

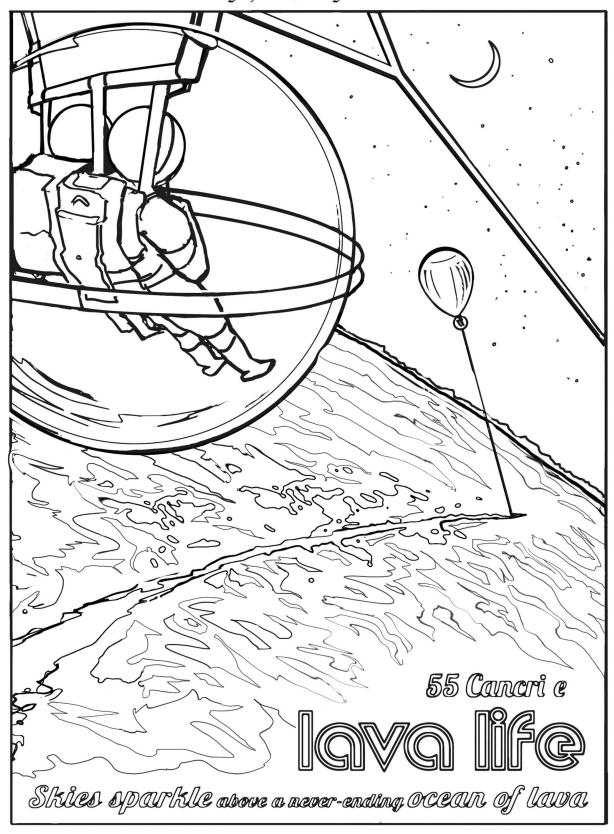


51 Pegasi b stands out among the first exoplanets discovered. It's about half the mass of Jupiter, with a star-hugging orbit that means its "year" is only 4.2 Earth days! It is the first planet confirmed to orbit a Sun-like star, and it ushered in a new class of planets called "Hot Jupiters": massive planets orbiting extremely close to their stars.

What colors would light up the first exoplanets discovered?



## Exoplanet Travel Bureau

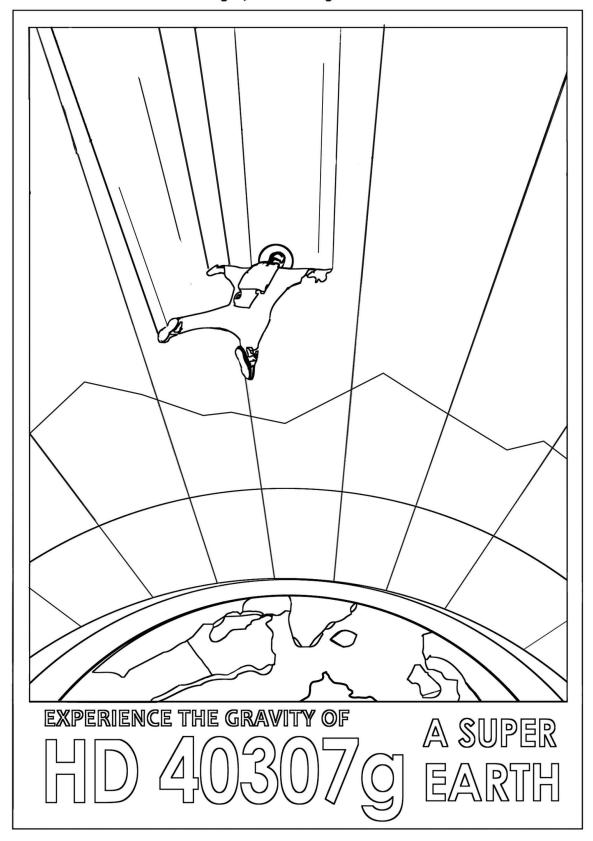


A global ocean of lava and sparkling silicate skies make this dreamy world the perfect extreme vacation! 55 Cancri e, or Janssen, orbits a star 41 light-years away from Earth. The molten surface is uninhabitable, but the views of a burning horizon, Janssen's sister planet, Galileo, and glittering skies will take your breath away.

What colors can you imagine on the ultrahot world of 55 Cancri e?



