



# ADD ME Small, Sustainable Strategies

## SUMMARY

Try making **one small, sustainable change** to create more space for students to bring their own experiences and values to learning activities:

- **Adjust your approach to existing activities** – Who is providing the contexts? How connected are the contexts to what's on students' minds?
- Students **create their own problems, identify their own variables, or write their own stories** about a graph, table of values, equation...etc
- **Math Moments** – 'Created' Math Moment (CM<sup>2</sup>) and 'Caught Myself' Math Moment (CM<sup>3</sup>) – Tracked and recorded with journal, bulletin board, Jamboard, daily or weekly Math Moments sharing; incentivized with credit or bonus points
- **Daily question or task** during warm up/hook/bell brainstorm
- **Weekly group brainstorm and share**
- **Real-time progress tracking and making justified predictions**



# ADD ME Small, Sustainable Strategies

Making one small, sustainable change to **create more space for students to bring their own experiences and values** to learning activities:

1. Adjust your approach to existing activities:

Who provides the contexts?

How connected are the contexts to students' interests and what's on their minds?





# ADD ME Small, Sustainable Strategies

2. Have students **create their own problems, identify their own variables, or write their own stories** about a graph, table of values, algebraic expression, equation, etc.

*Ex. Do you have a pet at home? Or thinking of getting a pet? Gather data and write an equation to represent the cost of owning a new pet – Fixed costs; Variable costs (food, treats, toys, vet visits, medication (heartworm, flea & tick prevention)...*

Let **D** be the total cost of owning a dog

Let **F** be the cost of food each month

Let **T** be the cost of treats each month

Let **V** be the average cost of vet visits each year

Let **M** be the cost of medication every six months

**Fixed Costs: \$232**

Vaccinations - \$160      Collar - \$12

Crate - \$40              Leash - \$20

The cost of owning a dog for **one year**

$$D = 232 + 12F + 12T + V + 2M$$

The cost of owning a dog or **five years**

$$D = 232 + 60F + 60T + 5V + 10M$$



# ADD ME Small, Sustainable Strategies

3. **Math Moments** - Times outside of class when students use something they learned in math

- **‘Created’ Math Moment (CM<sup>2</sup>)** – students intentionally seek out or create opportunities to use what they learned in math outside of class.

*e.g. ‘I created an equation to estimate how much money my family will need for weekly grocery shopping’*

- **‘Caught Myself’ Math Moment (CM<sup>3</sup>)** – students catch themselves (or someone else) using what they learned in math outside of class.

*e.g. ‘I caught myself writing an equation in my science homework’*

Math moments can be **recorded or tracked** using

- Journals
- Bulletin boards or Jamboards
- Class time for sharing daily or weekly Math Moments,

Math moments can be **incentivized** by attaching bonus points or credit



# ADD ME Small, Sustainable Strategies

## 4. Daily question or task during warm up/hook/bell brainstorm

- Add context or write a story about an expression, equation, graph, function etc.
- Do you think you could use the strategy or skill in your homework for something not related to math class? If so, how? If not, who do you think could use the strategy or skill in their lives or work and how?

## 5. Weekly group brainstorm and share

- Similar prompts to the daily question or task above
- Write a problem (with a real-world or fictional context) for other groups to solve
- Expression, Equation, Graph, Function...Talks (alternative version of 'Number Talks') – post an expression, equation, graph, function, etc. and give groups 10 minutes to brainstorm as many things as they can think of that relate to what has been posted. To encourage creativity, this could be played as a game with credit only given for things that do not appear on any other group's list.



# ADD ME Small, Sustainable Strategies

## 6. Real-time progress tracking over a period of weeks or months, with opportunities to make justified predictions

- Can be done as a class or individually
- Sports goals (e.g. speed or pace; goals scored)
- 10,000 hours rule
- Raising money for charity
- Saving for a purchase or college
- Tracking pet costs (e.g. dog treat consumption)

