

Surface Area

7th Grade

Unfold the solid, add up the faces. That is all surface area ever is.

Surface area is the total area of every face. A net makes them all visible at once.

Solid	Formula	Faces
Cube	$6s^2$	6 identical squares
Rect. prism	$2lw + 2lh + 2wh$	3 pairs of matching rectangles
Triangular prism	$2(\frac{1}{2}bh) + 3 \text{ rectangles}$	2 triangles, 3 rectangles
Cylinder	$2\pi r^2 + 2\pi rh$	2 circles + 1 rolled rectangle

The cylinder's rectangle has width equal to the circumference. That is where $2\pi rh$ comes from.