

1. EXOPLANET APP ACTIVITY

1. In the Exoplanet App on your ipad or iphone, choose **Database**. Search for the planet **HD 12484 b**. That was the planet from this morning's exercise.
 - (a) What is the planet's mass and orbital period (according to the app, not this morning's exercise)?
 - (b) Is the planet in the habitable zone? Click on the third panel from the top to find out.
 - (c) How far away is the planet from Earth, in light-years?
 - (d) How many years would it take you to get there by rocket, travelling at light speed? (Rockets nowadays are around 20,000 times slower than light speed. How long would it take on such a rocket?)
2. Return to Main menu, choose **Database**, and find Kepler-101b.
 - (a) What method was used to detect this planet?
 - (b) There are two planets in this system. From the second panel from the top: how do the sizes of these planets compare to Solar System planets?
3. You are an exoplanetary travel agent.
 - (a) Find a planet that you think is interesting to visit. You can search for different kinds of planets by clicking on **Options** e.g., "Planets in binary systems, P-type" [if you select that: what does it mean?]. Or, use "sort" to find the most eccentric planet, or some other extreme planet. Or, you could try find a system with 7 planets. What planet did you choose?
 - (b) Write a short ad to advertise trips to your planet. Put at least three noteworthy things about the planet that will make people want to purchase a rocket-ticket to that planet (e.g., how quickly your birthday will come, how hot or cool it is, or the view of the sky, etc). You will be reading out your ad to everyone.