Analyzing Bivariate Categorical Data

Today's Standard

8.SP.A4 - 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. For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?

Real-World Applications for this Standard

Survey students on curfew and chores, and analyze the data.; Examine the relationship between gender and participation in sports.; Study the association between dietary habits and academic performance.; Investigate the link between screen time and physical activity levels.

Today I Learned

Today, we learned how to look at data from two different categories and see if they are connected. We used tables to show how often things happen and compare them.

Common Stumbling Blocks

Sometimes, kids might mix up how often something happens with how often it happens compared to everything else. They might also think that just because something happens a lot, it means there's always a strong connection.

Quiz Me

- What is a two-way table?
- What does relative frequency mean?
- Can you give an example of two variables we might compare?
- How do we use a two-way table to find patterns?
- Why is it important to look at all the data?

Help Me

We use tables to see if two things are connected, like if kids with chores also have curfews. This helps us understand more about how things are related in real life.