Statistics & Probability Task Cards 8.SP.4

20 Task Cards, Recording Sheet, Answer Sheet





Created by:

Math in the Midwest

8.SP.4

Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables.

Determine the vocabulary word that describes:
The number of times a variable appears in a data set

Determine the vocabulary word that describes:
Data that can be grouped into categories

8.SP.4

Determine the vocabulary word that describes:
Percent or Proportion of observations within a category of a data set 8.SP.4

Use the two way frequency table to answer the question:

| Pets | No Pets | Total |
| Male | 24 | 11 |
| Female | 27 | 10 |
| Total |
| Are there more males or females represented?

| 8.SP.4

| | Pets | No Pets | Total |
|--------|------|---------|-------|
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Do the males or females have more pets according to this survey?

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How many total people are represented in this survey?

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How many more females are represented than males?

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What is the relative frequency of males that have a pet?

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What is the relative frequency of females that do not have a pet?

8.SP.4

Use the two way frequency table to answer the question:

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Which grade had the highest percentage of people who preferred technology? 8.SP

| | Cookies | lce Cream | Pie | Total |
|--------|---------|--------------|-----|-------|
| Male | 58 | 75 | 32 | 165 |
| Female | 56 | 83 | 41 | 180 |
| Total | 114 | 158 | 73 | 345 |

Out of the people surveyed what percentage are female? **8.SP.4**

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What percentage of people preferred ice cream? 8.SP.

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What percentage of males preferred either cookies or ice cream? **8.SP.4**

17

Use the two way frequency table to answer the question:

| | Italian | Mexican | American | Total |
|----------|---------|---------|----------|-------|
| Teachers | 14 | 18 | 11 | 43 |
| Students | 42 | 24 | 57 | 123 |
| Total | 56 | 42 | 68 | 166 |

Out of the people surveyed what is the most popular type of food?

8.SP.4

18

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What percentage of the teachers preferred Mexican food?

