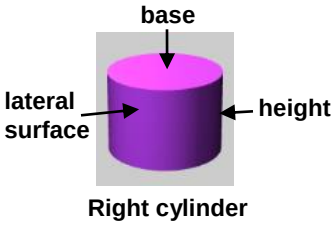
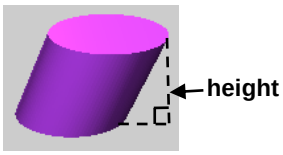
Vocabulary: Surface and Lateral Areas of Prisms and Cylinders

Vocabulary

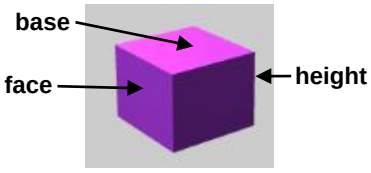


Right cylinder

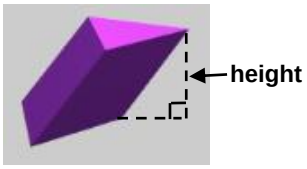


Oblique cylinder

- Cylinder – a three-dimensional figure with two congruent, circular bases in parallel planes and a curved lateral surface.
  - The *lateral surface* connects the two bases.
  - A cylinder that is straight up and down (the bases sit directly above one another) is *right*.
  - A cylinder that is skewed (tilted to one side) is *oblique*.
- Height (of a cylinder or prism) – the perpendicular distance between the two planes in which the bases lie.
- Lateral area – the sum of areas of the lateral surfaces of a three-dimensional figure.
- Net – a two-dimensional pattern of a three-dimensional figure that can be folded to form the figure.
- Prism – a three-dimensional figure with two congruent, polygonal bases in parallel planes and other faces that are parallelograms.
  - The bases of a prism determine its type.
    - For example, the figure to the right with rectangles for bases is a *rectangular prism*, and the one with triangles for bases is a *triangular prism*.
  - A prism that is straight up and down (the bases sit directly above one another) is *right*.
  - A prism that is skewed (tilted to one side) is *oblique*.
  - A prism with six congruent square faces is a *cube*.
  - The parallelograms that connect the bases are *lateral faces.*



Right rectangular prism



Oblique triangular prism

- Surface area – the sum of areas of all faces and curved surfaces of a three-dimensional figure.