

## Lesson 3.6: Starry Night

### Objectives

In this lesson, students will:

- ❖ Create a scene with different characters on Scratch Jr. representing a farm
- ❖ Learn how to repeat code
- ❖ Make objects disappear

### Agenda

1. Introduction	5 mins
2. Demonstration	5 mins
3. New concepts	10 mins
4. Choosing a background	5 mins
5. Adding Stars	10 mins
6. Students expand on their project	10 mins
7. Wrap Up & Reflections	5 mins

### Preparation

- Create the project in advance so you can demonstrate it to the students

### Resources & Links

- Scratch Blocks:  
<https://www.scratchjr.org/learn/blocks>
- [Google Slides](#)
- Demo video:  
<https://youtu.be/95B0zHp-bxl>
- Scratch Jr. Interface:  
<https://www.scratchjr.org/learn/interface>

Credits:



## 1. Introduction



Explain to students that today they will create a new project using Scratch Jr.

With their elbow partner or as a class discussion, ask students to tell one thing they remember learning on Scratch Jr.

Remind students on how to open Scratch Jr. on their tablet or computer and how to create a new project

Discuss with students what can be seen in the sky at night, when there are no clouds

Today students will

- Create a starry night using sprites from the library (minimum 4)
- Each sprite should do different things
- Use a variety of blocks we've already tried and blocks we haven't tried yet.
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## 2. Demonstration

Show the students a project you have prepared for this class. Do not show them the code.

<https://youtu.be/95B0zHp-bxl>

## 3. New concept:

### a. End blocks

Today, you will use a new set of blocks:

The end blocks allow you to

- Terminate a script
- Repeat a script forever
- Go to a different screen (we will use that in another project later)

END BLOCKS

End



Indicates the end of the script (but does not affect the script in any way).

Repeat Forever



Runs the script over and over.

Go to Page



Changes to the specified page of the project.

Demonstrate the Repeat forever block









**b. Looks blocks**

Looks Block (in Pink) allow us to change the appearance of a sprite

**LOOKS BLOCKS**

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<p><b>Say</b></p> <hr/>  <p>Shows a specified message in a speech bubble above the character.</p>	<p><b>Grow</b></p> <hr/>  <p>Increases the character's size.</p>
<p><b>Shrink</b></p> <hr/>  <p>Decreases the character's size.</p>	<p><b>Reset Size</b></p> <hr/>  <p>Returns the character to its default size.</p>
<p><b>Hide</b></p> <hr/>  <p>Fades out the character until it is invisible.</p>	<p><b>Show</b></p> <hr/>  <p>Fades in the character until it is fully visible.</p>

We can make things appear and disappear, but for that, we would need a new kind of blocks to make it very cool

**c. Control blocks**

**CONTROL BLOCKS**

**Wait**



Pauses the script for a specified amount of time (in tenths of seconds).

**Stop**



Stops all the characters' scripts.

**Set Speed**

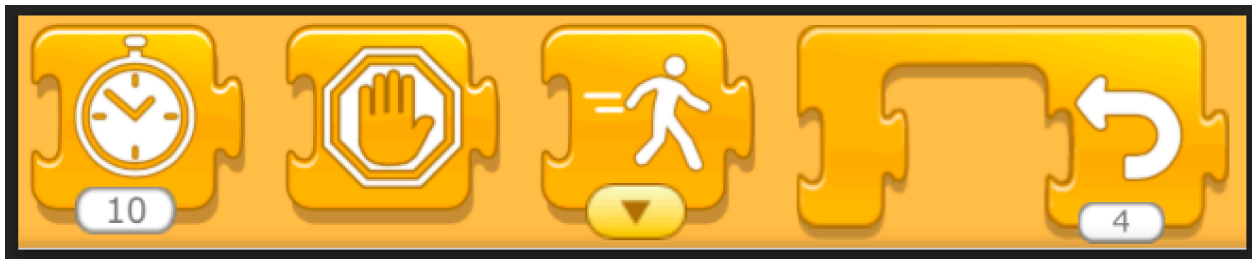


Changes the rate at which certain blocks are run.

