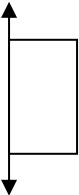
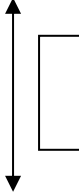
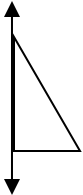
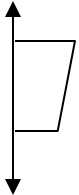



UNIT 10: SPATIAL REASONING

****NEED CALCULATOR & SHOW ALL CALCULATIONS****

| LESSON | TOPIC | BOOK / VIDEO | CC STANDARDS | HOMEWORK |
|--------|--|--------------|-----------------------------------|---------------------------|
| Day 1 | Solid Geometry Introduction | 10-1 | G-GMD.B.4 7.G.A.3 | WORKSHEET 10-1 |
| Day 2 | Cylinders & Prisms | 10-4 10-6 | G-MG.A.1 G-GMD.A.1 | WORKSHEET 10-2 |
| Day 3 | Cones & Pyramids | 10-5 10-7 | G-GMD.A.2 G-GMD.A.3 | WORKSHEET 10-3 |
| Day 4 | Quiz 1; Spheres | 10-8 | G-MG.A.1 G-GMD.A.2 | WORKSHEET 10-4 |
| Day 5 | Word Problems & Applications – Density, Modeling, Pouring Rate, Design | | G-GMD.A.3 G-MG.A.1,2,3 | WORKSHEET 10-5 |
| Day 6 | More Word Problems & Applications; Review for Test | | 7.G.B.4;8.G.B.7&9; MP.6 & MP.7 | REVIEW PACKET |
| Day 7 | Test | | | BRIDGE TO UNIT 11; CR #10 |

| DAY | MAIN POINTS / FORMULAS TO REMEMBER | QUESTIONS AFTER HMWK |
|--------|---|----------------------|
| 10-1 | <p>Draw each: right square prism oblique cylinder right regular triangular prism</p> <p>Solids can be formed by</p> <ul style="list-style-type: none"> • 2 bases: translating the base into a _____ plane • 1 or 2 bases: _____ congruent or similar base areas • 1 base: _____ a base from a point • Circular base(s): _____ a figure about a line/axis. Draw each rotation and name/describe the solid created: <div style="display: flex; justify-content: space-around; align-items: center;">      </div> <p>_____</p> | |
| 10-2 | Complete Cylinders and Prisms on Graphic Organizer | |
| 10-3 | Complete Cones and Pyramids on Graphic Organizer | |
| 10-4 | Complete Spheres on Graphic Organizer | |
| 10-5 | Density = _____ Watch out for _____ conversions in word problems! | |
| Review | | |

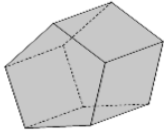
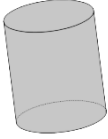
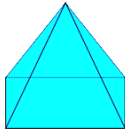
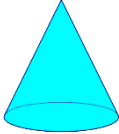

Geometry Unit 10 Graphic Organizer

Vocabulary Reminders:

- Face, Edge, Vertex
- Base vs. Lateral Face
- Net
- Regular
- Right vs. Oblique

Remember solids can be created by translating, rotating, stacking, or dilating

- Lateral Area LA
- Surface Area SA
- Slant Height ℓ
- Altitude H vs. Apothem a
- Cross Section
- Perimeter P
- CARD for circles
- Great Circle & Hemisphere
- Volume V
- Density

| | Geometric Solid | | | | |
|---|---|---|--|---|---|
| Properties | Prism | Cylinder | Pyramid | Cone | Sphere |
| Shape of Base & Relationship | | | | | |
| Number of Bases | | | | | |
| Ways Solid Can Be Formed | 1. 2. | 1. 2. 3. | 1. 2. | 1. 2. 3. | 1. |
| Shape of Lateral Faces | if right → if regular → | if right → | if right → if regular → | if right → | |
| Shape of Cross Section (\parallel to base) | | | | | Great Circle is centered at the _____ of the sphere |
| Possible Shape(s) of Slice | | | | | |
| Formula for Volume <div style="border: 1px solid black; padding: 5px; width: fit-content;"> B = _____ of base H = _____ of solid </div> | | | | | |
| Example – draw in one each as appropriate: altitude h , axis, slant height ℓ , apothem a , radius r |  |  |  |  |  |
| Net (use to find surface area) | | | $\ell =$ | $\ell =$ | No net, but formula for surface area of a sphere: $SA = 4\pi r^2$ |

