

Star Wars & Battle of Visual Magnitude

Student Worksheet

Read the following

Scientists say that the Yukon fireball had a visual magnitude of -26. Huh? That means it was nearly as bright as the Sun. "Magnitudes" are a system that astronomers use to describe the brightness of stars, planets, and meteors.

Depending on the time of year, one of the brightest stars in the night sky is Arcturus. It gets a rating of 0 (zero!). That is bright. The North Star, Polaris, is not as bright. It is rated 2. A very faint meteor that can only be barely seen with the naked eye (no telescopes!) gets a rating of 5. The bright Sun shines down at magnitude -27.

Get the idea? Smaller numbers mean brighter stars. Negative numbers mean really bright stars!

You can become familiar with the magnitude scale by using the "Star Wars" cards to play war! You will need to pay close attention to the scale. A star with a negative magnitude is much brighter than a zero or a two!

Materials

student worksheet for each student
set of cards for each pair of students

Procedures

1. Play the same way that war is played.
2. If you have trouble with a partner that is trying to wait until you flip your card before he/she flips hers, try this; both of you chant "One, Two, Peekaboo!" and both flip the cards as you say peekaboo.
3. The person who flips the brightest card takes possession of both cards.
4. If you both flip the same magnitude, each person lays one card face down and then flips a second card face up, the winner takes all six cards.
5. Have fun!