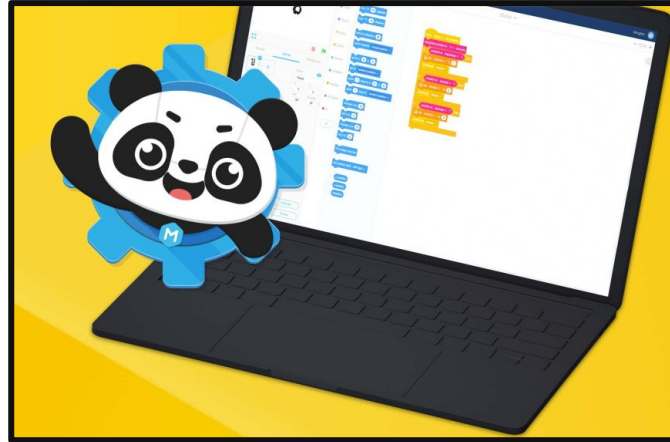




## Lesson 5 – Essentials of mBlock 5





## **Note for Faculty**

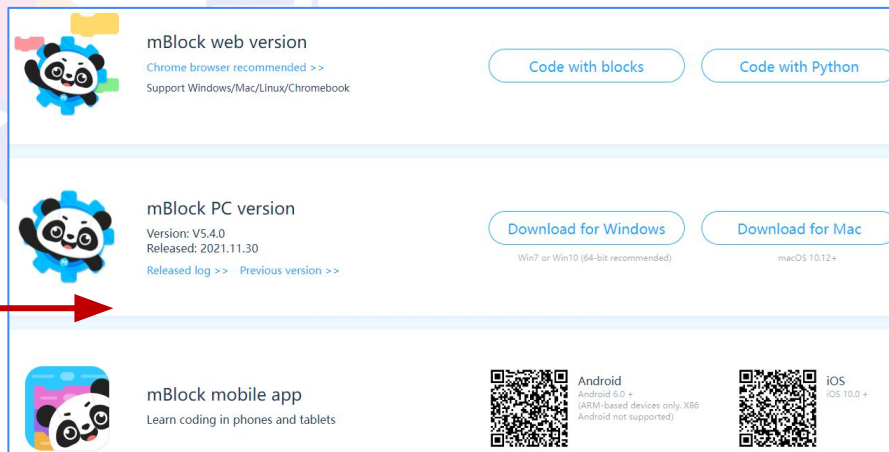
- 1. This is an important lesson. Go over it a couple of times.**
- 2. Do not be in a hurry, & kindly spend time on each slide.**
- 3. Ask a simple question on each slide before going to the next.**
- 4. Help them all with download & installation of mBlock 5 on their PC.**
- 5. Show them download on all there platform options.**
- 6. Do show them the download & look of Scratch 3.0.**



# Downloading mBlock 5

Open your PC/laptop & follow following Steps to Download:


- Select a browser.
- Enter mBlock 5.
- This screen appears.





## This offers three options on which it works:

1. This is for on-line Coding. Will need Internet while coding.



mBlock web version

[Chrome browser recommended >>](#)

Support Windows/Mac/Linux/Chromebook

2. This will download on PC. It is for off-line coding.



mBlock PC version

Version: V5.4.0  
Released: 2021.11.30

[Released log >>](#) [Previous version >](#)

3. This is for mobile/tab.  
Scan its QR code to download.



mBlock mobile app

Learn coding in phones and tablets



- **Select the desired option.**
- **Download starts.**

The screenshot displays the mBlock website interface with three main sections:

- mBlock web version:** Includes a gear icon with a panda face. Text says "Chrome browser recommended >>" and "Support Windows/Mac/Linux/Chromebook". There are two buttons: "Code with blocks" and "Code with Python".
- mBlock PC version:** Includes the same gear icon. Text says "Version: V5.4.0", "Released: 2021.11.30", and links for "Released log >>" and "Previous version >>". There are two buttons: "Download for Windows" (with subtext "Win7 or Win10 (64-bit recommended)") and "Download for Mac" (with subtext "macOS 10.12+").
- mBlock mobile app:** Includes a smartphone icon with the panda face. Text says "Learn coding in phones and tablets". There are two QR codes: one for "Android" (with subtext "Android 6.0 + (ARM-based devices only, X86 Android not supported)") and one for "iOS" (with subtext "iOS 10.0 +").

