Name: Date:

Precipitation Towers

# 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:

1. Which months have the most precipitation?
2. Which months have the least precipitation?
3. 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?
4. 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

1. Is the pattern of the data the same or different? Describe how.
2. Are the ranges of the two data sets the same or different? Describe how.
3. Which location gets more precipitation for the whole year?

**Bonus:**

1. 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?

1. 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:

1. As you look around the room at different towers and discuss all of the locations as a class, write down five observations.
2.
3.
4.
5.
6.

# Extend:

1. 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?
2.
3.
4.
5. 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, and why do you think this?