Welcome to International NodeBots day 2015!

Your challenge is to build a NodeRover to explore the asteroid Juno 3.

Here are some ideas for programming your bot:

- Display the temperature on the digit display
- Display the light reading on the digit display
- Use buttons to toggle what is displayed
- Beep when an obstacle is detected using the ultrasonic sensor
- Program your bot to drive around an area autonomously, using the ultrasonic sensor to avoid obstacles

Rover Build instructions:
https://t.co/x3l8ml0ddU

Code samples:
https://gist.github.com/AnnaGerber/e5f8972b7456f96da463

Juno, minor-planet designation 3 Juno in the Minor Planet Center catalogue system, was the third asteroid to be discovered and is one of the larger asteroids in the asteroid belt, being one of the two largest stony (S-type) asteroids, along with 15 Eunomia. It is estimated to contain 1% of the total mass of the asteroid belt.
Juno is one of the larger asteroids, perhaps tenth by size and containing approximately 1% the mass of the entire asteroid belt. It is the second-most-massive S-type asteroid after 15 Eunomia. Even so, Juno has only 3% the mass of Ceres. Amongst S-type asteroids, Juno is unusually reflective, which may be indicative of distinct surface properties. Juno was originally considered a planet, along with 1 Ceres, 2 Pallas, and 4 Vesta. All four were reclassified as asteroids as additional asteroids were discovered.
Spectroscopic studies of the Junonian surface permit the conclusion that Juno could be the progenitor of chondrites, a common type of stony meteorite composed of iron-bearing silicates such as olivine and pyroxene.

Physical characteristics	
Dimensions	(320×267×200)±6 km[4] (233 km)[2]
Surface area	216 000 km^2[5]
Volume	8 950 000 km^3[5]
Mass	2.67 ×10^{19} kg[4]
Mean density	3.20 ± 0.56 g/cm^3[4]
Surface gravity	0.12 m/s^2
Escape velocity	0.18 km/s
Rotation period	7.21 hr[2] (0.3004 d)[5]
Equatorial rotation velocity	31.75 m/s[5]
Albedo	0.238 (geometric)[2][7]
Temperature	~163 K *max:* 301 K (+28°C)[8]
Spectral type	S-type asteroid[2][9]
Apparent magnitude	7.4[10][11] to 11.55
Absolute magnitude *(H)*	5.33[2][7]
Angular diameter	0.30" to 0.07"

From Wikipedia https://en.wikipedia.org/wiki/3_Juno
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