

Finding Volume and Surface Area of Three Dimensional Space Figures

Mr. Lewis Prisco

lewis.prisco@browardschools.com

Grade Level: 8th

Time Frame: 10 hours

Learning Outcomes: Students will be able to find Surface Areas and Volumes for Prisms, Cylinders, Pyramids, Cones, and Spheres.

Prerequisite Knowledge: Students should know how to classify polygons, and be able to find area and perimeter of triangles, quadrilaterals, and circles.

Student Materials: cone.html, cylinder.html, rectangular_prism.html, rectangular_pyramid.html, sphere.html, triangular_prism.html, triangular_prism1.html, triangular_pyramid.html

Teacher Materials: cone.ggb, cylinder.ggb, rectangular_prism.ggb, rectangular_pyramid.ggb, sphere.ggb, triangular_prism.ggb, triangular_prism1.ggb, triangular_pyramid.ggb

Technology: Java, GeoGebra, LCD projector & student computers

Vocabulary: polyhedron, edge, vertex, tetrahedron, regular polyhedron, bases, lateral faces, lateral edges, prism, oblique prism, altitude, height, pyramid, height, cross-section sphere, center, great circle, cylinder, radius, right cylinder, oblique cylinder, altitude, cone

Sunshine State Standards: MA.B.1.4.1 MA.B.3.4.1