

# What is a light-year?

The new discovery of chemicals in the atmosphere of a planet orbiting a red dwarf star, that may indicate an abundance of aquatic life, is some 124 light years from Earth

**LIGHT-TIME:** DISTANCE LIGHT TRAVELS WITHIN SPECIFIC PERIOD OF TIME

## K2-18b

Orbits cool red dwarf star in constellation of **Leo**. Scientists have discovered two chemicals in its atmosphere that on Earth are only known to be produced by life – **dimethyl sulphide** and **dimethyl disulphide**

SUN

One light-second: 300,000 km

One light-minute: 18 million km

RED LINE INDICATES PREVIOUS MEASURE

One light-hour: 1.1 billion km

EARTH (8 MINS)

JUPITER (43 MINS)

One light-day: 25.9 billion km

SOLAR SYSTEM

One light-year: 9.5 trillion km

200 light-years: 1.9 quadrillion km

K2-18b (124 LIGHT-YEARS)

100,000 light-years: 946 quadrillion km

MILKY WAY GALAXY