# Small Astronomical Bodies Cheat Sheet 

Version 3.0
Select moons, dwarf planets, and objects in Earth's solar system, organized by distance from the sun (near to far). Within the planet's listing, moons are listed by relative importance to high school quizbowl.

| Planet/Region | Moon/Object | Details |
| :---: | :---: | :---: |
| Mars | Phobos Deimos | named for the Roman gods of fear and panic |
| asteroid belt | Ceres | largest object and only dwarf planet in the asteroid belt; visited by Dawn probe, which orbited Ceres until it ran out of fuel in 2018 |
|  | Vesta | second-largest asteroid belt object; also visited by Dawn |
| Jupiter | Galilean moons | Ganymede, Europa, Callisto, and Io; the four largest moons of Jupiter; discovered independently by Galileo Galilei and Simon Marius; Ganymede is the largest moon in the solar system; Io is the most geologically active object in the solar system, |
| Saturn | Titan | second-largest moon in the solar system; nitrogen-based atmosphere; methane rivers and lakes; discovered by Christian Huygens; visited by Huygens probe, part of the Cassini-Huygens mission; contains the Kraken Mare |
|  | Enceladus | cryovolcanic and heavily cratered; sixth-largest moon of Saturn |
|  | shepherd moons | satellites that help contain planetary rings through their gravitational pull; Saturn's include Prometheus near the F ring and Pan near the Encke Gap |
|  | Mimas |  |
| Uranus | Titania <br> Oberon <br> Cordelia <br> Miranda | named for characters from Shakespeare plays |
| Neptune | Triton | has a retrograde orbit; largely covered in frozen nitrogen; has a "cantaloupe terrain" formed by complex patterns of depressions in the surface |
|  | Galatea | a shepherd moon (see above) for the Adams ring |
|  | Proteus <br> Thalassa |  |
| Kuiper Belt | Pluto | largest trans-Neptunian object (TNO); dwarf planet orbited by Charon, Styx, Kerberos, Hydra, and Nix; visited by the New Horizon probe; discovered by Clyde Tombaugh |
|  | Eris | dwarf planet orbited by Dysnomia; with Sedna, it was used to demonstrate that Pluto has not cleared its local area, leading to Pluto's reclassification as a dwarf planet |
|  | Haumea Makemake Gonggong |  |

