**Fortnite Fortress**

The developers of Fortnite have asked you to create a new Fortress in Lucky Landing. Your Fortress must include 6 polyhedrons (2 rectangular prisms, 1 cube, 1 square pyramid, and 2 cylinders) but don’t hesitate to include more! They have also asked you to draw the front and top view in 2D and provide the total surface area of the Fortress.

**Fortress Checklist:**

* 2 rectangular prisms
* 1 cube
* 1 square pyramid
* 2 cylinders
* front view labeled
* top view labeled
* at least 6 nets drawn and labeled
* surface area calculations with all work shown (attach)

**Due Date:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Stem** | **1** | **2** | **3** | **4** |
| **Understands mathematical concepts and relationships.** | No formulas, labels and nets. Or wrong formulas used. | Most formulas, labels and nets present with minor error. | All formulas, labels, and nets present with minor errors. | All formulas, labels, and nets are present with no errors. Extra calculations are shown for extra polyhedrons. |
| **Uses mathematical reasoning to analyze and solve problems.** | Does not find the total surface area. | Surface area calculated but with errors. Student may require support to solve equations. | Surface area calculated with no errors. | Surface area calculated with no errors and includes extra polyhedrons. |
| **Develops & applies appropriate & efficient strategies for computation.** | No calculations for surface area are completed or includes many incomplete calculations. | Calculations are shown but include errors. Or surface area is found but no work is shown.  Student may require support to solve equations. | Calculations for surface area are complete with work shown. A few errors may be present. | Calculations for surface area are complete with work shown. No errors are found.  Extra calculations are completed for additional polyhedrons. |
| **Models, represents & communicates mathematical ideas.** | Fortress in incomplete (missing required views, nets or polyhedrons). | Fortress is modeled in 2D but missing labels and some nets are drawn but with errors. | Fortress is modeled in 2D with labels and nets are properly drawn. A few errors may be found. | Fortress is modeled in 2D with labels and nets are properly drawn. No errors are found. A 3D model is created and project includes extra nets. |

**Front View:**

**Top View:**