**Repeat**



Runs the blocks inside a specified number of times.

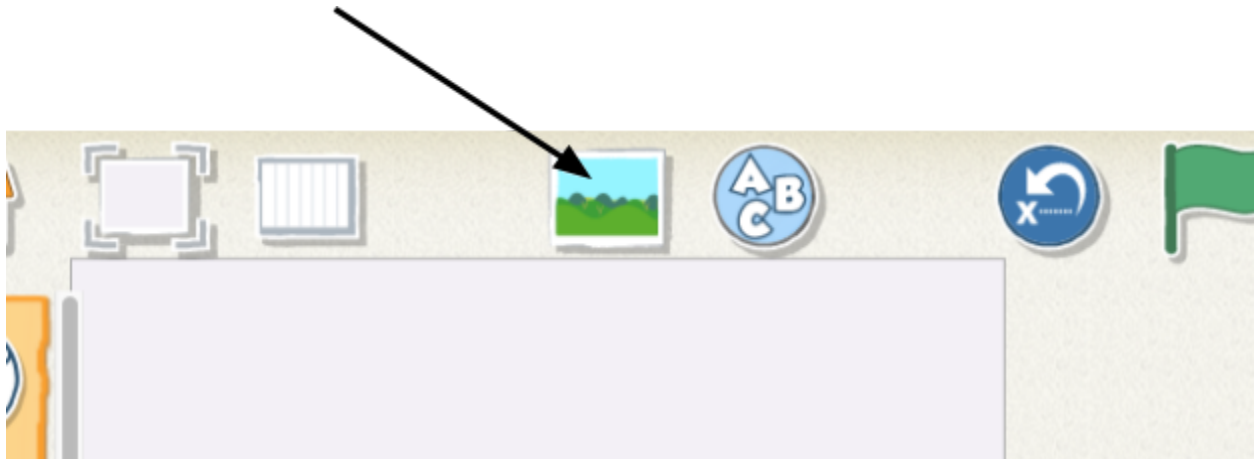


If you want to make a start shining, you would need to make it disappear, then wait a little bit and then reappear. You can use the Pause block for than

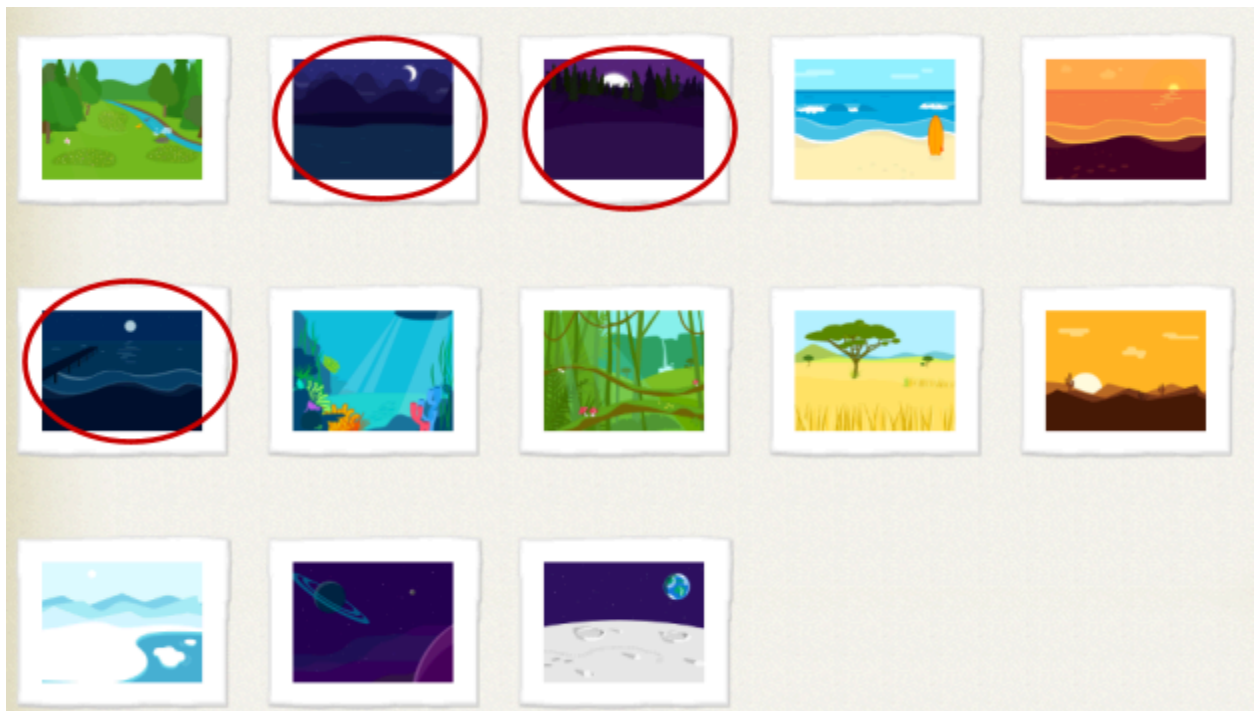
Demonstrate some of the blocks the students might want to try later

