STUDENT MATERIALS

PART 1 – CREATE A TWO-WAY TABLE

Michaela made a claim that middle school helps students decide what they want to be when they grow up. She decided to test her claim by surveying random students at her school.

Here are the questions she asked them:

- What grade are you in?
- Do you know what you want to be when you grow up?

Use the facts below to complete Michaela's two-way table.

- Michaela surveyed a total of 35 Grade 6 students.
- Of all of the students Michaela surveyed, 90 knew what they wanted to be when they grew up.
- Of the Grade 7 students Michaela surveyed, 30 knew what they wanted to be when they grew up and 15 did not.
- Of the Grade 8 students Michaela surveyed, 40 knew what they wanted to be when they grew up.
- In all, Michaela surveyed 130 students

	Know what they want to be	Do NOT know what they want to be	TOTAL
Grade 6 Students	20	15	35
Grade 7 Students	30	15	45
Grade 8 Students	40	10	50
TOTAL	90	40	130

PART 2 – ANALYZE A TWO-WAY TABLE

Mable was at a football party when the University of Michigan was playing Michigan State. Before the game, each fan completed a survey and answered these questions:

- Are you a Michigan State fan or a University of Michigan fan?

- Do you like the color green or blue better?

Mable created a two-way table of the results.

	Prefers BLUE	Prefers GREEN
University of Michigan Fan	120	15
Michigan State University Fan	12	80

Answer the following questions based on Mable's data. **Provide clear mathematical evidence to support your claims in your responses.**

1. Each fan will receive a cookie with the school's mascot. What percent of the cookies that are ordered should be <u>Michigan State University cookies</u>? Remember to support your claim.

   The percent of the cookies ordered for Michigan State University should be 95.

   12+80=95

   95 = amount of MSU fans

2. If Mable chose a person at random, which person is Mable more likely to find at the party?
   - A University of Michigan fan who prefers green

     or
   - A Michigan State University fan who prefers blue

   Mable is more likely to find

   ☑ A University of Michigan fan who prefers green

   ☐ A Michigan State University fan who prefers blue

   Support for your claim:

   Mable would most likely find a university of Michigan fan who prefers green because there was 15 that voted for that, Michigan State university fans who prefer blue are less likely to be found, 12 votes for blue.

3. Ten (10) more University of Michigan fans (who prefer blue) showed up late to the party. How many total people were at the football party after the late fans arrived?

   The total of people after the late people arrives is 237.

   $120 + 90 + 15 + 12 + 10 = 237$

PART 3 – REFLECTION

Respond to each of the following reflection questions:

1. What strategies did you use, if any, to check that the two-way table you completed in Part 1 was correct?

   I subtracted the total from a number I already had to find other numbers.

   I added numbers to find a total.

2. What did you find challenging or difficult about the assessment items? How did you overcome those challenges?

   I found finding the percent difficult.

Performance Assessment MA.8.3 – Table Talk
Grade 8

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