

# Observing the Sky with Robotic Telescopes

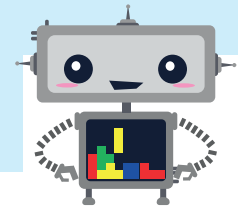
## Summary

In this activity students will learn about a range of cosmic objects, play a game of Messier Bingo and use the Las Cumbres Observatory to observe the night sky.

**Age:** 8 – 12 years

**Materials:** Computer, projector and Internet, [Messier Bingo cards](#), [SEROL presentation part 3](#), pens

**Duration:** 15 minutes



1. At this point, students should understand what the LCO network is and how it works. Now you will introduce them to a variety of cosmic objects that can be observed with these telescopes. To do this use Slides 7-10.

**Tip:** Before starting this activity we strongly recommend you complete the following activities: “The Search for Dark Skies”, “Why do telescopes come in different sizes?” and “What is a robotic telescope?”

**Nebulae:** A Nebula is a cloud of gas and dust in space. Some are the remains of dead stars and others are where stars are born.



**Star Clusters:** A Star Cluster is a huge group of stars bound together by gravity. A star cluster can contain a few hundred stars or many millions.



**Galaxies:** A Galaxy is a gigantic collection of stars, along with cosmic gas, dust and other stuff. The galaxy we live in is called the Milky Way.



2. Familiarise the students with the objects further through a game of Messier Bingo:

[messierbingo.lco.global](https://lco.global/messierbingo)

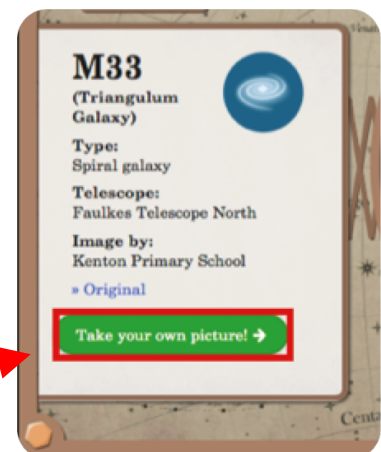
3. Instructions for the game can be found online:

<https://lco.global/education/messierbingo/>

4. Ensure you are logged in to Messier Bingo with your LCO account and it can be used as a platform to carry out observations on the LCO network.

5. Have them shout out the object type each time the image changes (nebula, star cluster, galaxy).

6. When a student wins, invite them to select a Messier Object to observe. To do this, simply select a target object within the tombola, it must have the green “Take your own picture” button. Click the button to send a request to SEROL for your own observation of the target object.



7. Within 2 weeks you will find the new observation by visiting the LCO observing portal:

<https://observe.lco.global>

Log in and you will be taken to your homepage, where all of your observation requests will be listed.

Coloured versions of your observations can be found by clicking on the observation request and selected data. On the bottom left of the page, you will find a thumbnail of your observation beneath which you can select ‘View color image’. A large, full-colour version of your observation will open in a new window.

Observing Portal basic mode [Home](#) [Submit Observation](#) [Manage Proposals](#) [Planning Tools](#) [Help](#)

**serol\_NGC5307\_20180119**  
Tracking # 563821

State	Updated	Submitted	Proposal	Submitter	IPP	Options
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Sub-requests / # 1399522

# 1399522  
Duration: 546 seconds  
Instrument: 0.4 meter SBIG

✓ COMPLETED  
2018-01-19 15:50:07

[View in API](#) [Download](#) [Data](#)

Could not load thumbnail for this file

Details Scheduling Visibility

Click a row in the data table to preview the file below. Click preview for a larger version.

coj0m405-kb97-20180119-0239-e11.fz

VB frames found. [View color image](#)

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