Name: _____ Date: _____ Period: _____

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.

  ▪ _____

  _____

  ▪ _____

  _____

  ▪ _____

  _____

Name: _____ Date: _____ Period: _____

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? _____

   _____
   _____
   _____
   _____
   _____