

4th Grade

Earth & Space Science Chapter 9 Lesson 3

Page	Question	Answer(s)	Links/Sources
313	Why do stars appear to be in band?	Because we are viewing the stars from within them rather than from outside of them.	
313	Does the glow seem brighter or dimmer when viewed edge-on compared to viewing from above? Why?	The glow seems brighter edge on because all the light has been concentrated into a thin strip.	
314	How are constellations like the Try This Activity?	Constellations are just a way for one human to communicate what stars they are referring to when speaking with another human.	
315	Do you think all early people used the same name for certain constellations? Why?	No. Different cultures had different names for stars and different arrangements of constellations.	If you have access to a classroom Star Lab, show your students the difference between the European and Chinese constellations.
315	How many zeros.	One Million 1,000,000 One Billion 1,000,000,000 1,000,000,000,000 Ten Trillion 1,000,000,000,000,000,000 One Trillion	
315	Which constellations are mentioned in Job 38:31-32?	The Pleiades, Orion, and the star Arcturus.	Mazzaroth may mean the constellations of the Zodiac.
316	Why is our home galaxy called the Milky Way?	The Greek words for galaxy derives from the word for Milk. The Romans called our Galaxy the Via Lactea which means the Road of Milk.	Universe today.com
318	What is your complete address in space?	The Universe, Virgo Supercluster, The Milky Way, The Solar System, Planet Earth, The United States ...	
318	Why was Joseph's dream in Genesis 37 so upsetting to his father and brothers?	Because they recognized that the sun and the eleven stars represented them and that they would all bow down in homage to this annoying little boy.	
319	How are the terms galaxy and universe related?	The universe included everything in space. Galaxies are clusters of stars in space.	

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319	Which best describes the Milky Way Galaxy?	A. Pinwheel shape with long spiral arms.	
319	Compare and Astronomical Unit with a Light Year	One AU is 150,000,000 km. One Light Year is 9,461,000,000,000 km. So one AU is only 0.002% of one Light Year.	
320	In what ways did Galileo change our understanding of the Solar System?	He pointed out that the planets all revolve around the sun.	
320	Why did the leaders not like Galileo's ideas about the Solar System?	They thought his ideas contradicted the Bible because according to the current belief, Earth had to be the center of the universe because Earth was the focus of creation week.	
320	How did Galileo use his understanding of the Bible to support his theory the Sun was the center of the Universe?	Galileo believed in the adage that "The Bible teaches how to go to Heaven, not how the heavens go." So, like many Christian scientists today, Galileo used the Bible as a spiritual guidebook that explained moral issues throughout time, but he insisted on using observation and experimentation to guide his scientific research.	
321	Why is being an air traffic controller a stressful job?	Because there are a lot of people relying on you for good information and instructions in order to stay alive.	
321	What parts of a satellite might aerospace engineers design?	They design how it will look, they design the motors, they design the communication systems, they test to see how it will all work together.	