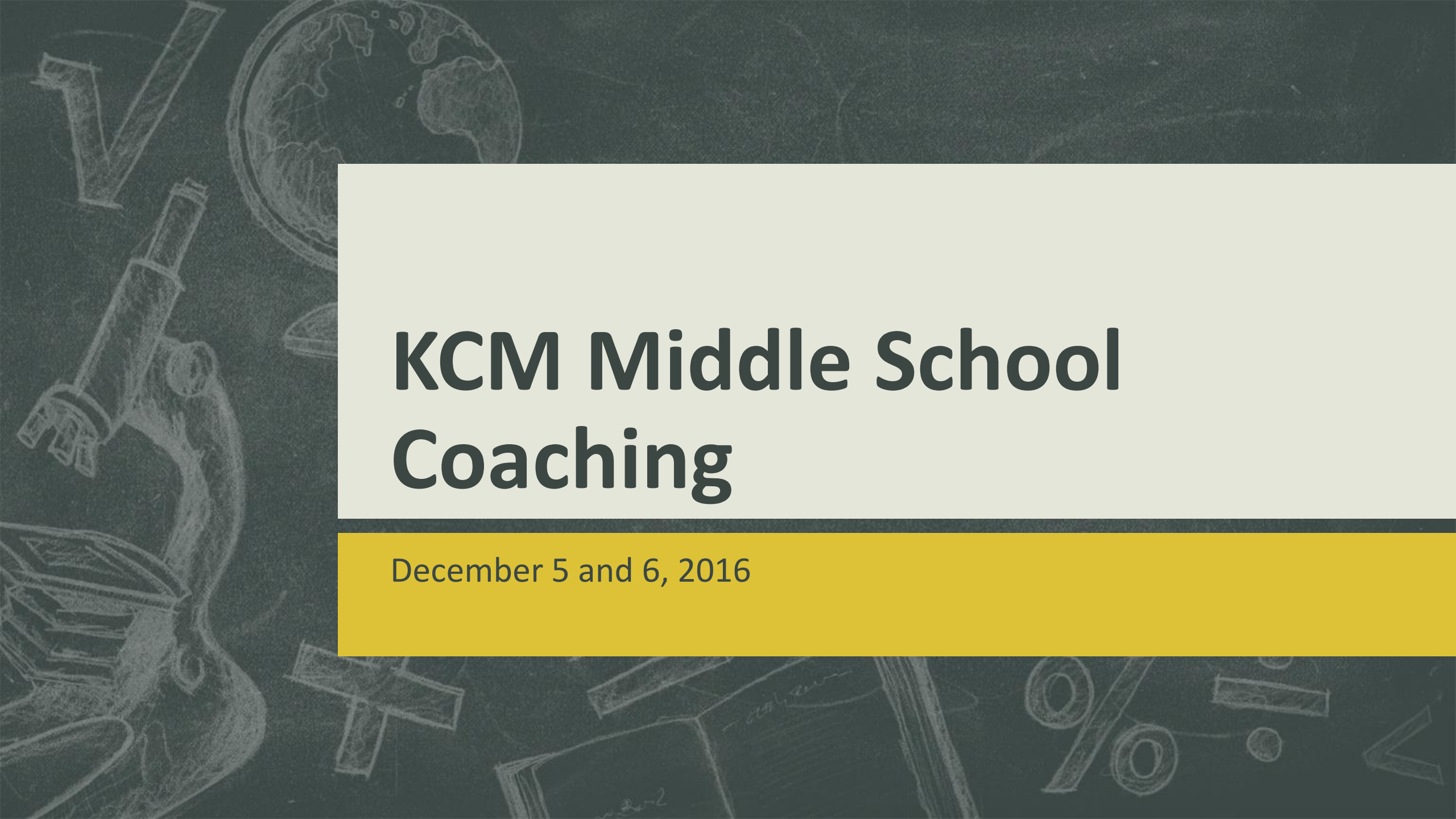


The background is a dark chalkboard with various white chalk sketches. In the top left, there's a large 'V' and a globe. Below the globe is a microscope. In the bottom left, there's a stack of books. In the bottom center, there's a cross and some scribbles. In the bottom right, there's a percentage sign and some other symbols.

KCM Middle School Coaching

December 5 and 6, 2016

Create a name tent, write your name large on both sides.

- Tell us about yourself and why you chose to be a part of this cohort.
- Write about what you hope the children we are now teaching will be like as adults.

Chalk Talk

- Discuss what role math teachers have in creating this kind of adult.

We are hoping for someone who is

“curious, engaged, able to persevere, empathetic, willing to take risks and try new things, better able to problem-solve, creative, passionate about something, a listener, open-minded, healthy, committed to the community, respectful, analytical, inquisitive, a lifelong learner, an avid reader, a critical consumer, helpful, compassionate, able to take a global view, willing to learn from his or her mistakes, collaborative, imaginative, enthusiastic, adaptable, able to ask good questions, able to connect, well rounded, a critical thinker...”

The Coaching Role

- Now think about what role a math coach has in supporting teachers to provide this type of environment for our students.

What is Content Coaching?

A form of professional development that allows teachers to develop the confidence and know-how of becoming more thoughtful about their practice and the decisions that they make in developing mathematical learning opportunities for children.

Ideally the goal of content coaching is to transform a school culture where everyone is more thoughtful, deliberate, and smarter about what they do.

