Neʻepapa Ka Hana Mathematics Resources
Professional Development Course
Video 6 *Example Activities*

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Let's see how our classmates can help us to learn about our school.

1. How many students are in your class? _____

2. For the following colors, find the number of students **in your classroom** who consider it to be their favorite.

Color	Number of students
Black	
Blue	
Brown	
Green	
Grey	
Orange	
Purple	
Red	
White	
Yellow	
Other	

3. How many students are in your school? _____

4. For the following colors, **predict** the number of students **in your school** who consider it to be their favorite. Use your data from part 2 by assuming that your classroom is a good sample of the school.

Color	Number of students
Black	
Blue	
Brown	
Green	
Grey	
Orange	
Purple	
Red	
White	
Yellow	
Other	

Local schools tell us a lot about the communities they're in. Let's look at some official data for Hawaiʻi's schools. Go to the **School Status & Improvement Report (SSIR)** from **Accountability Resource Center Hawaiʻi (ARCH)** at `http://arch.k12.hi.us/school/ssir/ssir.html` and choose a year, district, and high school.

1. Year: _____

2. District: _____

3. School: _____

Take a look at the ethnic data of the school. Suppose that the students in that school came from and represents a community of 5000 people.

4. About how many people from that community are *Native Hawaiian*?

5. About how many people from that community are *Black*?

6. About how many people from that community are *Filipino*?

7. About how many people from that community are *Japanese* **or** *White*?

For this activity, you will need a dice and a colored spinner. If you do not have a colored spinner, then you can make one with some crayons, a paperclip, a pencil, and the printout on the last page.

1. Roll the dice and spin the spinner. Then record your result. Repeat this experiment 15 times.

Trial	Dice roll	Spinner spin
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

2. Write down all of the possible combinations of dice rolls and spinner spins. If you were to repeat the experiment 250 times, how many of each combination would you expect to show up?

Dice roll	Spinner spin	Number of expected observations

| Dice roll	Spinner spin	Number of expected observations

(You don't need to use every row.)

(Optional) Try the experiment again with a different spinner.

3. Roll the dice and spin the spinner. Then record your result. Repeat this experiment 15 times.

Trial	Dice roll	Spinner spin
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

4. Write down all of the possible combinations of dice rolls and spinner spins. If you were to repeat the experiment 250 times, how many of each combination would you expect to show up?

Dice roll	Spinner spin	Number of expected observations

Dice roll	Spinner spin	Number of expected observations

(You don't need to use every row.)

Choose one of these spinners and color in the spaces. You can also draw your own spinner with the bottom right one. To spin, just hold a paperclip between the center of your spinner and the tip of a pencil, and then flick the paperclip around.
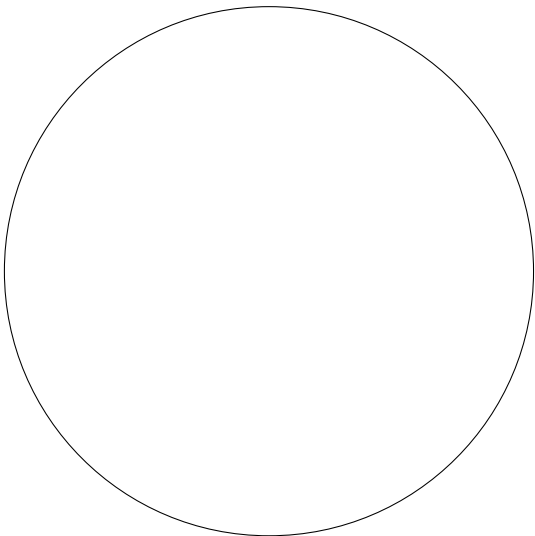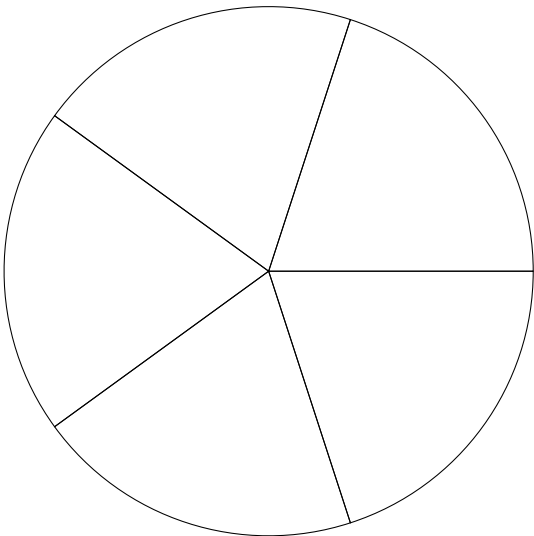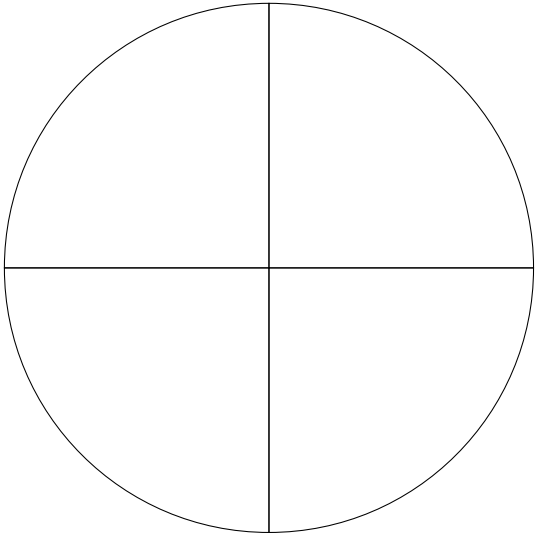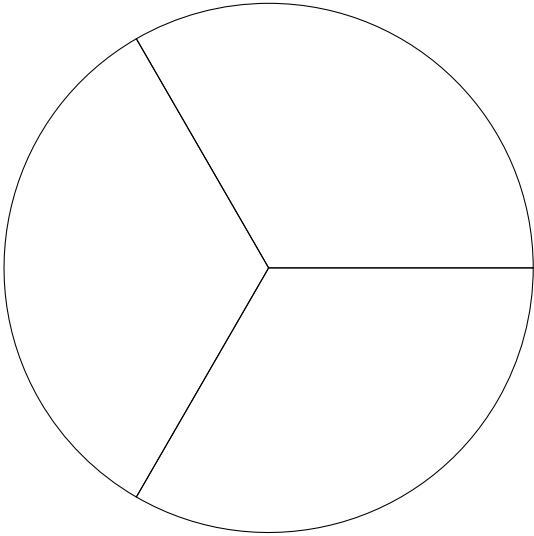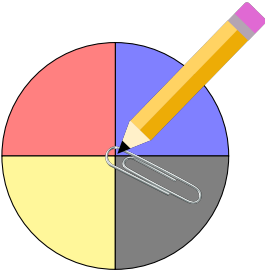
Let's learn about the lunch preferences at our school

1. First, let's choose a portion of the lunch the focus on. It can be the main course, side dish, dessert, drink, or any-thing that has options available to all students. For example, if all students have to get bread as a side dish, then you cannot chose "side dish" as the portion that you focus on. But if students can choose between regular milk, chocolate milk, and juice as their drink, then "drink" can be the portion that you focus on.

   Portion: _____

2. During lunch time, talk to 20 random students and ask them what option did they get for the portion you chose in part 1. Count how many students chose each option.

Portion	Number of students

3. If 175 students ate lunch today, what would have been the most popular choice?

4. Of those 175 students, how many chose to get the most popular choice?