**Lesson 3: Activating Activity**

In the very first lesson we determined how much water was needed to fill a rectangular shaped pool and how much it would cost. While looking at this pool, I have also decided that the inside surfaces of the pool need to be painted or tiled. I can paint the surface with a special pool paint that is waterproof or I can tile it. I really love the way the tiles will look, but I know it will cost a lot more money. How much more is it to tile the pool than paint the pool?

![C:\Users\eligootee\AppData\Local\Microsoft\Windows\INetCache\IE\G928TUTE\pool[1].png]()What information do I need to know in order to determine how much would cost to tile and how much it would cost to paint?

Surface Area: Introduction and Explanation

Discussion Questions

What is area? What is surface area?

When is area used? When is surface area used?

What is a two-dimensional object? Draw a two-dimensional object. What is a two-dimensional object in your daily life?

What is a three-dimensional object? Draw a three-dimensional object. What is a three-dimensional object in your daily life?

**Formula Discussion:**

Use the surface area formulas on the GED formula sheet.

1. Write the formulas for each figure.
2. Label the variables for each formula.
3. Describe what each piece of the formula means, draw a net to help with descriptions.

Fill in the chart:

|  |  |  |  |
| --- | --- | --- | --- |
| Figure | Volume Formula | Name each variable | Describe each piece of the formula using the help of a net |
| Rectangular Prism | SA= |  |  |
| Right Prism | SA= |  |  |
| Pyramid | SA= |  |  |

How are area and surface area similar? How are they different?

Discussion: Use the nets and surface area formulas above to discuss the pieces of each of the formulas. Label the nets with each piece of the formulas.

Notes: