**GEOMETRY NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**LATERAL/SURFACE AREA/ VOLUME REVIEW**

**PRISMS**

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| Find the lateral area of each prism. Round to the nearest tenth if necessary.  |
| 1.
 | 1.
 | 1.
 |
| Find the **surface area and volume** of each prism. Round to the tenth if necessary.  |
| 1.
 | 1.
 | 1.
 |

**CYLINDERS**

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| Find the **surface area and volume** of a cylinder with the given dimensions. Round to the nearest tenth.  |
| 1. r = 10 in., h = 12 in.
 | 1. r = 5 ft., h = 20 ft.
 | 1. d = 8 m, h = 7m
 |
| Find the **surface area and volume** of the cylinder. Round to the nearest tenth.  |
| 1.
 |
| Find the radius of the base of each cylinder.  |
| 1. T = 603.2 m2, h = 10 m
 | 1. T = 226.2 cm2, h = 5 cm
 |

**PYRAMIDS**

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| Find the **surface area and volume** of each regular pyramid. Round to the nearest tenth if necessary.  |
| 1.
 | 1.
 |
| 1.
 | 1.
 |
| 1.
 | 1.
 |

**CONES**

|  |
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| Find the **surface area and volume** of each cone. Round to the nearest tenth if necessary.  |
| 1.
 | 1.
 | 1.
 |
| 1. Find the surface area of a cone if the height is 8 feet and the slant height is 10 feet.
 |
| 1. Find the surface area of a cone if the height is 12 inches and the diameter is 27 inches.
 |
| 1. You purchased a conical hat when shopping at Party City. The basic frame of the hat is 16 hoops that gradually diminish in size and covered in paper. If the hat has a diameter of 50 cm. and a slant height of 32 cm., what is the lateral area of the conical hat?
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**SPHERES/HEMISPHERES**

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| Find the **surface area and volume** of each sphere or hemisphere. Round answers to the nearest tenth if necessary.  |
| 1.
 | 1.
 |
| Find the **surface area and volume** of each sphere or hemisphere. Round answers to the nearest tenth if necessary. |
| 1. a hemisphere with a radius of the great circle of 8 yards.
 |
| 1. a hemisphere with a radius of the great circle of 2.5 mm.
 |
| 1. a sphere with the area of the great circle of 28.6 in.

**Identify the following solids.** 1. A. rectangular prism

B. rectangular pyramidC. triangular prismD. triangular pyramid1. A. cylinder

B. hexagonal PrismC. pentagonal PrismD. hexagonal Pyramid |

1. Baseballs and softballs come in different sizes for different types of leagues. If the diameter of a baseball is 3 inches and a softball has a diameter of 3.8 inches, find the difference between the volumes of the two balls. Rounds to the nearest tenth.
2. Find the volume of a rectangular prism that is 10 cm long, 14 cm wide, and 19 cm high. What is the effect on the volume of the rectangular prism when each dimension is doubled.
3. Find the surface area and volume of the following composite.



1. Brandon made a model of a tower as shown below. It is composed of a square prism and a square pyramid. The height of the pyramid is 2 inches. He would like to paint the model tower and knows one can of paint covers 900-1000 square inches. How many cans of paint does Brandon need to give the model tower one coat of paint?
2. A hot water heater is in the shape of a cylinder. Find the amount of insulation need to cover just the sides of the hot water heater.

