

## What do we need to know?

Be able to define and use the following terms. This means understanding them, not just being able to regurgitate a definition!

| Polaris | Retrograde Motion | Meteor |
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| Meteoroid | Meteorite | Comet |
| Geocentric Model | Heliocentric Model | Eclipse |
| Galaxy | Solstice (summer, winter) | Equinox |
| Axis | Triangulation | Orbit |
| Constellation | Asteroids | Azimuth |
| Altitude | Light Year | Rotation |
| Nebula | Astronomical Unit | Revolution |

Some sample questions:

1) What is actually happening when we see retrograde motion?
2) What is a solstice? What is an equinox? When do they occur?
3) What causes the seasons on Earth?
4) What is the largest planet in our solar system? Which is the coldest? Closest to the sun? Furthest away?
5) What is an asteroid? Where in our solar system are you most likely to find one?
6) What is azimuth? How do you measure it?
7) What is altitude? How do you measure it?
8) Why do astronomers use both azimuth and altitude to locate an object?
9) Why, when giving azimuth and altitude, do we need to give a reference location?
10)What is the difference between revolution and rotation? How are they similar? How often does the Earth complete a revolution? How often does it complete a rotation?
10) Know how to use your seasonal star map. For example on February $5^{\text {th }}$ at 8 pm name a constellation that would be close to the Northern horizon.
11) Why do the stars seem to move slowly through the night sky? For example, why don't we see the big dipper in the same spot all the time?
13)What happens during a solar eclipse? A lunar eclipse? Which one is more common?
12) What causes the tides on Earth? Draw or explain the alignment of the sun, moon, and Earth that cause different types of tides.
13) What four factors affect how bright we see a star on Earth? Explain the effect of each factor.
16)What is the difference between an Astronomical Unit and a Light year? When would we use each?
14) Jupiter is 5 AU from the sun. If $1 \mathrm{AU}=150000000 \mathrm{~km}$, how many km is Jupiter from the sun?
18)What is triangulation? How do you do it?
