripts. Have a look at this example:

```
when rightarrow was key pressed
change x by moveSpeed
point in direction (SUB)
if on edge, bounce
if not touching edge was a change x by moveSpeed
when leftarrow was key pressed
change x by moveSpeed * -1
point in direction (SUB)
if on edge, bounce
if not touching edge was a change x by moveSpeed * -1
point in direction (SUB)
if on edge, bounce
if not touching edge was a change x by moveSpeed * -1
broadcast moved left was a change x by moveSpeed * -1
broadcast moved left was a change x by moveSpeed * -1
broadcast moved was a change x by moveSpeed * -1
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broadcast moved wa
```

- Here we're telling the body to face the direction it is moving (make sure your sprite orientation is set to "only face left-right") and to stop and turn around if it collides with the edge of our screen. You will have also noticed that we have wrapped our broadcast in an if block, we only want the other body parts to move if the body isn't on the edge of the screen. If you decide to add any animation to the movement, make sure that any associated movements take just as long. i.e. if moving a leg to the left takes 1 second due to an animation, all other left movements must take 1 second too (use a wait block to make sure they're all in step).
- You can also animate your body sprite using **costume** changes, by triggering the change every time a movement broadcast is received.



These projects are for use outside the UK only. More information is available on our website at http://www.codeclub.org.uk/.This coursework is developed in the open on GitHub (https://github.com/CodeClub), come and join us!

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