

ASTRONOMY WITH DR GAIL ZASOWSKI

TALKING POINTS

KNOWLEDGE

1. Why is our proximity to the Milky Way a positive thing when trying to observe it?
2. Why does it pose challenges?

COMPREHENSION

3. How are astronomers currently better positioned than ever before to peer farther into the Milky Way? Try and name some specific projects and initiatives, providing some details of each.

APPLICATION

4. Why is it important to understand more about the history of the Milky Way? How might it inform our understanding of other galaxies?

ANALYSIS

5. What is the process that Gail and her team follow to understand the history of the Galaxy?

EVALUATION

6. What do you think of the idea that astronomers are often making discoveries that include knowledge that has never been known before? How does this make you feel?
7. How would you feel if you knew something about the world or Universe that nobody had ever known before?

ACTIVITY

There are about 9,096 stars visible to the naked eye, although because only half of the celestial sphere is visible at any one time, you can only expect to see a maximum of 4,548 stars in extremely dark sites. Considering these factors (and given that many of us don't own a telescope), step outside on a very dark and clear night and try to find the visible constellations in the northern hemisphere.

An image of these constellations can be found on Astronomy Trek (www.astronomytrek.com/wp-content/uploads/2015/11/4-sailpastorio.jpg). You will be looking for the following six more popular constellations as well as the Milky Way:

- Cassiopeia
- Perseus
- Auriga
- Taurus
- Gemini
- Orion
- Milky Way

How many can you find?

MORE RESOURCES

NASA SCIENCE

The NASA Science website (science.nasa.gov) is a treasure trove for everyone interested in astronomy. You can also get involved and there is a wide range of citizen science projects: science.nasa.gov/citizenscience

Visit the Voyages website (<http://voyages.sdss.org/>), an educational portal for SDSS, for access to several hands-on activities that allow you to learn about stellar and other astronomical measurements using actual data