The Trouble with Tribbles
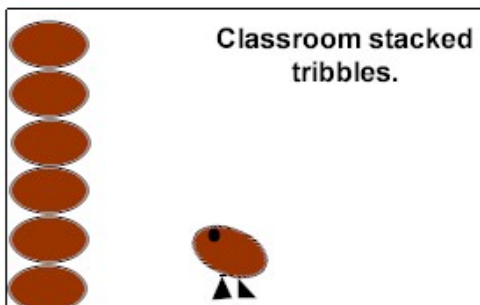
Name_____

Measurement and Volume

Tribbles are cute, furry creatures that exist in the world of *Star Trek*. A tribble can produce a litter of 10 babies every 12 hours. One tribble gets trapped in the grain hold of the starship Enterprise for 3 days. Science officer, Spock, proclaims that there were 1,771,561 tribbles in the grain hold at the end of this time.

1. The average tribble is approximately the size of a 12 cm by 12 cm by 9 cm rectangular solid. Determine the volume of an average tribble. _____

2. How many cubic centimeters are in one cubic meter? _____
_____

3. How many tribbles would fit into one cubic meter of space? Round your answer as to not include portions of a tribble. _____

4. Measure your classroom to determine its width, length and height in meters (or you may use a typical classroom measurement of 10m by 8m by 3 meters.)
Width = _____   Length = _____   Height = _____

5. Calculate the volume of your classroom in cubic meters. _____

6. How many tribbles are needed to fill your classroom to the ceiling?_____

7. If the height of a tribble is 9cm, how many tribbles can be stacked one on top of the other from the floor to the ceiling in your classroom? _____

8. What is the volume, in cubic meters, of the grain hold on the starship Enterprise? _____

9. How many classrooms will fit into the grain hold?_____

Classroom stacked tribbles.

10. If the grain hold is a cube, what are the approximate measurements of the grain hold, in meters? _____
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