Unit 9, Lesson 5

How Do We Choose?

Let's vote and choose a winner!

5.1 Which Was "Yessier"?

Two sixth-grade classes, A and B, voted on whether to give the answers to their math problems in the form of poetry. The "yes" choice was more popular in both classes.

Was one class more in favor of math poetry, or were they equally in favor? Find 2 or more ways to answer the question.

	yes	no
class A	24	16
class B	18	9

5.2 Painting the School Purple

The school will be painted over the summer. Students in 2 classes voted on whether to paint it a new purple color or to keep the original beige color.

	new color	original color
class A	26	14
class B	31	19

In both classes, a majority voted for changing the paint color to purple. Which class was more in favor of giving the school a new color?

5.3 Supermajorities

1. Another school is also voting on whether to change their school's color to purple. Their rules need a $\frac{2}{3}$ supermajority to change the colors. A total of 240 people voted, and 153 voted to change to purple. Were there enough votes to make the change?

2. This school also is thinking of changing their mascot to an armadillo. To change mascots, a 55% supermajority is needed. How many of the 240 students need to vote "yes" for the mascot to change?

3. At this school, which needs more votes to pass: a change of mascot or a change of color?

5.4 Best Restaurant

A town's newspaper held a contest to decide the best restaurant in town. Only people who subscribe to the newspaper can vote. 25% of the people in town subscribe to the newspaper. 20% of the subscribers voted. 80% of the people who voted liked Darnell's BBQ Pit best.

Darnell put a big sign in his restaurant's window that said, "80% say Darnell's is the best!"

Do you think Darnell's sign is making a correct and reliable statement? Support your answer with:

- Some calculations
- An explanation in words
- A diagram that accurately represents the people in town, the newspaper subscribers, the voters, and the people who liked Darnell's best