

ASK SPACE MONKEY!



Albert has been studying planets for a really long time now... He can answer any of your questions! 😊

Basic concepts

What is mass? *Mass is how much stuff (matter) is inside an object. It tells us how heavy something is: The more mass an object has, the heavier it feels!*

What is the orbital period? *The orbital period is the time it takes for a planet to make one full trip around its star! For Earth, this journey takes 1 whole year*

What is the orbital radius? *It's the distance from an object in space to the body which it is orbiting. Basically how far a planet is from its star!*

What is the habitable zone? *The habitable zone is the special area around a star where it's just the right temperature for liquid water to be on a planet's surface. It's not too hot or too cold.*

What are light years? *A light-year is how far light can travel in one year! Light zooms through space at super-fast speeds, moving about 186,000 miles (300,000 kilometers) every second. That's why we use light-years to measure really long distances in space!*

Star types



What are Red Dwarfs? *These are the coolest stars in space! They look more orange than red and make up about 75% of all the stars in our Milky Way galaxy!*

What are White Dwarfs? *Imagine a tiny, super-hot star. White dwarfs are compact stars that shine brightly at first but cool down slowly over billions of years.*

What are Red Giants? *These stars have started to run out of energy and are slowly dying.*

What are Neutron Stars? *These stars are formed when a massive star runs out of fuel and collapses into a tiny, super-dense ball*

Types of planets

What Are Super-Earths? *Super-Earths are special planets that are bigger than Earth but smaller than Neptune. They are rocky, like Earth, and might have air around them.*

What are gas giants? *Gas giants are huge planets made mostly of gases, like hydrogen and helium. They don't have solid surfaces like Earth, so they look very different.*

Planet discovering methods

What is the Transit Method? *The transit method is when a planet moves in front of a star, blocking some of its light. This helps astronomers spot the planet from Earth!*

What is the Radial Velocity Method? *The radial velocity method is when planets pull on their stars, making them wobble a little. This wobble changes the color of the star's light, which scientists can measure to find out more about the planet!*

More information!

[NASA Space Place](#)

[Nasa Exoplanets](#)

[Exoplaneteers](#)

What Is an Orbit? | NASA Space Place – NASA Science. (2023).
Nasa.gov. [Link](#)

What is Orbital Radius? | Homework.Study.com. (2024).
Homework.study.com. [Link](#)

Types of Stars - NASA Science. (2020, September 22). Nasa.gov. [Link](#)

What is a Light-Year? - NASA Science. (2020, March 4). Nasa.gov. [Link](#)

Activity Descriptions. (n.d.). [Link](#)

What is the Habitable Zone or “Goldilocks Zone”? - NASA Science.
(2017, February 21). Nasa.gov. [Link](#)

What’s a Transit? - NASA Science. (2020, April 27). Nasa.gov. [Link](#)

Radial Velocity - NASA Science. (2021, July 27). Nasa.gov. [Link](#)

Overview of Planet Types - NASA Science. (2020, October 22).
Nasa.gov. [Link](#)