The questions a scientist is able to ask about the natural world are limited by his/her current knowledge, observation of phenomena and technology, and data available for exploration.

What do you already know or have observed about galaxies?

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| --- | --- |
| I know/ I have observed . . . . | Evidence |
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Scientific questions follow from asking “Why?” about some observation or when a new observation calls into question a current explanation or hypothesis. The questions scientists ask are always empirical in nature -- that means they can be answered by observation, measurements, and the analysis of data. From your list above, create some “Why?” questions that are interesting to you.

What data are you aware of that relates to galaxies in the SDSS?

|  |  |  |
| --- | --- | --- |
| Data Type | Location | What do these data communicate? |
| *Color Images* | *Navigator* | *You can determine the shape of the galaxy and what the local environment looks like.* |
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List and describe any additional sources of information that you are personally able to use that might be outside the SDSS.