

Astronomers discover “Earth’s twin”

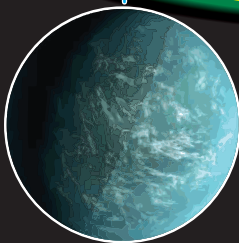
NASA’s Kepler mission has confirmed the existence of an Earth-like planet in the “habitable zone” around a star similar to our own sun.

Kepler-22b is more like Earth than any planet yet found and could prove a key discovery in the ongoing quest for extraterrestrial life

KEPLER-22
SYSTEM

SOLAR
SYSTEM

HABITABLE ZONE:
Area around
star where
temperatures
are right for
water to exist
in liquid form



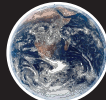
Kepler-22b lies
about 15% closer to
its star than Earth
to our sun. Its sun
puts out about
25% less light,
keeping planet
at about 22C



Mercury



Venus



Earth



Mars

Planets and orbits to scale

KEPLER-22b

Size: 2.4 times that of Earth

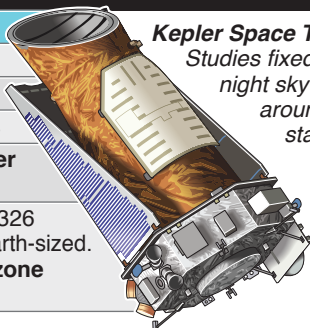
Length of year: **About 290 days**

Distance from Earth: **600 light-years**

Composition: **Not yet known whether
made mostly of rock, gas or liquid**

Kepler Telescope has so far found 2,326
candidate planets of which 207 are Earth-sized.

**Kepler-22b is first of 48 habitable zone
candidates to be confirmed**



Kepler Space Telescope:

*Studies fixed swathe of
night sky containing
around 150,000
stars, looking
for dips in
brightness
as planets
transit
across
face of
host stars*