**Once downloaded, complete the installation by clicking on next.  
Once installed, Click on the icon & start coding.**

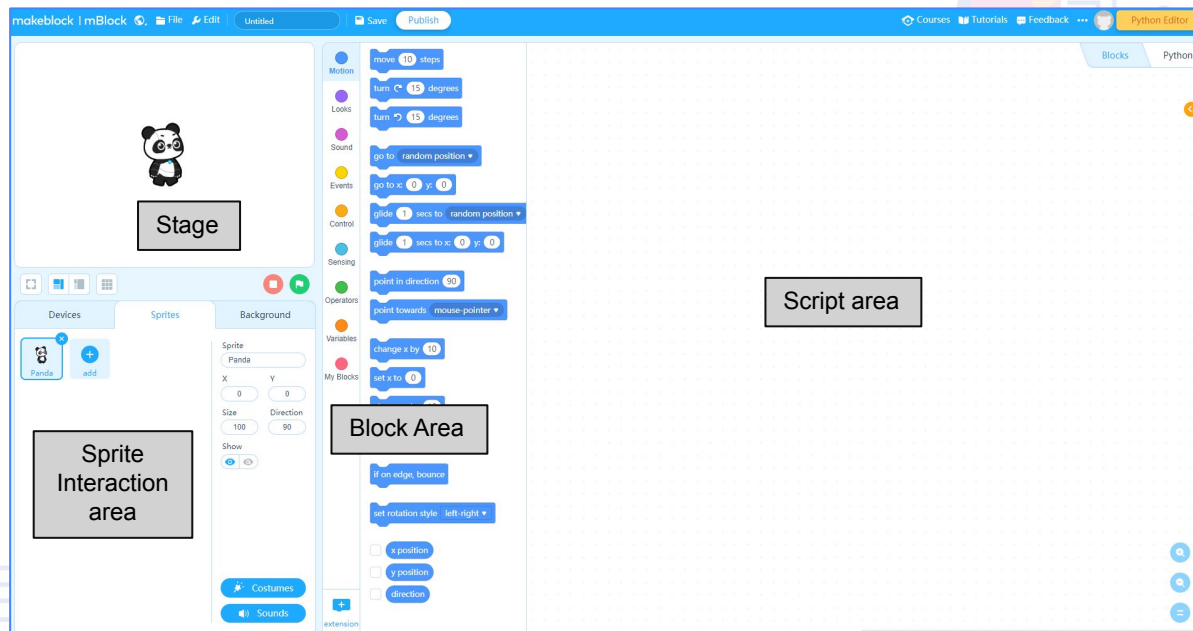


# Opening Screen

This is the opening screen.

Its four important areas are:

It is also the **only screen** on which you will do **all your coding**



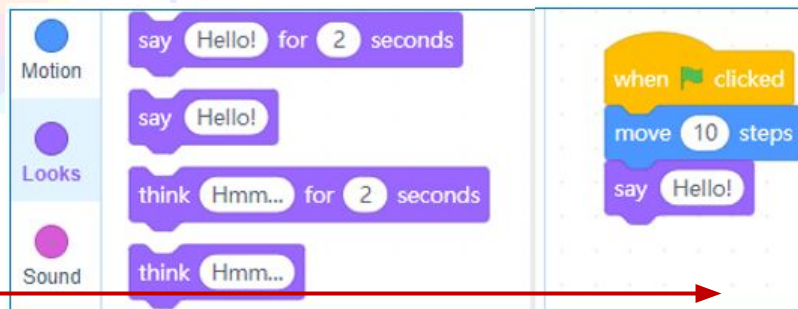


# Understanding Key Areas of Opening Screen

Initially it is enough to concentrate on the four key areas of the screen

**Block Area.**  
Contains blocks  
and the block Statements.

**Script Area.**  
Into which you  
Drag & Drop the statements.



**This line allows us to:**



- 
- At this stage we shall focus on **Sprites only**.

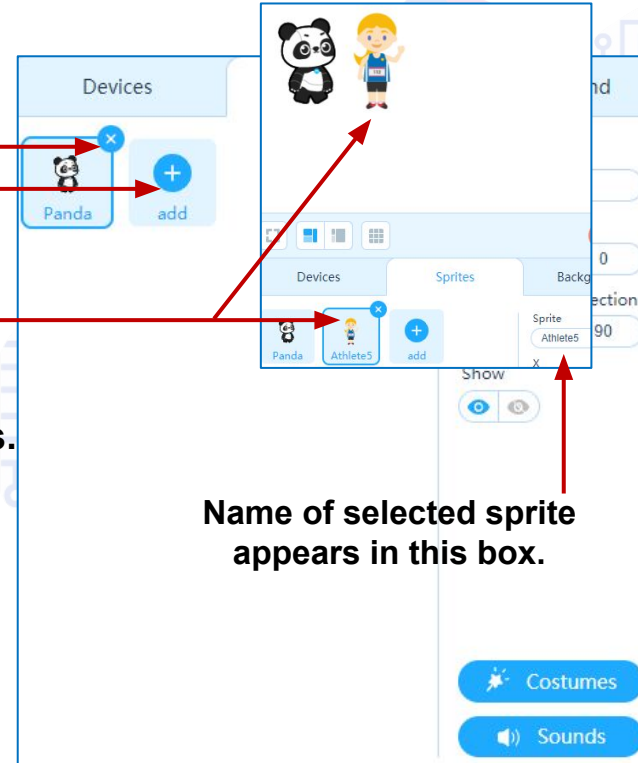






### The next three important icons/areas are:

- Icon to delete sprite. 
- Icon to add sprite. 
- Added sprite appears in the interaction area & in the stage.
  - We can add any number of sprites.
  - To code, we need to select one of the added sprite.
  - Sprites are coded one at a time.



