

What is TRAPPIST-1 b?

March 29, 2023 • vajiramandravi.com



About TRAPPIST-1 b:

- It is a **hot rocky exoplanet orbiting** an ultracool **red dwarf star TRAPPIST-1**.
- It is the **innermost of** seven known planets in the **TRAPPIST-1 system**.
- It has **1.4 times the mass** and **1.1 times the radius of Earth**.
- It **orbits its star** at a distance of **0.011 astronomical unit (AU)**, **completing one circuit in just 1.51 Earth days**.
- It **receives** about **four times the amount of energy that Earth gets from the Sun**.
- TRAPPIST-1b is **tidally locked**, meaning that one side of the planet always faces the star, and one side looks away.

What is an astronomical unit (AU)?

- An AU is the **average distance between Earth and the Sun**, which is about 93 million miles or **150 million kilometres**.
- It is usually used to **measure distances within our Solar System**.

Q1) What is an Exoplanet?

An exoplanet is any planet beyond our solar system. Most orbit other stars, but free-floating exoplanets, called rogue planets, orbit the galactic center and are untethered to any star.

Source: [Earth-like planet expected to be habitable turns out to be a burning furnace](#)

Source: <https://vajiramandravi.com/current-affairs/what-is-trappist-1-b/>

© Vajiram & Ravi. For personal use only.