

# Scratch Basics

1 Open Scratch 3.0 by typing the following into your browser - <https://scratch.mit.edu/>.

2 Click on *Create* to go to the coding area

The layout is shown on the back of this sheet to give you a tour of the page

3 The best way to use Scratch is to create an on-line account and store all your work in “*The Cloud*”, that way you will be able to access it via any of your devices – Yes, Scratch 3.0 now works on Tablets and smart devices. It also makes it easier to save your work

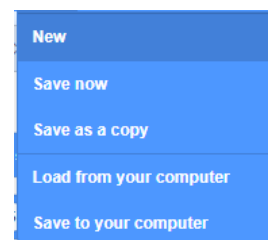
- Always check with your parent to make sure it’s OK. If not, it’s still Ok, we have a plan B - just skip to 6 below
- Click on “*Join Scratch*” on the top right of the screen, choose a Scratch Name and a Password you can remember
- Click *Next*
- Add your birthday month and year, gender and country
- Add your parents email address and click *Next*
- You should then get the welcome page, so click on *OK Let’s Go*

Now you can save your work

4 To save a file, first enter a name for it in the box at the top of the screen that says “*Untitled*”



- Now click on *File*, and you will see the following menu
- If you have created an account, simply click “*Save Now*”



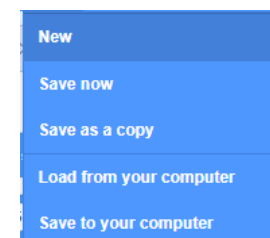
5 To load a file that you have worked on before, click on your user name and select “*My Stuff*”. A menu with your files will then appear. Simply click on the file you need

6 If you have not created an account

- To save a file, first enter a name for it in the box at the top of the screen that says “*Untitled*”



- Now click on *File*, and you will see the following menu
- Click on “*Save to your computer*”
- To load an existing file, again click on *File*, but this time select “*Load from your computer*”



7 If this is your first time here, explore the new versions. If you are familiar with Scratch 1.4 or 2.0, most of what you already know is here and in the same place, however some bits may be in different places, or there is a different way of doing things.

If you’re not sure, ask one of the leaders

8 Most important of all – HAVE FUN!!

**Coding, Costumes and Sounds section.**  
The tabs change if you are working on backdrops

**Prefer to work in a different language?** Here is where you can change it

**You can explore lots of cool projects** from the global Coderdojo community

**This shows you which sprite you are coding**  
Useful when you have multiple sprites

**This is the start and stop button for your program**

**Log In Here**  
If it shows your user name, you're logged in

**These buttons change the screen layout.**  
The one in blue is the current view

**These are your coding blocks**  
They are split into sections to make it a little easier to find. Clicking on one of the coloured buttons, takes you to the section to select your blocks. If you find it easier, you can also simply scroll up and down the list. Just drag them to your coding area to use them

**These buttons control the coding area.**  
You can zoom in, zoom out or reset to default

**Sprites Used In Your Program**  
A blue halo and cross indicates the sprite you are working on

**Select a New Sprite**

**Select a New Backdrop**

**This section tells you all about your sprite in code**  
The name of the *Sprite*, Where it is on the screen (X, Y), The Size of it. Which *Direction* it's facing. You can also Show (or hide) a sprite

**This is your coding area**

**This are called the "Stage"**

**This is a "Sprite"**

## Co-ordinates and Screen Locations

- Scratch uses *Co-ordinates* to set the location, on the screen, where something is happening
- Imagine there is a big cross dividing the page into 4 equal rectangles
  - Each rectangle is called a *segment*
- The lines of this invisible cross are called *axis* and are labelled *x* and *y*
  - The *x axis* runs from left to right
  - The *y axis* runs from top to bottom
- The numbers start in the centre of the page. At this point *x* equals zero and *y* also equals zero
  - The *x axis* starts on the left of the screen where it equals -266, goes through the centre of the screen, where *x* equals zero, and continues to the far right of the screen where *x* = 266 (we don't use the plus)
  - The *y axis* starts at the top of the screen where it equals 194 (again , we don't use the plus), goes down through the centre of the screen, where *y* equals zero, and continues to the bottom of the screen where *y* = -194
- Using these two co-ordinates you can then decide where you want something to happen. For example
  - To move a sprite to the centre of the screen, *x* needs to equal 0, *y* also needs to equal 0
  - To move a sprite to the top right of the screen , both *x* and *y* will be positive numbers
  - To move a sprite to the bottom left of the screen , both *x* and *y* will be negative numbers
- See the picture on the reverse of this card to help you
- *Note: The computer uses the centre point of a sprite to position it on the screen. If you are using a large sprite, this can cause a few challenges.*

## Co-ordinates and Screen Locations

