## **Interpreting Categorical Variables**

Statistical Question	What is the proportion of students who do not play an instrument?	How many students neither own a cat nor play an instrument?	Do a greater proportion of students in Rosa's art class who own cats prefer to play an instrument than those who do not own cats?	Is there a difference in cat preference for those who play instruments versus those who don't?	
Visualization					
Numerical Summaries					
Answer					

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## **Answer Key**

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Visualization	Plot B	Plot E Plot G Plot K Plot I	Plot H Plot L	Plot E Plot F Plot J Plot I	
Numerical Summaries	Table 2	Table 1 Table 7	Table 8	Table 4	
Answer	The proportion of students who do not play an instrument is 0.514. A majority of students do not play an instrument.	Nine students neither own a cat nor play and instrument.	No. About 44% of students who own cats play an instruments whereas 53% of students who do not own cats play an instrument.	41% of students who play and instrument own a cat and 50% of students who do not play an instrument own a cat. It seems that students in Rosa's class who do not play an instrument prefer cats compared to those students that play and instrument.	