

Name _____ Period _____ Date _____



Galaxy

STEM Sims

Lesson 2: Practicing with the Galaxy

Since visiting the parts of the universe outside our immediate solar system is currently out of the question, astronomers must use various devices to study these far-away objects. In this simulation, you'll use your results from Lesson 1 and a variety of tools to identify unknown astronomical objects. Look closely and behold the universe!

Doing the Science

1. Start the Galaxy Simulation by clicking on the "Sim" tab.
2. A given astronomical object appears in the middle of the screen using a view that measures X-rays emitted by the object.
3. Note and record in Table 1 the appearance of the object.
4. Next, select the next view of the same object (ultraviolet) and enter this information in Table 1.
5. Complete a similar process with the remaining three views (visible, infrared, and radio). Make sure to enter your information in Table 1.
6. Select the Spectral Scanner button on the right-hand side of the screen. Note and record in Table 1 the most abundant elements present in the object.
7. After you have collected and recorded all of your data, select the Analysis Complete button on the left-hand side of the screen to continue your investigation.
8. Using your information collected in Lesson 1 and your results recorded in Table 1, select the Astronomical Object that you think you studied. The program will tell you if your choice was correct or not. If correct, congratulations. If not correct, use the Back button to review the same object.

Table 1.

View	Your Notes
X-Rays	
Ultraviolet	
Visible	
Infrared	
Radio	

Spectral Scanner	
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Do You Understand?

1. What information was *most* useful in helping you correctly identify the astronomical object?
2. What information was *least* useful in helping you correctly identify the astronomical object?