

Computing



WALT design a sensor based programme.

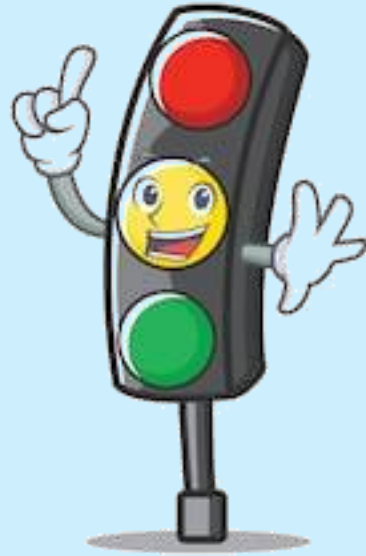
WILF:

- Plan the different steps of a programme by storyboarding.*
 - Use computational language to plan tiles and sensors.*
 - Label different game aspects.*
-



Do you remember what a sensor is?

Sensors are used in things like traffic lights, computers, robots and games to queue a response. For example, when the camera sees 4 pedestrians waiting, turn the light red.



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This also works in computer programmes. For example, when [space] clicked, move 90 steps.

Today we are going to plan our own sensor based programme, which you will make next week in computing.

Remember: to be safe on the internet, only go on pages you are directed to and do not talk to any strangers. If you are unsure about something, always ask an adult to take a look.


We will be using Scratch to make our programmes.



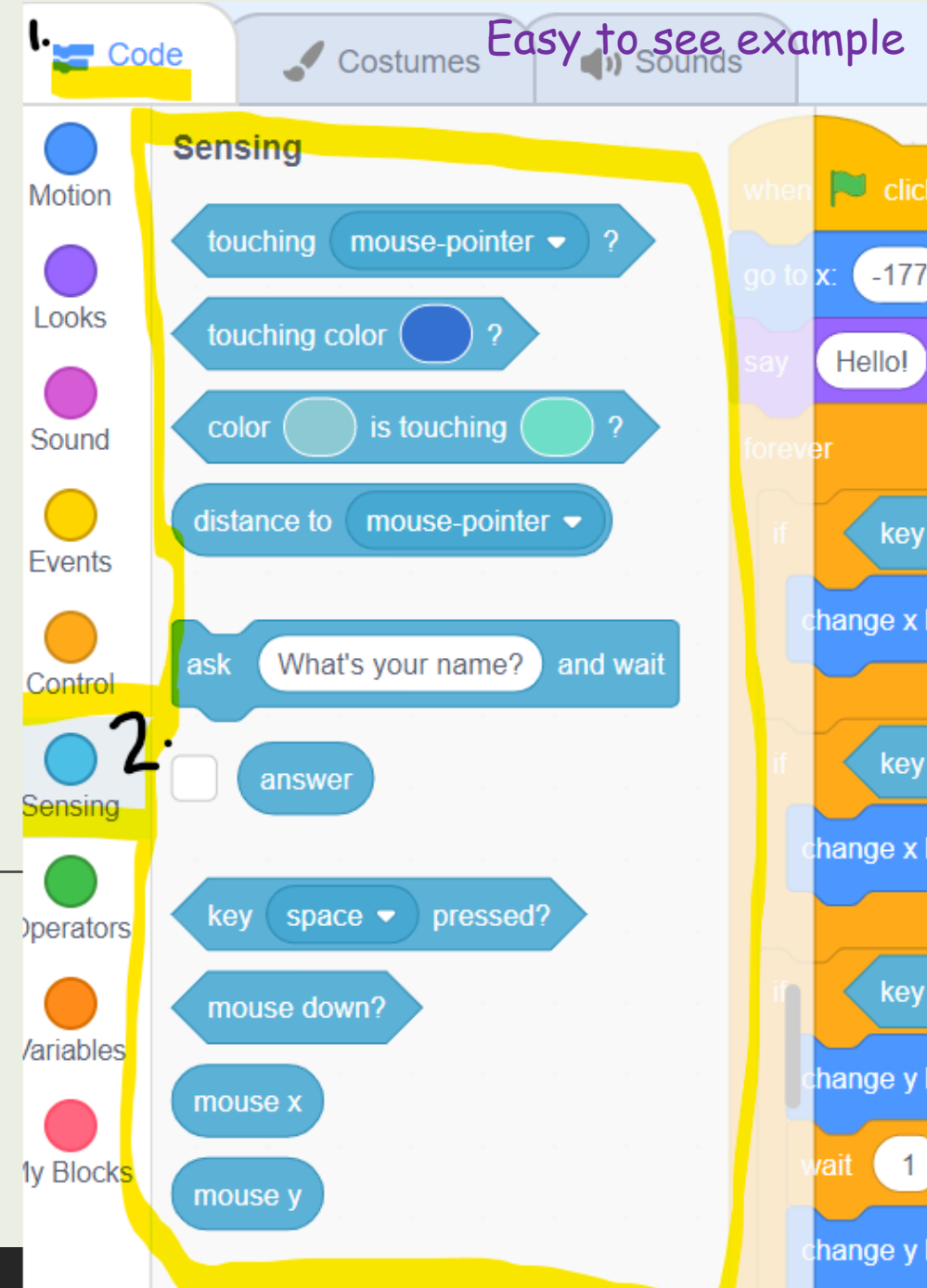
This is what the sensor command looks like on scratch.

