



# VOLUME & SURFACE AREA

## *of Solid Figures*

### FLY-SWATTER BINGO



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## Fly-Swatter Bingo!

**Objective:** Students will practice finding volume and surface area of the following solids: rectangular prisms, triangular prisms, trapezoidal prisms, pentagonal prisms, cylinders, square pyramids, triangular pyramids, hexagonal pyramids, cones, spheres, and hemispheres with this "Fly-Swatter" PowerPoint Bingo Game. For pentagonal and hexagonal bases, the base area is given. In some cases, the Pythagorean Theorem must be used to solve for a missing length. These problems were written for a high school level geometry class. There are 25 total problems included in this game.

**Directions:**

- 1) Distribute a student recording worksheet and bingo board to each student. There are 30 boards included; if you have more than 30 students, simply repeat a board.
- 2) Distribute a recording worksheet to each student to write down and solve equations as they appear. There are only 20 problems on the worksheet because there is almost always a winner by this point. If you need to keep going, they can continue their work on a separate sheet of notebook paper. I play until there are multiple winners.
- 3) Open the PowerPoint game to run. Click on any fly (or let the students throw a Koosh ball to pick a fly). Students solve the problem at their desk. You can also choose to work through the problems with the students as they come up, or choose a student to work the problem at the board while the other students work at their desk.
- 4) Click "Answer" to display the answer. Students look for this answer on their bingo board and cross it off. Click back to return to the fly screen and repeat until there is a winner.

**A student wins if they get 5 in a row, column, or diagonal. I typically awarded lollipops 😊.**

The screenshot displays the game interface. At the top is a fly screen with several flies and a fly swatter. Below it are four problem cards:

- Card 5:** Find the surface area of a triangular pyramid with a base of 36m and a slant height of 5m.
- Card 6:** Find the volume of a cone with a radius of 182 km and a height of H km.
- Card 8:** Find the volume of a rectangular prism with dimensions 10 cm, 16 cm, and 7 cm.
- Card 9:** Find the surface area of a sphere with a radius of 63 mm.

To the right is a 5x5 bingo board titled "VOLUME & SURFACE AREA FLY-SWATTER BINGO!". The board has numbers 1 through 25 in a grid. Below the board is an answer key table:

VOLUME & SURFACE AREA "FLY-SWATTER" BINGO!				
1,413.7	615.8	207.3	1,286.5	2,073.6
331.5	2,787.6	756	1,120	183.6
638.7	178.2	2,720	279.5	862.1
2,898.3	268.1	142.4	1,236.5	110
774	3,255	452.4	604	2,261