Online Videos

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| Ch. 12 Surface Area and Volume of Solids | |
| 12.1 Explore Solids | [What is a Solid?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/introduction/What-is-a-Solid?)  [What is a Net?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/introduction/definition-net)  [How Do You Identify a Three-Dimensional Figure from a Net?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/introduction/three-dimensional-figure-from-net)  [What is a Prism?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/introduction/prism-definition)  [What is a Cylinder?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/introduction/cylinder-definition)  [What is a Pyramid?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/introduction/pyramid-definition)  [What is a Cone?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/introduction/cone-definition)  [What is a Sphere?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/introduction/sphere-definition) |
| 12.2 Surface Area of Prisms and Cylinders | [What is a Net?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/introduction/definition-net)  [What is a Prism?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/introduction/prism-definition)  [What is the Formula for the Surface Area of a Prism?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/prisms-cylinders-area/formula-prism-surface-area)  [How Do You Find the Surface Area of a Rectangular Prism Using a Net?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/prisms-cylinders-area/calculate-surface-area-rectangular-prism-net)  [How Do You Find the Lateral and Surface Areas of a Rectangular Prism?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/prisms-cylinders-area/rectangular-prism-lateral-surface-areas)  [How Do You Find the Lateral and Surface Areas of a Triangular Prism?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/prisms-cylinders-area/triangular-prism-lateral-surface-areas)  [What is a Cylinder?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/introduction/cylinder-definition)  [What is the Formula for the Surface Area of a Cylinder?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/prisms-cylinders-area/formula-cylinder-surface-area)  [How Do You Find the Surface Area of a Cylinder Using a Net?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/prisms-cylinders-area/calculate-surface-area-cylinder-net)  [How Do You Find the Lateral and Surface Areas of a Cylinder?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/prisms-cylinders-area/cylinder-lateral-surface-areas) |
| 12.3 Surface Areas of Pyramids and Cones | [What is a Pyramid?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/introduction/pyramid-definition)  [How Do You Find the Lateral and Surface Areas of a Regular Pyramid?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/pyramids-codes-area/regular-pyramid-lateral-surface-areas)  [What is a Cone?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/introduction/cone-definition)  [How Do You Find the Lateral and Surface Areas of a Cone?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/pyramids-codes-area/cone-lateral-surface-areas)  [How Do You Find the Lateral and Surface Areas of a Cone if You Don't Know the Slant Height?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/pyramids-codes-area/cone-lateral-surface-areas-without-slant-height) |
| 12.4 Volume of Prisms and Cylinders | [What is Volume?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/prisms-cylinders-volume/volume-definition)  [What is the Formula for the Volume of a Prism?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/prisms-cylinders-volume/prism-volume-formula)  [How Do You Find the Volume of a Rectangular Prism?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/prisms-cylinders-volume/rectangular-prism-volume-example)  [How Do You Find the Volume of a Triangular Prism?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/prisms-cylinders-volume/triangular-prism-volume-example)  [What is the Formula for the Volume of a Cylinder?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/prisms-cylinders-volume/cylinder-volume-formula)  [How Do You Find the Volume of a Cylinder?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/prisms-cylinders-volume/cylinder-volume-example) |
| 12.5 Volumes of Pyramids and Cones | [What is the Formula for the Volume of a Pyramid?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/pyramids-cones-volume/pyramid-volume-formula)  [How Do You Find the Volume of a Rectangular Pyramid?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/pyramids-cones-volume/rectangular-pyramid-volume-example)  [How Do You Find the Volume of a Triangular Pyramid?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/pyramids-cones-volume/triangular-pyramid-volume-example)  [What is the Formula for the Volume of a Cone?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/pyramids-cones-volume/cone-volume-formula)  [How Do You Find the Volume of a Cone?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/pyramids-cones-volume/cone-volume-example)  [How Do You Find the Volume of a Composite Figure?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/pyramids-cones-volume/composite-figure-volume-example) |
| 12.6 Surface Area and Volumes of Spheres | [What is a Sphere?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/spheres/sphere-definition)  [What is the Formula for the Surface Area of a Sphere?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/spheres/sphere-surface-area-formula)  [How Do You Find the Surface Area of a Sphere?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/spheres/sphere-lateral-surface-areas)  [What is the Formula for the Volume of a Sphere?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/spheres/sphere-volume-formula)  [How Do You Find the Volume of a Sphere?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/spheres/sphere-volume-example) |
| 12.7 Explore Similar Solids | [What is the Relationship Between the Surface Areas of Similar Solids?](http://www.virtualnerd.com/geometry/surface-area-volume-solid/congruent-similar/similar-solids-surface-area)  <https://www.youtube.com/watch?v=dyTOqEAn3H0> – Relationships between the Corresponding Side Lengths, Surface Area and Volume of Similar Solids |