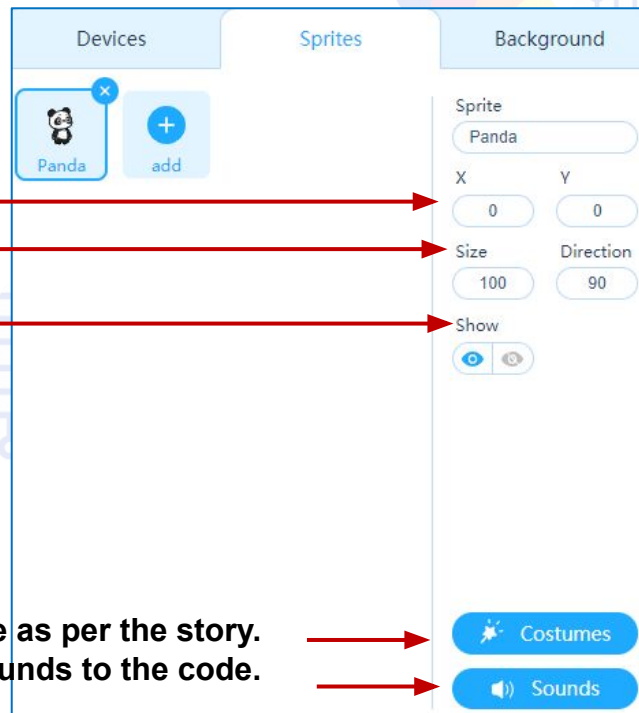


## The next five important icons/areas are:

- Positioning of sprite in x/y axis on the stage.
  - Changing size & orientation.

- Enabling a sprite to hide or reappear on the stage as per the story of the code.

- Making costumes (duplicates) of a sprite as per the story.
  - Adding different types of sounds to the code.

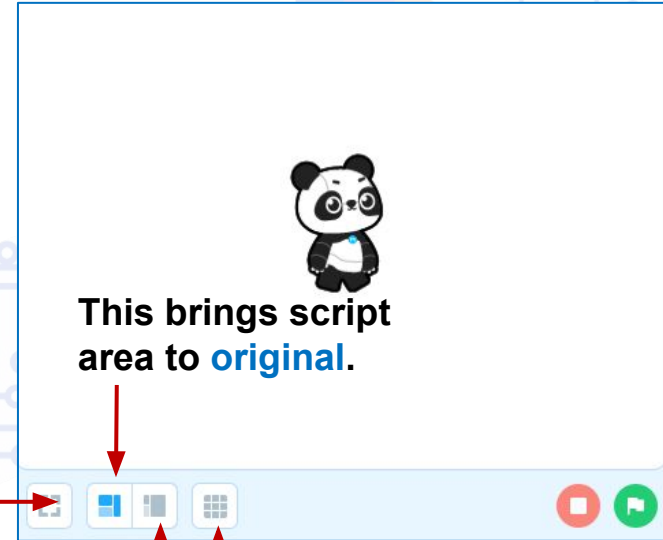


## Stage. Area in which Sprite executes the code.

In this:

- Your cursor can move the sprite around the stage. Try doing so.
- The green flag is an **Event**. We saw this in earlier lessons.
- The red flag is to **stop** the execution.
- This icon is to **enlarge the stage** to full size & also to **revert back**.
- This icon is to **enlarge script area**.
- This gives an **overlay of grid lines**.

Try them all one by one



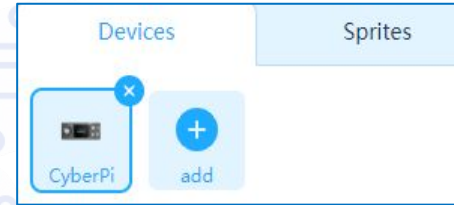


# Selection of Working Mode

It has two working modes:

- Devices.
- Sprites.

**Devices** is the default working mode.

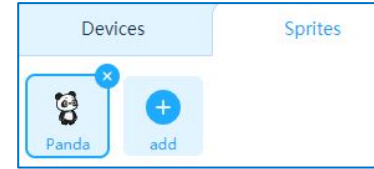


It contains:

- Blocks & block statements for devices.
- Default device is Cyber Pi.
- Click on **add** to view the different types of devices on which you can work & learn from.



For second working mode, click **Sprites**.  
Above screen changes to show this:



In this mode:

- Panda is the default sprite.
- It appears on the stage & here.
- Sprites added later, will also appear at these two places.





# **To Consolidate**

**To consolidate:**

- **Spend time to recap all the icons of Sprite Interaction Area.**
- **Ask children to download on their device at home & play.**





**End of Lesson 5**



**Code Karega India Badhega**