8.SP.4

19

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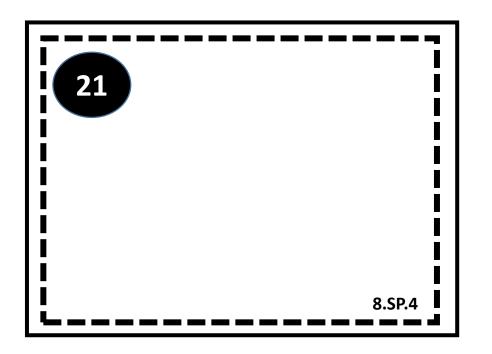
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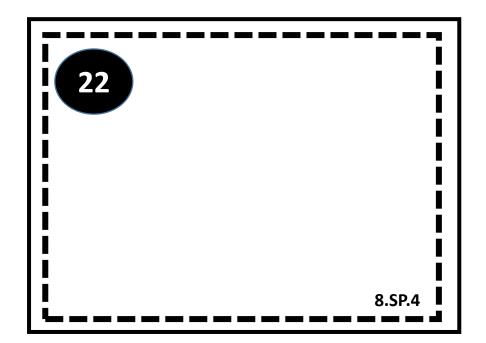
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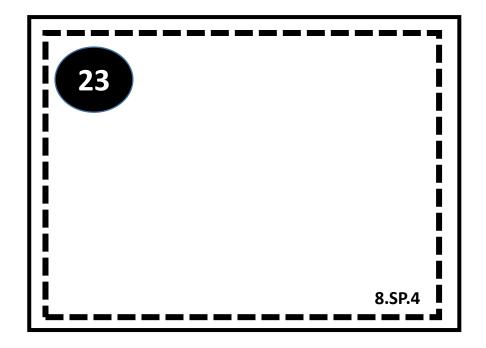
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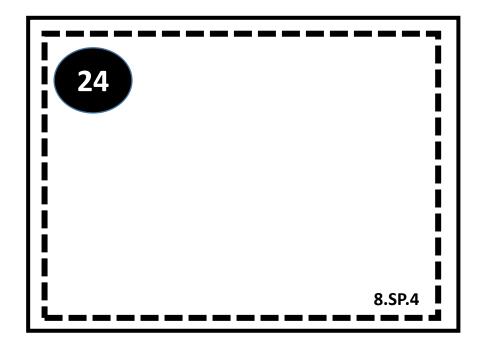
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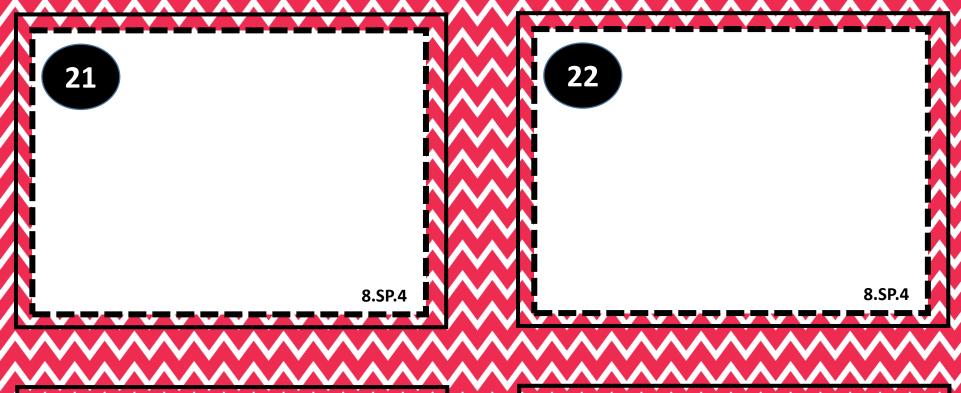
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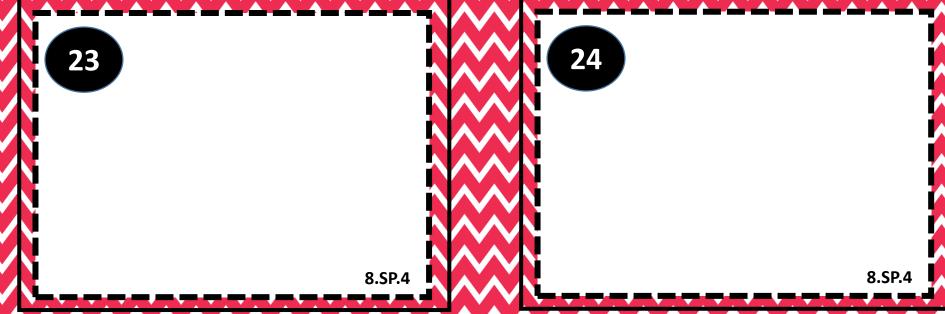
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Name _____

Hour ____

8.SP.4 Recording Sheet

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| 13. | 14. | 15. |
| 16. | 17. | 18. |
| 19. | 20. | |

Answer Key

| Number | Answer |
|--------|--------------------|
| 1 | Frequency |
| 2 | Categorical Data |
| 3 | Relative Frequency |
| 4 | Females |
| 5 | Females |
| 6 | 72 people |
| 7 | 2 Females |
| 8 | 69% |
| 9 | 14% |
| 10 | 252 people |

| Number | Answer |
|--------|------------------------------|
| 11 | Art |
| 12 | 8 th Grade by 10% |
| 13 | 52% |
| 14 | 46% |
| 15 | 46% |
| 16 | 81% |
| 17 | American |
| 18 | 42% |
| 19 | 34% |
| 20 | Italian and American |

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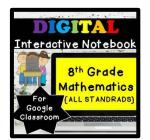


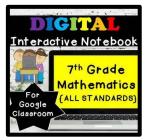


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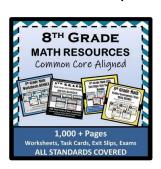








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