**Names:**

**Measurement Math Lab**

**Purpose:** To investigate surface area and volume of a variety of 3D shapes

**Materials:**

One piece of LARGE chart graph paper

One 30 cm ruler

One tape measure

Formula sheet

Pencil

3D shapes (*provided for you*)

**Procedure:**

Around the room there will be a variety of 3D shapes. In assigned groups/partners complete the following for each of the shapes :

1. **Draw** each shape on your large grid paper.
2. **Measure** the pertinent **dimensions** of each shape (ex height, length, width etc) and **label** your diagram appropriately. *USE* ***METRIC*** *UNITS*
3. **Calculate** **volume** of each shape and **record** it your diagram (include units)
4. **Calculate surface area** of each shape and **record** it on your diagram (include units)
5. **Choose** at least **two** shapes and **convert** your measurements into***IMPERIAL UNITS***. **Record** this on your diagram.

Math 10C

Formula Sheet

|  |  |
| --- | --- |
| **Perimeter:**  Rectangle:  Circle (circumference):  **Area:**  Square:  Rectangle:  Triangle:  Circle:  Surface Area of a Cylinder:  Surface Area of a Cone:  Surface Area of a Sphere:  **Volume:**  Cube:  Rectangular Prism:  Triangular Prism:  Cylinder:  Cone:  Pyramid:  Sphere: | **Trigonometry:**   * **Be sure your calculator is set to Degree Mode**       **Linear Functions:**  Slope:  Slope / y-intercept form:  Point / Slope form:  General Form: |