Making Sense of Problems and Persevering

In life, we are often confronted with situations that look daunting and tasks that appear undoable. What do we do with them? It is easy to think about giving up, throwing in the towel, and telling ourselves “It wasn’t that important to me in the first place.” Would Vincent Van Gogh, Kobe Bryant, Apple, Bill Gates, or Amazon be who they are if they had the ‘give up’ attitude? No, they did not. They kept trying, and trying, and trying. This is perseverance. The put forth their all to make sense of the problems they had and find solutions that worked. These skills are important in every aspect of life, even in the math classroom. Here are some strategies to try when you come across things you are struggling with:

- Try a different strategy
- Call a friend for help
- Check your work
- Take a break – don’t forget to come back
- Remember your goal – why is there a solution needed?
- Track your work so that you won’t repeat what doesn’t work

**Key Content/Modeling**

**MP1 – Make sense of problems and persevere in solving them.**

I can analyze math problems reflective of real-life circumstances. I can look for and make sense of problems and describe their solutions in multiple ways. I can work to find a solution with multiple steps and not give up after one try.

**What am I learning?**

I can apply my understanding to similar and non-similar problems and come up with a viable solution.

**How do I know I learned?**

I can create my own problems and test them against what I know and what I have learned.

**Extra Learning Opportunities**

**Ponder this:** Would you rather take a penny that doubles in value every day for 30 days or a Million dollars right now? In what situation would taking the doubling the penny over 30 days be beneficial? In what situation would taking the million dollars today?

**Show me what you know (Proof of learning)**

Create a poster that represents your thinking – show 2 ways.
- Diagram/model
- Picture
- Mathematically

**Materials:** Pencil and Paper

**You Try**

**Task Instructions:**

In shops with lots of ice-cream flavors there are many different flavor combinations, even with only a 2-scoop cone. With 1 ice-cream flavor there is 1 kind of 2-scoop ice cream, but with 2 flavors there are 3 possible combinations (ex: vanilla/vanilla, chocolate/chocolate, and vanilla/chocolate).

- How many kinds of 2-scoop cones are there with 10 flavors?
- What about ‘n’ flavors? [‘n’ = any number of flavors].

**Materials:** Pencil and Paper

**Quick Write:**

Will the math you used to find the number of scoops work in other businesses? Ex: curtain colors, sandwich shops, pet store. How do you know? What information is needed to make an exact determination of the possible combinations a person has?