Difference in Difference

Bean Bag Toss: A game to explore difference in difference

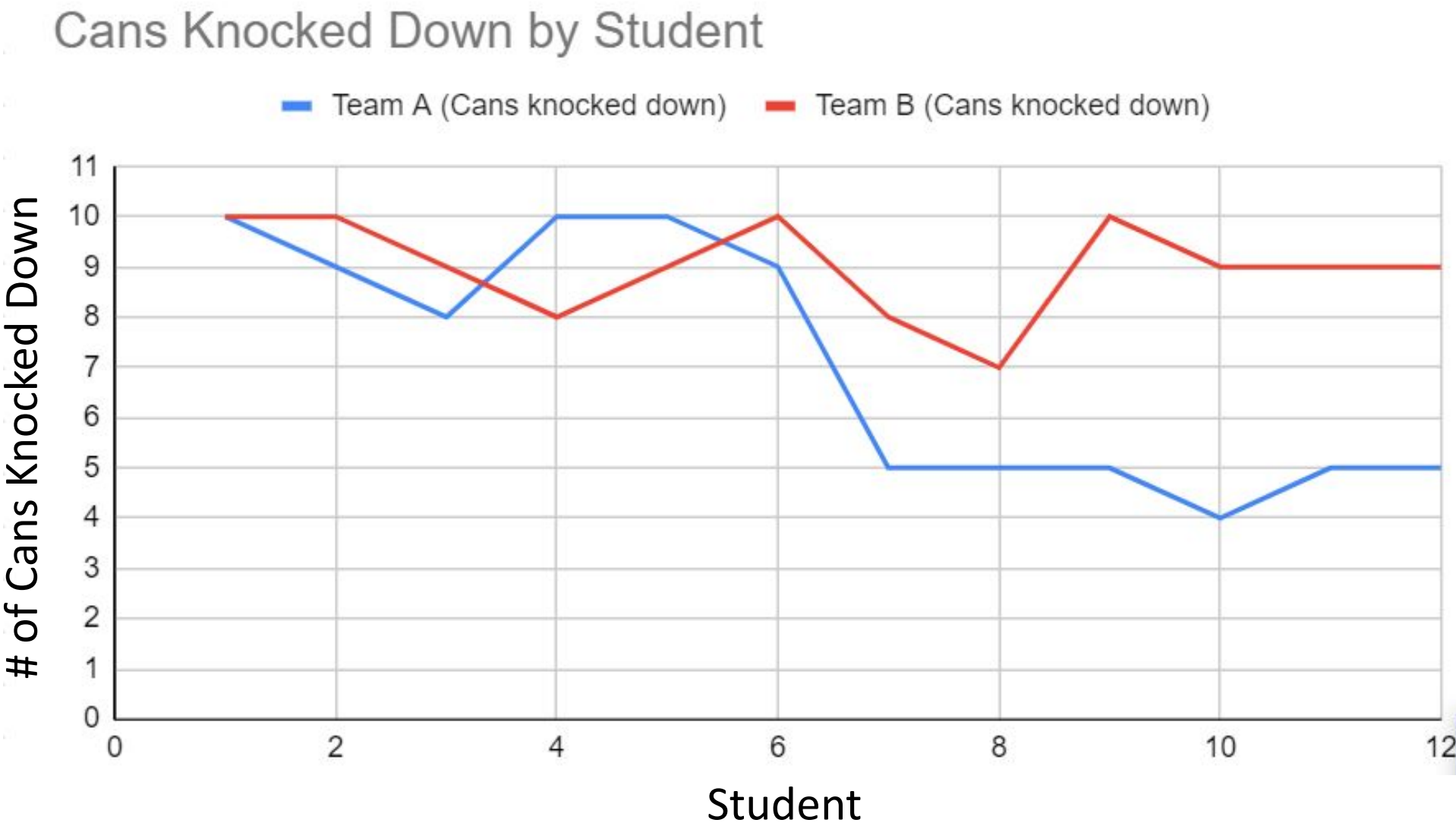How many can you knock down?

Rules of the game:

The class will be divided into two teams

Each team should:

- Come up with a team name and record it on your index card
- Team members take turns based on the number on index card
- Throw bean bag to see how many cans each member can knock down
- Record that number on their index card
- When instructed, plot data on graph.
- Link to the Data table and graph for activity

Sample Graph

What is Difference in Difference?

- Difference in difference is a statistical technique used in research
- It attempts to mimic an experimental research design by studying the differential effect of a treatment group versus a control group in a natural experiment
- It calculates the effect of an explanatory variable on an outcome (response variable)
- It does this by comparing the average change over time in the outcome variable for the treatment group to the average change over time for the control group.

- If we see a significant difference in difference in our data that is a clue that something in the environment changed at that point in time and it is worth exploring