

EXOPLANETS

Exoplanets are planets that orbit stars other than our Sun. Astronomers have discovered thousands in our galaxy.

Gas giants

Similar to Jupiter or Saturn with thick gas atmospheres. Includes "Hot-Jupiters" which have high temperatures because they orbit close to their stars.

Neptune-like

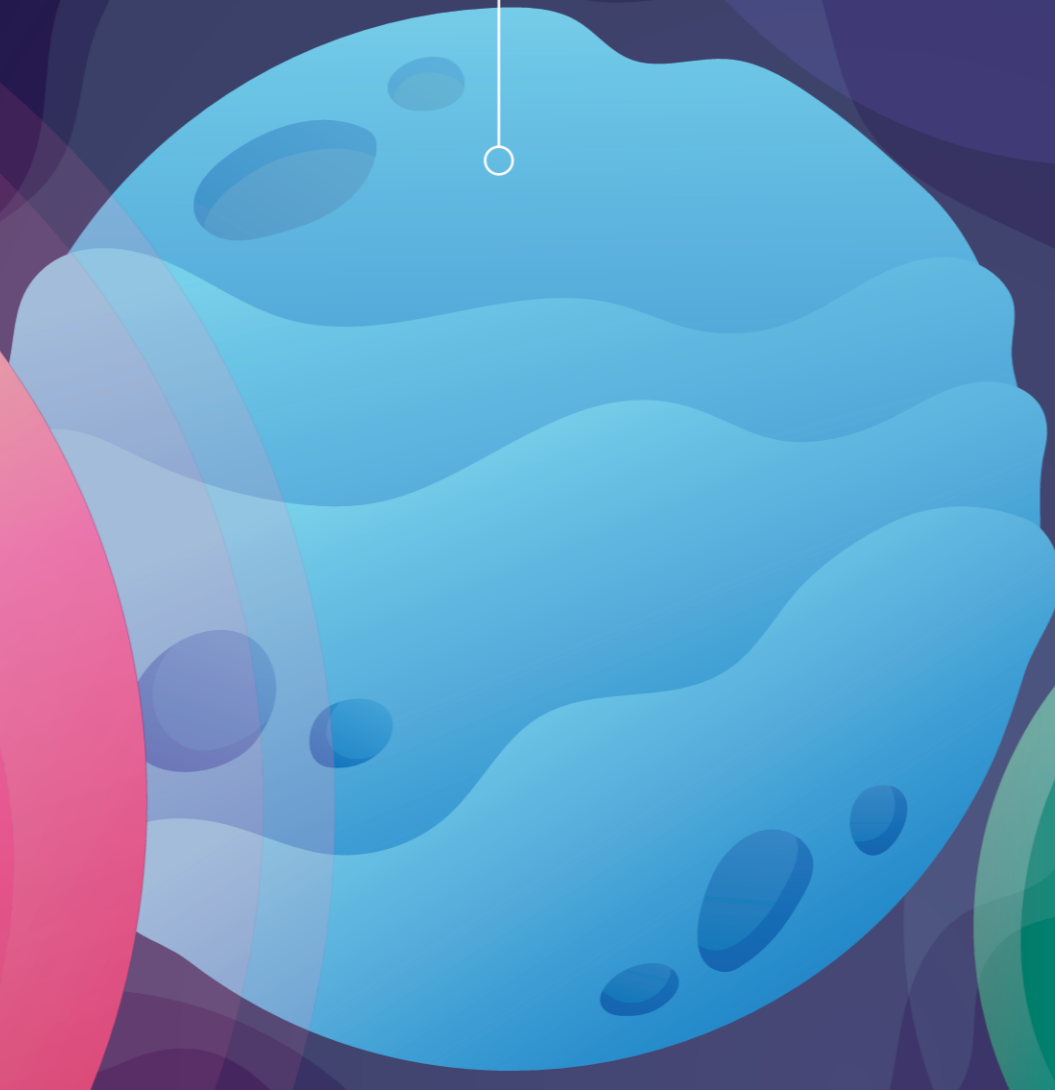
Planets like Neptune or Uranus, with thick gas atmospheres.

Super Earths

Usually rocky. More massive than Earth but smaller than Neptune. They may have atmospheres.

Terrestrial

Rocky planets that are in Earth's size range. Astronomers think that some may have atmospheres and oceans.



HABITABLE ZONE

If life exists on an exoplanet, it is likely to need liquid water. So the exoplanet's distance has to be just right, in the star's habitable zone: too close to its star and any water will boil away, too far away and it will freeze.

Planet A



Too close. Temperature is above 100 °C. Any water will boil away. Unlikely to have life.

Planet B



Just right. Temperature is between 0 and 100 °C. Liquid water can exist on surface. Could be suitable for life.

Planet C



Too far. Temperature is below 0°C. Any water will be frozen. Unlikely to have life.