$\qquad$
$\qquad$
Question: How much will it cost to redecorate the walls of this classroom?

## Skills/Formulas:

- SUM • use row/column lock \$
- ROUNDUP
- Using multiple tables
- format \$

Assignment: Here comes the TBC (Tahanto Beautification Committee) once again. Now that we have reseeded the grass and put in new flooring in our classroom, now let's improve the walls. You will calculate the area of the walls of this classroom. Then you will research a variety of painting and wallpaper options (www.homedepot.com) and create a spreadsheet that calculates the total cost of each option. You will need to provide links of each product. All the paint should be interior flat/matte. Assume that we will be redecorating behind anything affixed to the walls, i.e. the whiteboards \& bulletin boards. You will submit a sheet with multiple tabs and a reflection document.

## Dimensions to use

If shooting for Proficient, use $30^{\prime} \times 39^{\prime}$. If aiming for Exceptional, include the doorway ( 5 ' x $8^{\prime}$ ) and that the back comes in about 2.5 ' on each side.

You will need to make a few tables. One will tell the dimensions of the walls and how you calculated it. The second and third tables will calculate the cost of paint and supplies. The fourth will give cost for projects with specific combinations. You will have a minimum of four options.

Here are some sample tables. All titles are for example only. You should pick your very own flavors. Be specific.

## Dimensions Table

(Advanced: include doorway and back "bumps")


## Applied Math

Repainting Project

## 

Paint Table

| Paint | Sold <br> by the <br> Unit | Cost per <br> Unit | Unit Covers <br> (sq ft) | Units <br> Needed | Cost |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Primer |  |  |  |  |  |
| Base 1: Inexpensive | gallon | $\$ 83.89$ | 40 | 8 | $\$ \$ \$ \$$ |
| Base 2: Expensive |  |  |  |  |  |
| Inexpensive <br> Wallpaper |  |  |  |  |  |
| Expensive <br> Wallpaper |  |  |  |  |  |

(Exceptional: add more options of different material)
Supplies Table: This table is a list of supplies you will need to complete the chosen project.

|  | Item | Cost | Item | Cost |
| :---: | :---: | :---: | :---: | :---: |
|  | Exacto Knife |  | Rollers |  |
|  | $\ldots$ |  | ... |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Formula | Wallpaper Supplies Total |  | Painting Supplies Total: |  |

Project Table: You need to calculate the four (minimum) options here.

| Combination | Primer <br> Cost | Supplies <br> Cost | Base <br> Cost | Total Project Cost |
| :--- | :--- | :--- | :--- | :--- |
| Inexpensive <br> Paint: | $=\mathrm{A} 3$ | $=\mathrm{D} 5$ |  |  |
| $\ldots$ |  |  |  |  |

## Applied Math

Repainting Project

## Reflection Questions on Google Doc:

1. How much did you expect the repainting project to cost? How did the actual costs compare to your expectation?
2. How did the costs of this project compare to the flooring project? Be specific. For example, compare the least expensive options, or the most expensive options, etc.
3. How much experience do you have painting or wallpapering rooms? Explain.
4. How much paint/wallpaper would you have left over on a particular project?
5. Other observations.

Rubric

| A: Advanced | Proficient Plus:. Actual samples of paint color and wallpaper inserted into the <br> spreadsheet (or shading matches). Notes include description of how you <br> calculated the area of wall space. More options for décor; must be different <br> material and costs. Reflections are highly specific and detailed. |
| :--- | :--- |
| B: Proficient | Excellent use of shading. Unused cells are deleted. Data is accurate. <br> Organization is clean. Spreadsheet auto calculates. Four options with total costs <br> clearly marked. Reflections are well written. |
| C: Basic | Some missing data. Not full auto calculation. |
| D: Developing | Significant portions are missing from spreadsheet. |
| F: Inadequate | Incomplete by missing most information. |

