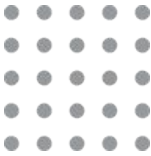


Lesson 5: Make Characters Move - I



By the end of the lesson, students will be able to

- ✓ Make sprites move from one location to another
- ✓ Use backpack to get objects from other projects
- ✓ Understand the use of x-y coordinates in Scratch

Things to do before the class

- ✓ Make sure all the computers that the students will use have decent internet connection.
- ✓ Make a list of usernames and passwords for each group's Scratch account. Some students might not remember their usernames or passwords.
- ✓ Read the student guide and engage with the given activities.
- ✓ Have a whiteboard and marker to write things down.
- ✓ Read the lesson plan and watch the videos linked inside. These videos are meant for teachers to help them learn Scratch as they run these lessons for their students.



0. Access the student guide (5 mins)

- ✓ Ask students to type this URL in the address bar: cd8.notion.site

Note: Because students have typed the address in the last class, the browser will usually auto complete the address when they type the first few characters.

1. Sprite modifying activity (15 mins)

Ask students to read till the **Let's modify some sprites!** section (page 1 to 3). Let them work on any of the three sprites.

- ✓ Provide hints if needed but avoid giving direct solutions.
- ✓ It's okay if students aren't able to modify the sprites as needed. They can work again in their spare time.
- ✓ Some students will complete these tasks sooner than their peers. Ask them to work on the other sprites too.

Note: Some students might not know how to get back to the student guide after opening one of these projects. Inform them that they need to click on the **back button** at the top left part of the browser.





2. Getting ready for the lesson (5 mins)

Ask students to read the **Getting ready for the lesson** section (page 2 and 3). They should

- ✓ Sign in to student accounts
- ✓ Change color mode to high contrast
High contrast blocks are much easier to read
- ✓ Explore the backpack
Students use backpack to get sprites from other projects. Ask them to get 2 or 3 Nepali sprites from the projects linked.



3. Exploring starter projects (15 mins)

Ask students to go through the **Let's explore some examples** section (page 4). Ask them to explore any one of the two starter projects. Encourage them to modify the projects and create something different from them.

- ✓ They might face difficulty in understanding the instructions written on the project page. Explain briefly if necessary.
- ✓ Ask students to "see inside" the project, play with the code, change it and create something slightly different.
- ✓ Some students might finish working on their starter project before the given time. Ask them to work on the other project.

An important idea introduced through the starter projects in this lesson is that of resetting sprites each time the project runs. It makes things much easier for students; especially as they work on more complex projects. Watch this video to learn more: [Initializing Your Sprites](#)



4. Let's animate some characters (40 mins)

Ask students to go through the **Let's animate some characters** section (page 5 & 6).

Three prompts are given to help students get ideas for their project.

- ✓ Let students work on a different idea if they wish to, but make sure it's not too ambitious for their current level of understanding.
- ✓ Some students might not understand the instructions, or might not read them. They prefer to ask questions directly to the teacher. Encourage them to ask their peers first, or point out relevant sections for them to look in the guide. It'll help you remain available to observe and nudge the students where necessary.
- ✓ Some students might finish their project before their peers. Ask them to work on the **More things to explore section**.

A key concept to be emphasized in this lesson is of x-y coordinates. It will help students better understand and plan the movements of their characters. Watch this video to learn more about it:

[Scratching The Surface: X & Y](#)

This lesson is mostly about moving sprites. Watch this video to learn about motion blocks in detail: [01.](#)

[Scratch - Motion Blocks](#)



5. More things to explore (Optional)

This section helps you differentiate learning in your class. Ask students, who completed their project to go through the **More things to explore** section (page 7). Let them animate names.

This section is also useful if you need to repeat this lesson for some reason. The students who have already learnt the concepts from this lesson can work on animating names, or on the other starter project, or debugging activity..

6. Reflection (10 mins)

Ask students to go through the **Let's Reflect** section in the student guide. There are 2 questions given for them to reflect on. Ask students to think on these questions and discuss with their group member.

Note: *It's helpful if you can provide them with pen and paper to write their reflections.*

Before students leave, ask them to exchange their reflections with two students they didn't interact much during the class.