# DIG INTO LINEAR FUNCTIONS: STACKING CUPS

Presented by MathLinks Authors
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For more information about our core programs for middle school and intervention programs for grades 6-9, please visit:

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In this session, we will explore a context that motivates students to:

- Decide what data to collect and how to organize it to solve a problem,
- Use multiple approaches and tools to solve a problem,
- Explore some features of linear functions.
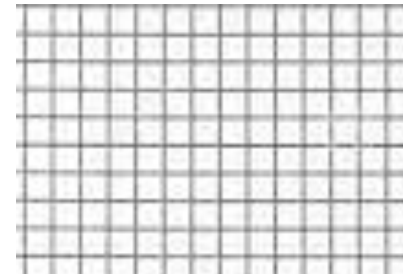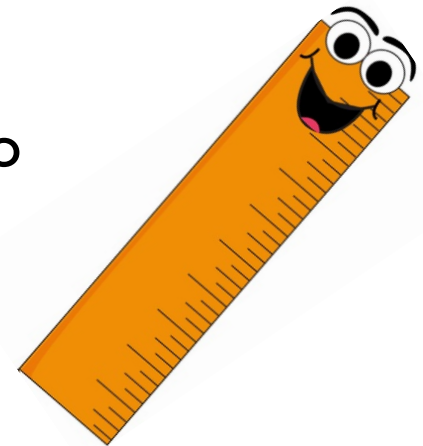
WHICH IS TALLER?

As we add the same number of cups to each stack, you think this always be true? Explain.

SPARK DISCUSSION WITH A VIDEO

From Andrew Stadel's Stack Cups at www.101qs.com

COLLECT SOME DATA
for the blue cups

Choose your variables

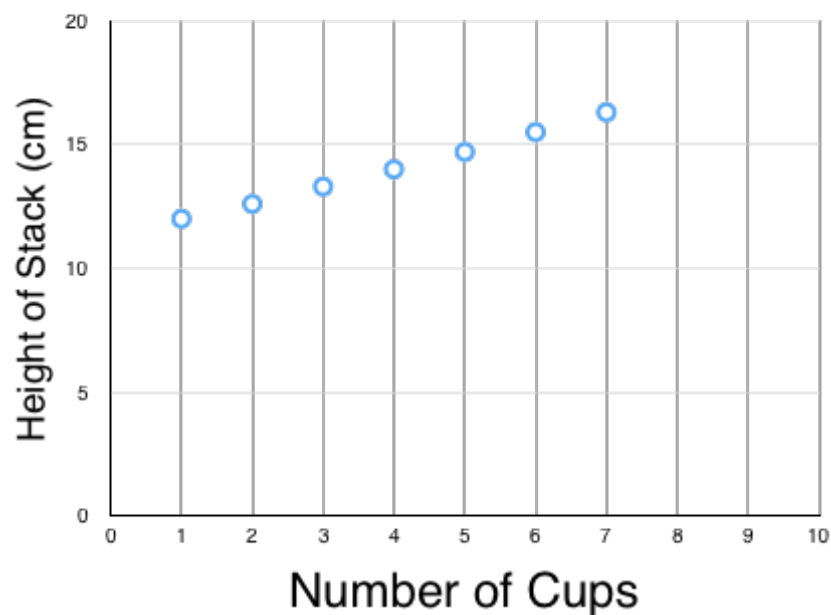Choose an appropriate unit of measure

Record data in the table

# of Cups	1	2	3	4	5	6	7
Height – Blue (cm)	12	12.6	13.3	14	14.7	15.5	16.3

GRAPH THE DATA
for the blue cups

# of Cups	1	2	3	4	5	6	7
Height – Blue (cm)	12	12.6	13.3	14	14.7	15.5	16.3

Stacking Cups (Blue)

○ blue cups

WHICH IS TALLER?

| # of Cups	1	2	3	4	5	6	7
Height - Blue (cm)	12	12.6	13.3	14	14.7	15.5	16.3
Height - White (cm)	9	10.4	11.9	13.2	14.8	16.2	17.8

Stacking Cups
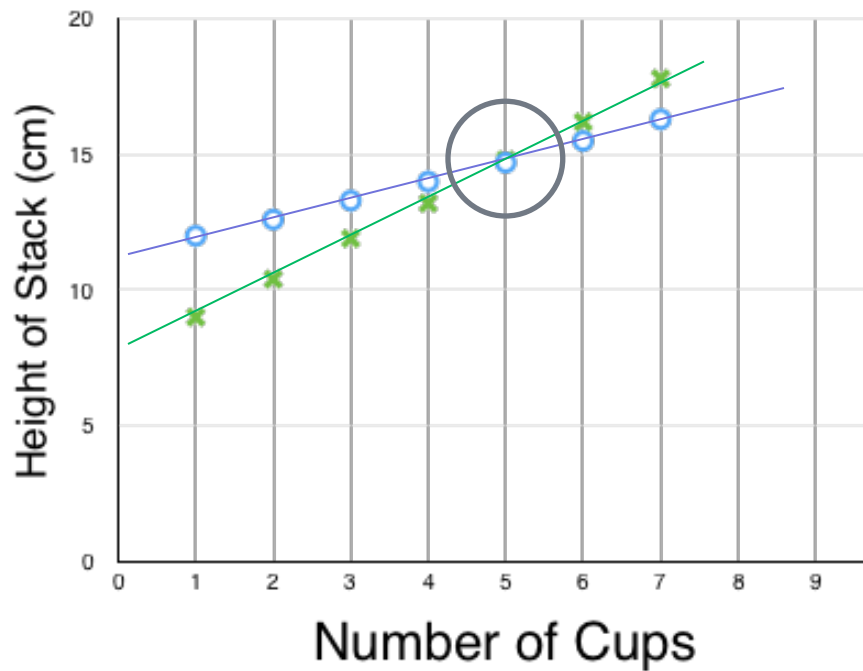
○ blue cups
✖ white cups

In this session, we

- Decided what data to collect and how to organize it to determine which stack of cups was taller.

- Used tables and graphs to solve a problem.

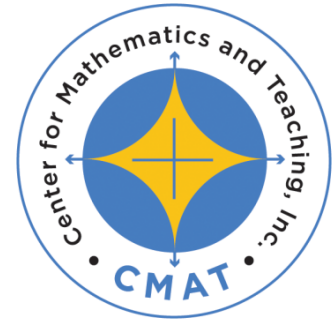- Discussed some features of linear functions within a real life context.

MathLinks
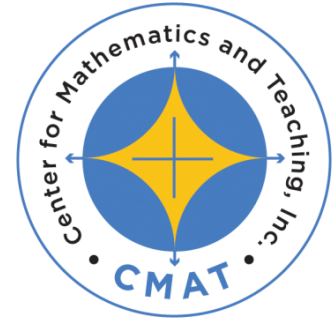
OUR PROGRAMS:

- Comprehensive 6-8 curriculum
- Customized intervention grades 6-9
- Special education programs
- Supplemental programs
- Professional development

For more information, please visit our website at www.mathandteaching.org

THANK YOU!

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www.mathandteaching.org/webinars