



PICK A NUMBER

Math Topic: Data and Probability

Subtopic: Data Clusters

Grades: 3-5

Motherboard loves sending out e-cards to wish her friends “Happy Birthday.” Which month would she be the busiest in your class? Which student’s birthday would mark her halfway point—when she has sent half the number of cards she has to send for the year? Challenge your students to find out which month has the most birthdays (mode) and which birthday represents the middle point of all the birthdays (median).

Learning Objective: Students gather and organize data to find one number that fairly represents the whole group.

NCTM Standard: Data Analysis & Probability

DIRECTIONS

Class Period: 1

1. Ask students for ideas on how to answer Motherboard’s question about which month she’d be busiest sending out cards. Accept all answers.
2. Suggest that students make a human bar graph and brainstorm ways to do it. Make the graph by having kids line up by month and date starting at the beginning of the year. You can represent the data using a line plot.
3. Ask students which month has the most students.
4. Now say that Motherboard would like to know when she’ll be at the halfway point sending out cards to your class if she starts at the beginning of the year. Invite suggestions for how to solve her problem.

(For example, line up students in order of their birthdays and have them step away from the ends till one person is left. If there is an even number of students, you should participate. That way there will always be someone with the middle birthday.)

Cyberchase Episode: “Hugs & Witches”



It's Valentine's Day, and Hacker captures Dr. Marbles and Lady Ada Lovelace, placing them inside a time machine invented by the mathematically minded Lovelace. The kids and Digit must decipher a series of poems left behind by Lady L, and free them from the time machine before it time travels to the nether world of cyberspace — never to return! Will the kids get there in time, or will Valentine's Day bring nothing but broken hearts?

The Big Idea:

When you have different numbers that describe members of a group, you can often find one number to fairly represent the group as a whole.

Cyberchase FOR REAL (epilogue)

On the job at a shoe store, Bianca consults sales data when placing an order. When a customer with really big feet requests a size Bianca hasn't ordered, she realizes she shouldn't have focused only on the top-selling sizes.

