Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Unit 9 – Surface Area, Lateral Area, and Volume**

Monica

Geometry Period:\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Directions:**

1. **Cut out all of the nets that were provided to you. Label each side with an appropriate dimension (l, w, h, r, etc.). Use the diagrams to help you.**
2. **Sketch the net for each corresponding figure and identify the number and type of shapes that make up the 3-D figures. (Identify the area of each shape.)**
3. **Using the area of the faces as your guide, develop the surface area and lateral area formulas for each shape.**
4. **Using volume formula as your guide, develop the volume formula for each shape. (Note: The cube and sphere are done for you.)**

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| --- | --- | --- | --- | --- | --- |
| **Name of 3-D Figure** | **Sketch of Net** | **Number and Type of Shapes that make up the Faces (and the Area of each face)** | **Surface Area** | **Lateral Area** | **Volume** |
| **Cube**    *s* |  | 6 congruent squares with length *s* (Area of one square = ) | **SA =**  **SA =** | **SA =** | **V =**  Where B is the area of the base  **V =** |
| **Rectangular Prism** |  |  |  |  | **V =**  Where B is the area of the base |
| **Cylinder** |  |  |  |  | **V =**  Where B is the area of the base |
| **Cone** |  |  |  |  | **V =**  Where B is the area of the base |
| **Square Pyramid** |  |  |  |  | **V =**  Where B is the area of the base |
| **Sphere** |  |  | **SA =** |  | **V =** |