Group 5: Dan, Amy, Marlene, Jess

ED 3221-01

Geometry

MN 5th Grade Math Standard: Geometry & Measurement

* Determine the surface area of rectangular prisms in various contexts.

5.3.2.2

* Use various tools and strategies to measure the volume and surface area of objects that are shaped like rectangular prisms.

**Objectives:**

* **Using prior knowledge about surface area, students will predict how much 2-D material it takes to cover a 3-D rectangular prism.**

**Outcomes:**

* **Using prior knowledge about surface area, students will predict how many 4”x4”x4” boxes can be covered with 30”x15” wrapping paper.**
* **How many rolls do I need for 8 packages? Is one enough?**

**Materials:**

* **Paper, Calculator, and Pencils**
* **Rolls of wrapping paper**
* **Boxes (enough for one for each group)**
* **Scissors**
* **Scotch tape**

**Launch:**

**I was Christmas shopping and found the perfect gift for every one of my eight siblings. The mittens fit perfectly in 4”x4”x4” boxes. But I was done shopping for everyone on my list and all I could think about was getting home. But I remembered I was all out of wrapping paper. I found the perfect Christmas wrapping. I had to make sure that I get enough so I don’t have to come back out into the chaos of shopping. The rolls I found were 30”x15”.**

**How many rolls do I need?**

**Is one roll going to be enough?**

**What is your prediction?**

**Explore:**

**Students will make a prediction about what they think the solution could be. Collect data. Problem solve using their own methods. Test their theory by wrapping the boxes with the wrapping paper. They will share their data with their classmates.**

**Summarize:**

**The students will record their methods and findings in their Math journal.**

**Tomorrow we will be working on wrapping bowling balls.**