**4. Choosing a background**

Ask students to create a new project and select the correct background for a farm scene using the “background” icon

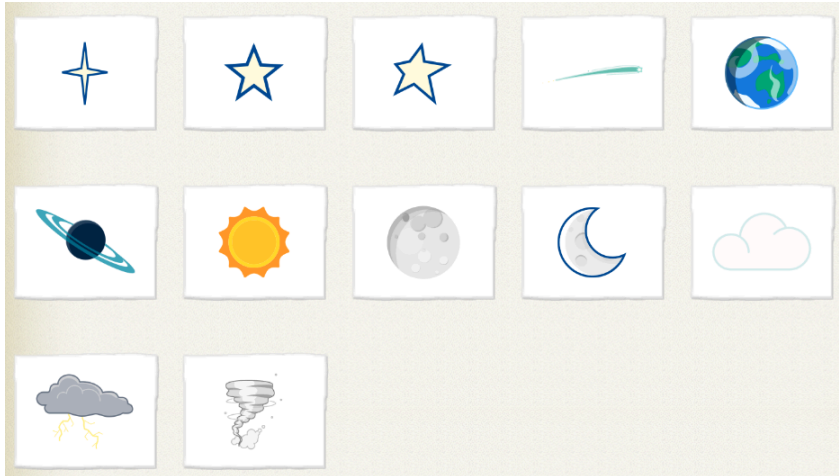


They can choose a night scene of their choice



### 5. Adding Stars

Students can add different stars to their projects. Invite them to make a script for each star so they do something different when the project starts.



**Ideas:**

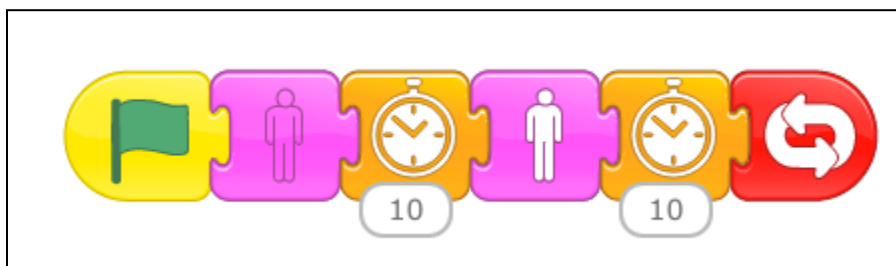
- Make the star spin forever



- Make a blinking star



Or



## 6. Student expands on their project

Ask students to add other characters to their scene (animals for example) and use the new blocks covered today

## 7. Wrap-up and Reflections



### Reflection Points:

- What is a new block you learned today?
- What is a triggering block?
- We can recognize animals using our eyes, our touch, and today, we made a program that uses our hearing to identify an animal