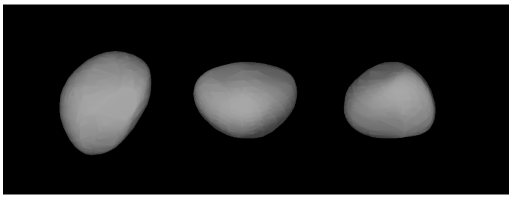
Eunomia (15)



Physical characteristics	
Dimensions	(357×255×212)±15 km[2] 268 km (mean) 330×245×205[3][4][5] 255.3 ± 15 km (IRAS)[1]
Mass	3.12 ×10¹⁹ kg[2]
Mean density	3.14 ± 0.53 g/cm³[2] 3.8±0.7 g/cm³[6] (based on IRASdiameter of 255km)
Surface gravity	0.08 m/s²
Escape velocity	0.16 km/s
Rotation period	0.2535 d (6.083 h)[1][7]
Albedo	0.209 (geometric)[1]
Temperature	~166 K *max:* 260 K (-13 °C)
Spectral type	S-type asteroid[1]
Apparent magnitude	7.9[8] to 11.24
Absolute magnitude *(H)*	5.28[1]
Angular diameter	0.29" to 0.085"

From Wikipedia https://en.wikipedia.org/wiki/15_Eunomia

Welcome to International NodeBots day 2015!

Your challenge is to build a NodeRover to explore the asteroid Eunomia 15.

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/x3J8mI0ddU

Code samples:
https://gist.github.com/AnnaGerber/e5f897b745e5f96da463

15 Eunomia is a very large asteroid in the inner asteroid belt. It is the largest of the stony (S-type) asteroids, and somewhere between the 8th-to-12th-largest main-belt asteroid overall (uncertainty in diameters causes uncertainty in its ranking). It is the largest Eunomian asteroid, and is estimated to contain 1% of the mass of the asteroid belt. Eunomia appears to be an elongated but fairly regularly shaped body, with what appear to be four sides of differing curvature and noticeably different average compositions.

Its surface is composed of silicates and some nickel-iron, and is quite bright. Calcium-rich pyroxenes and olivine, along with nickel-iron metal, have been detected on Eunomia's surface. This composition indicates that the parent body was likely subject to magmatic processes, and became at least partially differentiated under the influence of internal heating in the early period of the Solar System. The range of compositions of the remaining Eunomian asteroids, formed by a collision of the common parent body, is large enough to encompass all the surface variations on Eunomia itself.