

What is the mass of the Earth?

- radius

- density



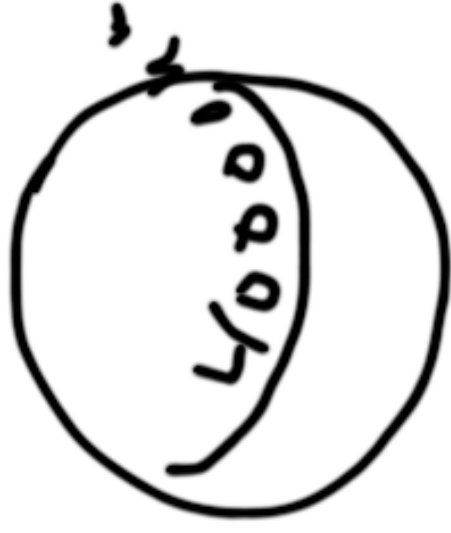
water: 1000 kg

rock: 3000 kg

metal: 20000 kg

air: 1.3 kg

$$C_E = 24008 \text{ m} = 410,000 \text{ km}$$



$$V = \frac{4\pi}{3} (7 \times 10^6 \text{ m})^3$$

$$= 1.4 \times 1000 \times 10^{18} = 1.4 \times 10^{21} \text{ m}^3$$

$$V = 1.4 \times 10^{21} \text{ m}^3$$

$$\rho = 8000 \frac{\text{kg}}{\text{m}^3}$$

$$12 \times 10^{24} \text{ kg}$$

$$\text{true: } 6 \times 10^{24} \text{ kg}$$

<http://cosmo.nyu.edu/hogg/gp1/>