The ABCs of Stargazing

How would you describe to a friend the size of a sky object, its distance from a particular star, its brightness, or its location on the celestial dome?

The ABCs of stargazing allow you to do just that!

"A" is for angular size and distance
Be sure to remember these handy references when discussing size or distance in the sky:
- The moon spans 1/2°. It would take 360 "full moons" to reach from horizon to horizon!
- The apparent width of the tip of your index finger on your extended arm is 2°.
- The width of the bowl of the Big Dipper is 5° and the bowl's length is 10°.
- Your clenched fist on your fully extended arm is 10° from side to side.
- Your outstretched hand on your extended arm is 20° from the tip of the pinky to the tip of the thumb.

"B" is for brightness
Skywatchers use the "magnitude" scale to describe an object's brightness. Don't be confused by the reverse nature of the scale: The brighter the object, the smaller the magnitude. Objects with negative magnitudes are very bright, indeed!

Polaris, the North Star, always has an azimuth of 0° and has an altitude above the northern horizon matching the latitude of the observer.

"C" is for coordinates
Stargazers often use the simple, but descriptive altitude-azimuth (alt-az) system to locate objects in the sky.

The Astronomical League, www.astroleague.org/outreach