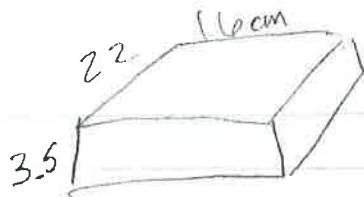


Styrofoam Block

10/9/14

SAMPLE (MA)
Medium Sand



$$A = 22 \times 16 \text{ cm}$$

$$V = 1232 \text{ cm}^3$$

$$\text{mass} = 25 \text{ g}$$

$$D = \frac{m}{V} \quad D = \frac{25}{1232}$$

$$D_{\text{styro}} = .02 \text{ g/cm}^3$$

Sediment

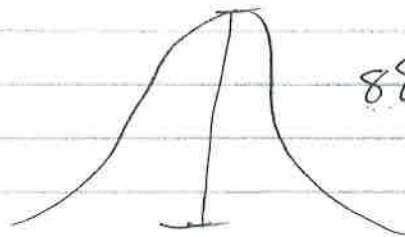
$$A = 10 \times 16 \text{ thick} = 1.7 \text{ cm}$$

$$\text{mass} = 355 \text{ g}$$

$$D_{\text{sed}} = 1.3 \text{ g/cm}^3$$

$$D_{\text{Both}} = \frac{25 \text{ g} + 355 \text{ g}}{V_{\text{styro}} + V_{\text{sed}}} = \frac{380 \text{ g}}{1504} = 0.25 \text{ g/cm}^3$$

mt. Everest



8800m

26 mm/yr
Avg

2-12 mm/yr

erosion rate:

12 mm/yr

$$\frac{12 \text{ mm}}{\text{yr}} \quad \frac{\text{m}}{1000 \text{ mm}}$$

$$= \frac{.012 \text{ m}}{\text{yr}}$$

$$\frac{8800 \text{ m}}{.012 \text{ m}}$$

733,333 yrs.

to erode to
sea level!

UPLIFT RATE

10 mm/yr