Please take a few minutes to look at the programme: find the sensor commands in them. What do they do? What commands are needed before and after them so that they work? **Click on the images for examples.**

Remember, if you're unsure you can pull the tiles apart (decompose the game) to figure out how it works.

Click  See inside to look at and edit the code (tiles).

Trickier to see example



Now it's time to design your own!

Your game must have sensors as the main part: the aim must be activating them.



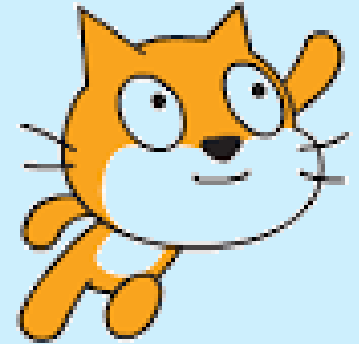
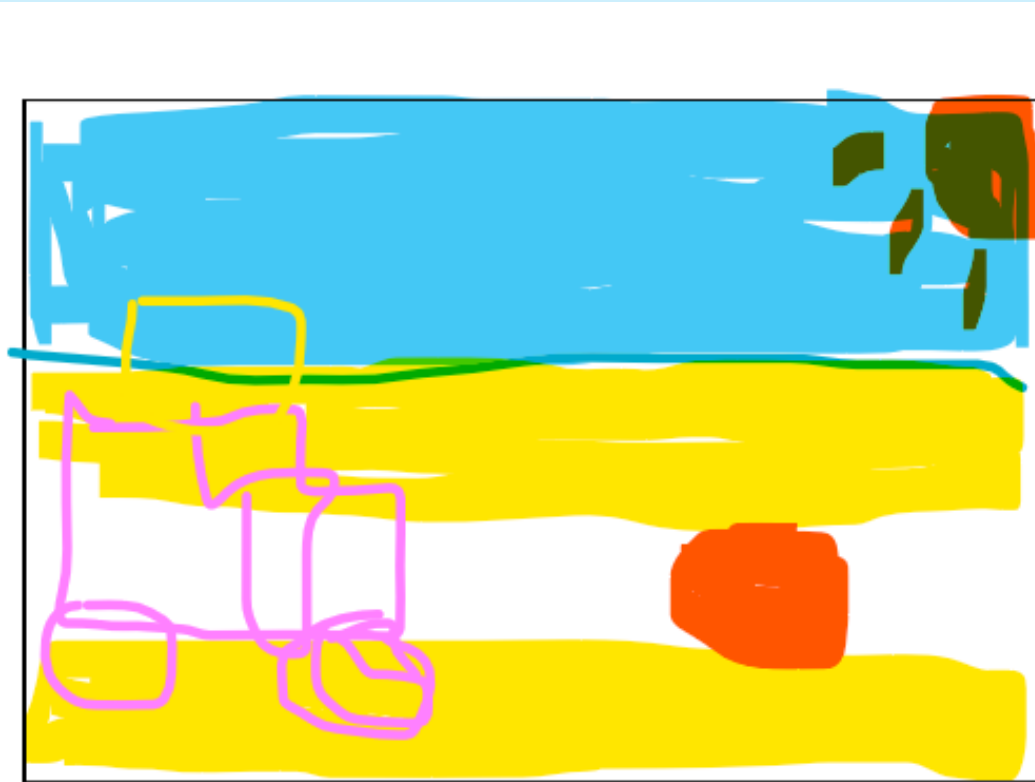
1) Decide on a target audience (e.g. me, Year 2, your adult, robotics?)

2) Decide on the purpose of your programme (e.g. to stand on all dots)

3) Map out what the screen will look like at each point in the story board boxes by drawing pictures.

4) Write the code (tiles) you will need to make this happen, using the scratch code menu to help you find them.

Example:



Event: 'When green flag clicked'

Motion: Go to X 99 Y 87

Control: IF

Sensor: right arrow pressed

Motion: Move 10 spaces