Precipitation Towers (Basic): Student Capture Sheet

Engage:
1. What do you know about precipitation? Do all places on Earth get the same amount and type? Why or why not?

Explore:
I am graphing the location: __________________________

2. Which towers (months) are the tallest (have the most precipitation)? __________________________

3. Which towers (months) are the shortest (have the least precipitation)? __________________________

4. What does the overall pattern look like? Are the towers all about the same height? Or is there a time of year that is clearly very rainy or very dry compared to the rest of the year? __________________________

Compare two different locations. My second location is __________________________

5. Do the towers for the two locations look the same or different? __________________________

6. Describe how they are the same or different. __________________________

7. Which location gets more rain for the whole year? __________________________

Explain:
8. As you look around the room at different towers and discuss all of the locations as a class, write down three observations.
   - __________________________
   - __________________________
   - __________________________
   - __________________________
   - __________________________
Precipitation Towers (Intermediate): Student Capture Sheet

Engage:
1. What do you know about precipitation? Do all places on Earth get the same amount and type? Why or why not?
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

Explore:
I am graphing the location: __________________________

2. Which months have the most precipitation? __________________________
3. Which months have the least precipitation? __________________________
4. What does the overall pattern look like? Is there about the same amount of precipitation in all months, or are there times of the year that are noticeably wetter or drier? __________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

5. How much difference is there between the wettest and driest month? Calculate the range of the data. ______
   Compare two different locations. My second location is __________________________

6. Is the pattern of the data the same or different? Describe how. __________________________
   ____________________________________________________________
   ____________________________________________________________

7. Are the ranges of the two data sets the same or different? Describe how. __________________________
   ____________________________________________________________
   ____________________________________________________________

8. Which location gets more precipitation for the whole year? __________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

Bonus:
9. Move the blocks around to make the towers as even as possible (a physical way to find an average/mean). What do you think the average per month is? __________________________
10. Now calculate the average mathematically (divide the total precipitation for the year by 12 months). Is this different from what you got by the physical method? Why or why not? __________________________
    ____________________________________________________________
    ____________________________________________________________
Explain:
11. As you look around the room at different towers and discuss all of the locations as a class, write down five observations.
   - ____________________________________________________________
   - ____________________________________________________________
   - ____________________________________________________________
   - ____________________________________________________________
   - ____________________________________________________________

Extend:
12. Watch the animation of global precipitation from the Global Precipitation Measurement Mission. What are three interesting patterns that you notice, or questions you have about the data?
   - ____________________________________________________________
   - ____________________________________________________________
   - ____________________________________________________________

13. Based on watching one or more of the other extension videos, or on your own background knowledge, what do you think is the most important reason we need to measure precipitation around the world? Why do you think this? ____________________________________________________________
   - ____________________________________________________________
   - ____________________________________________________________
   - ____________________________________________________________
   - ____________________________________________________________