

6.3.1) Notes

Włodarczyk
Period 6

• there are three one-dimensional "space dimensions", length, width and depth

• two dimensional objects have a combination of two dimensions, and they cover up an area

• three-dimensional objects have all three space dimensions, and take up volume

• volume has cubic units

• the volume of a rectangular solid is the product of all three lengths, $V = lwd = Bh$

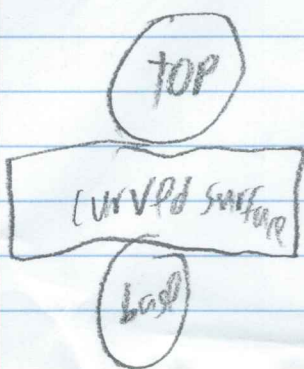
• $B =$ base area

• the bases of a cylinder are circles

if
• the axis of symmetry of a cylinder is perpendicular to the bases, then it is a "Right Cylinder"

• The volume of a cylinder is the same as the volume for a rectangular solid: $V = Bh$, where B is the Base Area

$$V = \pi r^2 h$$



• the surface area of a right cylinder is made up of 3 parts: two circular bases, and the "lateral surface area"

• the lateral surface area is a rectangle