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Exponents and Scientific Notation Unit

LAP 3 Reflection

 To counter the skills-heavy focus of the beginning of this unit, I started the first day of this lesson with a real-world problem about exponential growth (see the attached supplementary materials). The starter went really well! It was great to see my students engage in problem-solving that allowed them to share different methods, which they hadn’t gotten to do in a while. They really shine when I give them activities like that, and it felt like a nice reminder of how we should be acting as a class. Then we went over the homework together and started working with the exponent cards. Gen and Kenzie made a stink about sitting with their new groups, which had been happening a lot lately. After talking with them both, Gen eventually sat with her group but Kenzie still refused to, so she earned a zero for the day. I told them that there would be collaborative work required for the next two days, so they would just have to get used to it. Felix, on the other hand, did great with the starter and the activity. He led the class in enthusiasm and engagement, and it was nice to see him get back on track after a rough start to the unit. Despite the drama over seating, I liked the groups I made; they were a good combination of abilities and personalities.

Because we spent so much time on the starter, which I was happy to do, students only got to begin sorting the exponent cards at the end of the first day. It took a little while for them to understand what I meant by an equivalent set, but after some modeling and circulating, each group got on track. On the second day, each group finished sorting their cards and was much more engaged in the task than they were yesterday. I think this could partially be attributed to the fact that they had more time on the second day to really dive into the activity. Each group finished at different times, so I just went around and checked each group’s work instead of bringing the class together to go over all the sets. Most of the groups played Go Fish with their cards for a little, but they weren’t that into it. None of them tried Exponent Rummy, and they honestly seemed pretty done with the cards as the period wore on. I was a little disappointed that they weren’t that into the card games since I thought they would really like them, but they had done good work sorting the cards, so I at least knew that they got the idea of equivalent expressions. I think that having so many cards (there were 55 of them) was intimidating for playing games. Plus, the cards are pretty small so they were hard to hold. If I were to do this again, I would make the cards bigger and I would maybe take out some of the sets when it was time to play the games.

Sensing their boredom with the cards, I decided to end this lesson on the second day instead of keeping if it going for a third day. At the end of the second class, I went over the exit slip with them and told them that, because of time, we were actually going to do it to start class tomorrow, as more of an entrance slip. The next day, I passed out the entrance slips as students entered the room. I had differentiated the entrance slips for each student; every student had a different exponential expression that would appropriately challenge them. I think this was some of the best and most comprehensive differentiation I had done this year. Before they completed their entrance slips, I showed them a model, since yesterday I had only showed them the blank template. As opposed to my original template, I wrote in the names of the different exponent rules on all of their slips instead of having them write them in themselves. I thought that this would make the assignment a little clearer. I was pleasantly surprised to see students working very hard on their entrance slips. I went around and graded their slips as they finished and circled any mistakes they had made. Most of them were quickly able to figure out how to correct their mistakes, which was a good sign of understanding. Besides Edward and Gen, everyone got a ¾ or above! That demonstrated to me that students had a good grasp on basic exponent rules and equivalent expressions. I liked that that assignment allowed students to generate more original thought than is usually required when simplifying exponential expressions. They had to use the exponent rules they had learned, but they got to decide *how* they wanted to use them.