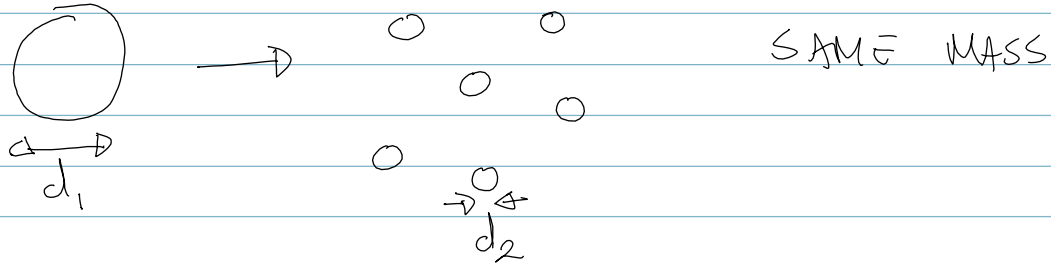


SPECIFIC SURFACE AREA VS SIZE

NANO-04 | 12/10/11

SPECIFIC SURFACE AREA

$$= \frac{\text{SURFACE AREA}}{\text{MASS}} \quad \text{UNITS: } \frac{\text{m}^2}{\text{g}}$$



$$\text{S.S.A} = \frac{\pi d_1^2}{\left(\frac{\pi d_1^3}{6} \rho\right)} = \frac{6}{d_1 \rho}$$

$$\frac{\text{S.S.A}_2}{\text{S.S.A}_1} = \frac{\left(\frac{6}{d_2 \rho}\right)}{\left(\frac{6}{d_1 \rho}\right)} = \frac{d_1}{d_2}$$

$$\boxed{\text{S.S.A}_2 = \text{S.S.A}_1 \frac{d_1}{d_2}}$$