**Observing the Sky with Robotic Telescopes**

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| 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](https://lco.global/documents/46/BingoCards-v2.zip), [SEROL presentation part 3](https://lco.global/documents/1276/SEROL-presentation-part3.pptx), pens | |
| Duration: | 15 minutes | |  | |

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| 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?”** |

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| 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. |  |

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| 2. Familiarise the students with the objects further through a game of Messier Bingo:  [messierbingo.lco.global](https://messierbingo.lco.global)  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 your 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. |  |

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| 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. |  |