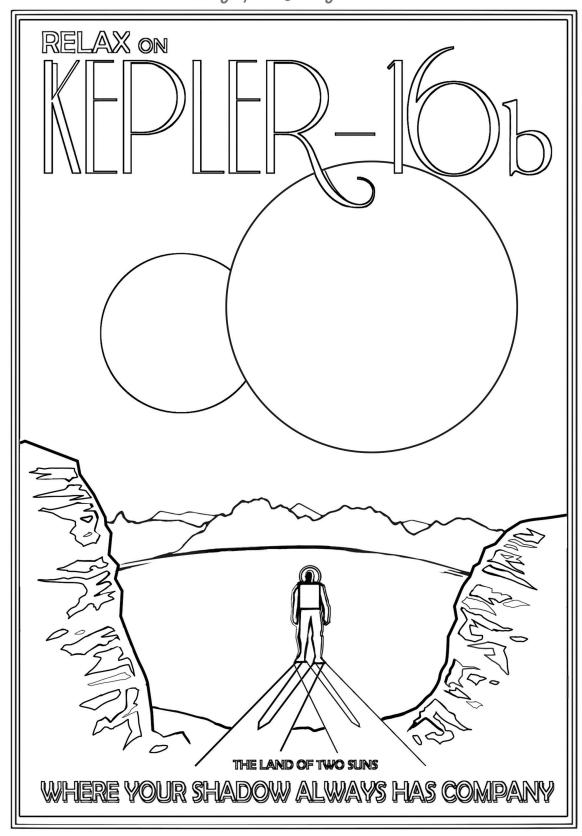




Twice as big (in volume) as Earth, HD 40307 g straddles the line between "Super-Earth" and "mini-Neptune," and scientists aren't sure if it has a rocky surface or one buried beneath thick layers of gas and ice. One thing is certain though: at eight times Earth's mass, its gravitational pull is much, much stronger.

Color this world! Do you picture a rocky planet or one shrouded in gas and ice?





Like Luke Skywalker's planet "Tatooine" in Star Wars, Kepler-16b orbits a pair of red and yellow stars. Depicted here as a terrestrial planet, Kepler-16b might also be a gas giant like Saturn. Prospects for life on this unusual world aren't good, as it has a temperature similar to that of dry ice — well below freezing!

If you visited Kepler-16b, what colors do you think you'd see?



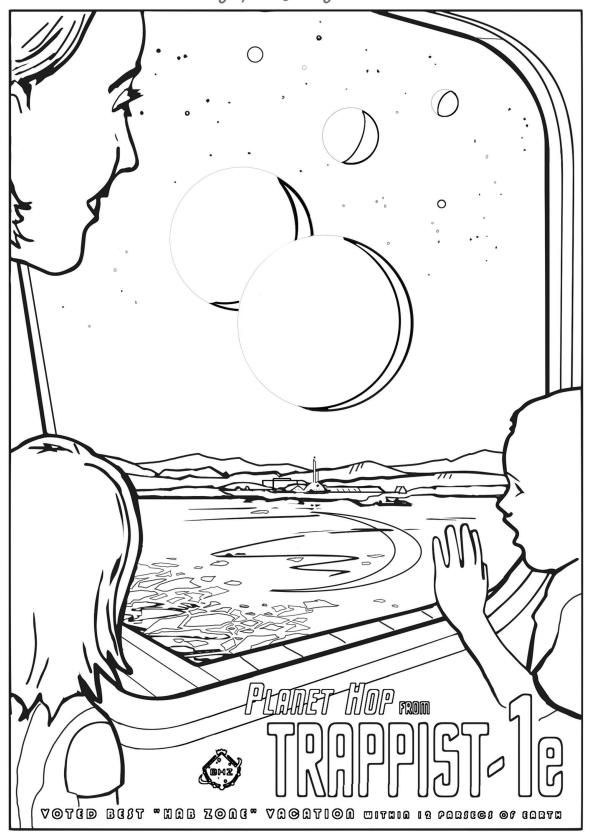


Kepler-186f is the first Earth-size planet discovered in the habitable zone of another star – where liquid water could exist on the surface. If plant life did exist on Kepler-186f, leaves might be shades of red to generate energy from its cool, red star – very different than Earth's palette of greens under our yellow Sun.

What tones will you pick to color Kepler-186f?



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About 40 light-years from Earth, seven planets orbit a small, dim, red sun. TRAPPIST-1e, the fourth planet from the star, is in the habitable zone, meaning liquid water could exist on its surface. The six other Earth-size planets are so close that they would loom like moons in its red-tinged sky.

Imagine what the other planets would look like from TRAPPIST-1e!

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