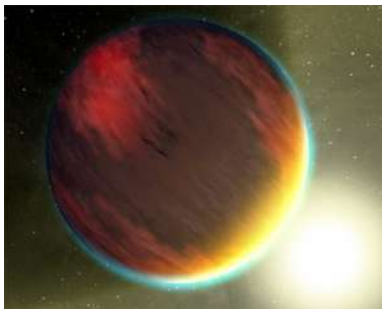
Planet Cards

55 Cancri e
Size: twice the size of Earth
Mass: 8 times the mass of Earth
Temperature: 1700 C
Liquid water: no
Type of planet: rocky
Length of year: 18 hours!
Other Notes:
This planet could largely be made of carbon, which could be in the form of a HUGE diamond in its core due to the high pressure.

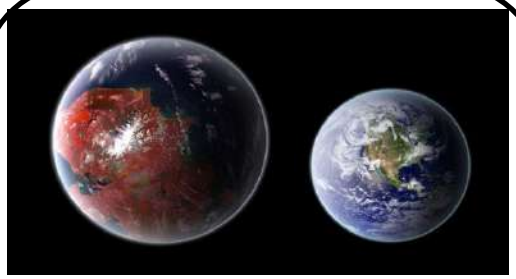
Gliese 436 b
Size: 4 times the size of Earth
Mass: 22 times the mass of Earth
Temperature: 440 C
Liquid water: ice
Type of planet: rocky
Length of year: 2 days
Other Notes: Due to the high surface pressure water could be in the form of ice there despite the high temperature. This ice could "burn" into vapour due to radiation.



HD 209458 b
Size: A bit larger than Jupiter
Mass: Almost as massive as Jupiter
Temperature: 1100 C
Liquid water: no
Type of planet: gas giant
Length of year: 3 days
Other Notes:
An example of a "hot Jupiter". A huge planet that orbits very closely to its star.

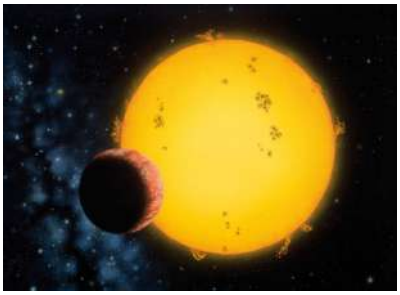
Kepler 62 f
Size: 1.4 times the size of the Earth
Mass: Maybe 3 times the Earth's mass
Temperature: -30 C or greater
Liquid water: possible
Type of planet: rocky
Length of year: 267 days
Other Notes:
Seems too cold, but depending on the atmosphere the greenhouse effect could make this planet habitable.

Kepler 20 e
Size: 87% the size of Earth
Mass: 40% of Earth
Temperature: 1000 C
Liquid water: no! Liquid lava!
Type of planet: rocky
Length of year: 6 days
Other Notes:
The same side always faces the Sun, so one side is extremely hot and the other side is very cold.



Kepler 296 e
Size: 1.75 times the size of Earth
Mass: unknown, likely larger than Earth
Temperature: -6 C or higher
Liquid water: possible
Type of planet: rocky
Length of year: 34 days
Other Notes:
A bit larger than Earth but very similar.

Kepler 442 b
Size: 1.34 times the size of Earth
Mass: 2.3 times the size of Earth
Temperature: - 40 C
Liquid water: Possible in tropical regions
Type of planet: rocky
Length of year: 112 days
Other Notes:
The surface gravity on Kepler-442b would be only 30% stronger than that of Earth.

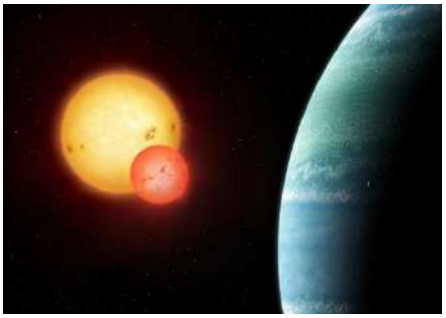


51 Pegasi b
Size: larger than Jupiter
Mass: At least half of Jupiter's mass
Temperature: 1200 C
Liquid water: NO
Type of planet: gas giant
Length of year: 4 days
Other Notes:
The first extra solar planet found. Extremely close to its star. A "hot Jupiter".

Kepler 186 f
Size: 1.1 times size of Earth
Mass: about 1.4 times the mass of Earth
Temperature: likely above zero degrees
Liquid water: possible
Type of planet: rocky
Length of year: 130 days
Central star: Very faint red star.
Other Notes:
In habitable zone.

Kepler 438 b
Size: 1.1 times size of Earth
Mass: about 1.4 times the mass of Earth
Temperature: 3 C
Liquid water: possible
Type of planet: rocky
Length of year: 35 days
Central star: smaller and cooler than Sun
Other Notes:
This planet is frequently hit by large amounts of radiation from solar flares.

Kepler 22 b
Size: 2.3 times diameter of Earth
Mass: unknown
Temperature: -11 C to 460 C possible
Liquid water: possible
Type of planet: rocky
Length of year: 290 days
Central star: 25% fainter than Sun.
Other Notes:
This planet could be an ocean world, covered in water.



Kepler 453 b
Size: 6 times diameter of Earth
Mass: less than 32 Earth masses
Temperature: -11 C to 460 C possible
Liquid water: possible on its moons!
Type of planet: gas giant
Length of year: 240 days
Other Notes:
If this planet has moons, they may be habitable!