

Mr. Bardi

Aim: Earth's Shape

9/20/12

HW-Density Lab

Text p.27-31 #1-4

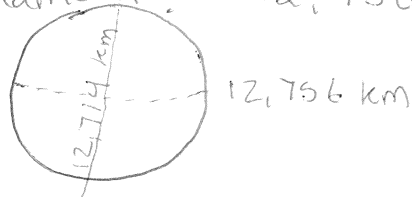
Proof that the Earth is Round

1. Pictures from space
2. Lunar Eclipse, Earth casts a curved shadow on the moon.
3. Ship's sailing away appear to disappear slowly
4. Altitude of Polaris equals your North latitude

The Earth is not a perfect circle.It is an OBLATE SPHEROID

Because of Earth's Rotation it BULGES at the equator + it is flattened at the poles.  
(video: The earth's equatorial bulge)

Equatorial Diameter: 12,756 km see p.15



Weigh more at the Poles

Polar Diameter: 12,714 km

Handout: Measuring EarthEarth's Structure

- ① Lithosphere (land) - solid, outershell, composed of rock + soil
- ② Hydrosphere (water)
- ③ Atmosphere (air)

## Aim: Earth's Structure

① Lithosphere - Solid outer shell composed of Rock + Soil (crust)

Composed of mostly Oxygen + Silicon

density =  $2-3 \text{ g/cm}^3$

esrt p.1 (crust)

② Hydrosphere - Water sphere  $\text{H}_2\text{O}$  (liquid)

~75% of earth is covered by water

66% Hydrogen

33% Oxygen

Density =  $1.0 \text{ g/mL}$

esrt p.1

③ Atmosphere - Air/Gas sphere [TROPOSPHERE]

Composed of Nitrogen 78% + Oxygen 21%

Very Low Density

esrt p.1 AND 14