Votes and Voice

Sort assigned votes from the power to change a result.

FM.FD.A.25 "Use methods of weighted voting and identify issues of fairness related to weighted voting. a. Distinguish between weight and power in voting."

NAME _____ DATE _____

WEIGHT

Weight is the number of votes assigned to a voter or group. It tells you how many votes they have, not how often they can change a result.

At a harbor council, the pilot has 7 votes.

POWER

Power is a voter's ability to change whether a plan passes. A voter has power in a group when the result would change without that voter's support.

At an orchard council, every plan that passes needs the grower's support.

1 SORT

8 items

Circle WEIGHT or POWER for each statement, then choose one of each and explain how you knew.

1.	On the library council, the student seat is assigned 3 votes.	WEIGHT	POWER
2.	On the transit board, removing Ren's support changes an approved route into a rejected one.	WEIGHT	POWER
3.	On the theater committee, Kai can block every plan from passing.	WEIGHT	POWER
4.	At the river board, the west district is assigned 8 votes.	WEIGHT	POWER
5.	On the cafeteria committee, each coach receives 2 votes.	WEIGHT	POWER
6.	At the city budget meeting, the north ward is assigned 12 votes.	WEIGHT	POWER
7.	On the recycling panel, Jules is the deciding voter in three possible groups.	WEIGHT	POWER
8.	On the trail board, the bike club is given 5 voting points.	WEIGHT	POWER

2 PROVE IT

Explain your thinking

Choose one of each and explain how you knew.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Write one new statement about a voter's weight and one about a voter's power.

WEIGHT _____

POWER _____

CHALLENGE

A council has three voters: A has 4 votes, B has 3, and C has 2. A plan needs 6 votes to pass. Which voter has the most power? List every winning group where that voter is necessary for the plan to pass.

ANSWER KEY # Votes and Voice

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	On the library council, the student seat is assigned 3 votes.	**WEIGHT**	The statement gives the seat's assigned number of votes.
2	On the transit board, removing Ren's support changes an approved route into a rejected one.	**POWER**	Ren's support changes the outcome.
3	On the theater committee, Kai can block every plan from passing.	**POWER**	Kai's ability to prevent a plan from passing describes power.
4	At the river board, the west district is assigned 8 votes.	**WEIGHT**	The statement gives the district's assigned number of votes.
5	On the cafeteria committee, each coach receives 2 votes.	**WEIGHT**	The statement gives each coach's assigned number of votes.
6	At the city budget meeting, the north ward is assigned 12 votes.	**WEIGHT**	The statement gives the ward's assigned number of votes.
7	On the recycling panel, Jules is the deciding voter in three possible groups.	**POWER**	Being able to decide the result in possible groups describes power.
8	On the trail board, the bike club is given 5 voting points.	**WEIGHT**	The statement gives the club's assigned voting amount.

PART 2 · PROVE IT

Task: Choose one of each and explain how you knew.
Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **WEIGHT**: On the robotics council, the coding team is assigned 9 votes.
- **POWER**: On the debate committee, removing Ana's support changes a winning group into a losing group.

Challenge: A has the most power. A is necessary in A and B, A and C, and A and B and C. Without A, each group falls below 6 votes.

Sort key: 1 WEIGHT, 2 POWER, 3 POWER, 4 WEIGHT, 5 WEIGHT, 6 WEIGHT, 7 POWER, 8 WEIGHT. In the challenge, A is necessary in three winning groups; B and C are each necessary in one.