Content Coaching: Guide to Core Issues Focuses on the instructional core:

Planning a lesson – Lesson design that focuses on the creation of rich lessons centering on important content and student learning and development

Co-teaching the lesson – Side by side teaching designed to support the implementation of pedagogy and content knowledge discussed in the preconference

Debriefing the lesson – Deconstruction of the lesson – naming specifics to highlight what worked and determine next steps

Coaching can only succeed when:

- There are respectful relationships based on trust and willingness to inquire into practices and beliefs.
- There is a commitment to professional learning.
- We find mutual purpose and co-construct goals.
- We learn by doing the work together.

Title and Content Layout with List

- Add your first bullet point here
- Add your second bullet point here
- Add your third bullet point here

The piece before the cycle....

What information might you need to know BEFORE working with a teacher?

What might you do to find out about a teacher?

What questions might you ask?

How will you sequence those questions?

Two ways to start painting a portrait.

- Interviews/ Conversations
- Observations.

What are the benefits and drawbacks of each?

Anne's Interview Questions:

Tell me about your experiences teaching math;

- What are your successes? Struggles?

What does a typical class look like?

- Walk me through it.
- What are you doing at each phase?
- What are the students doing?

What is your vision of an ideal math classroom?

What would you like to work on?

Painting a Portrait of a Teacher

- What's information did we learn?
- What conjectures do you have?
- What might be some goals for this teacher.

Writing Expressions

Build this figure using multilink cubes.

Use **color** when building so others will see the same structure that you see.

Write an expression that matches your way of seeing the figure.



Writing Expressions (new)



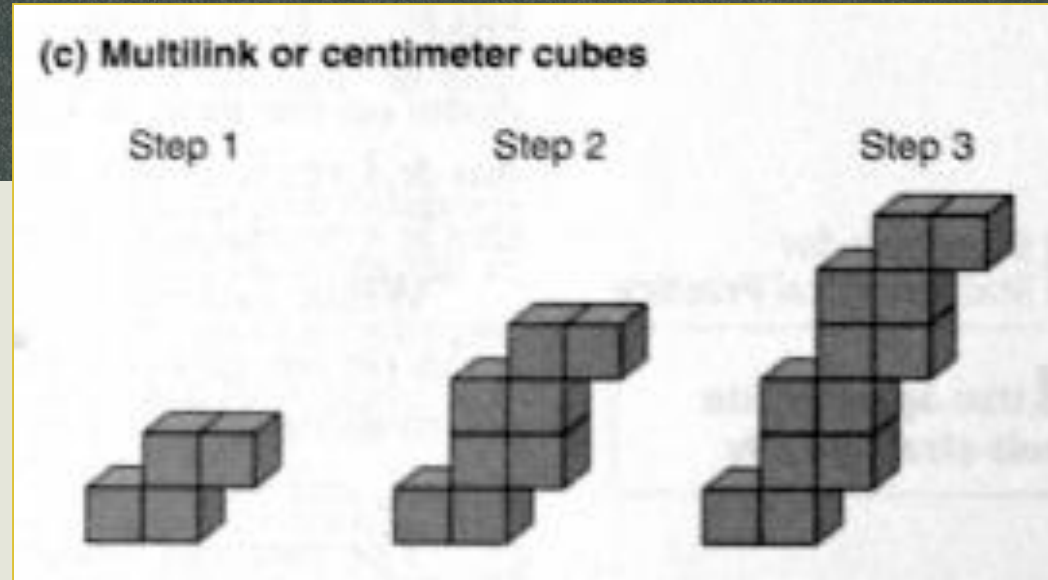
Writing Expressions



Growing Patterns

Van de Walle
Fig 12.9 – pg 244

Use omnifix cubes or 1 inch tiles.

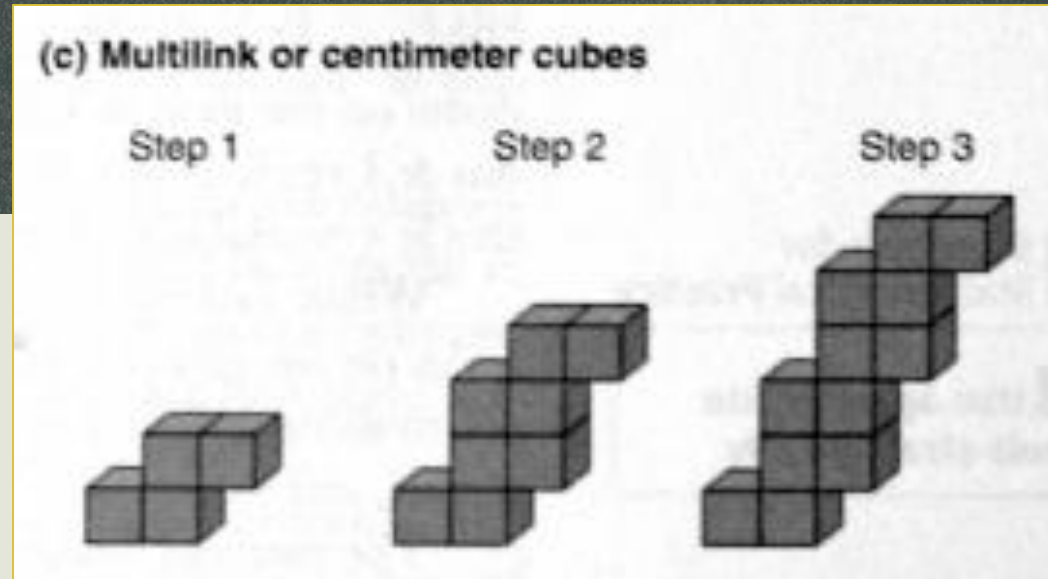


- Build steps 1 through 3. Use color to show how you see each step changing from the previous.
- Build Step 8, again using color to show structure.

Growing Patterns

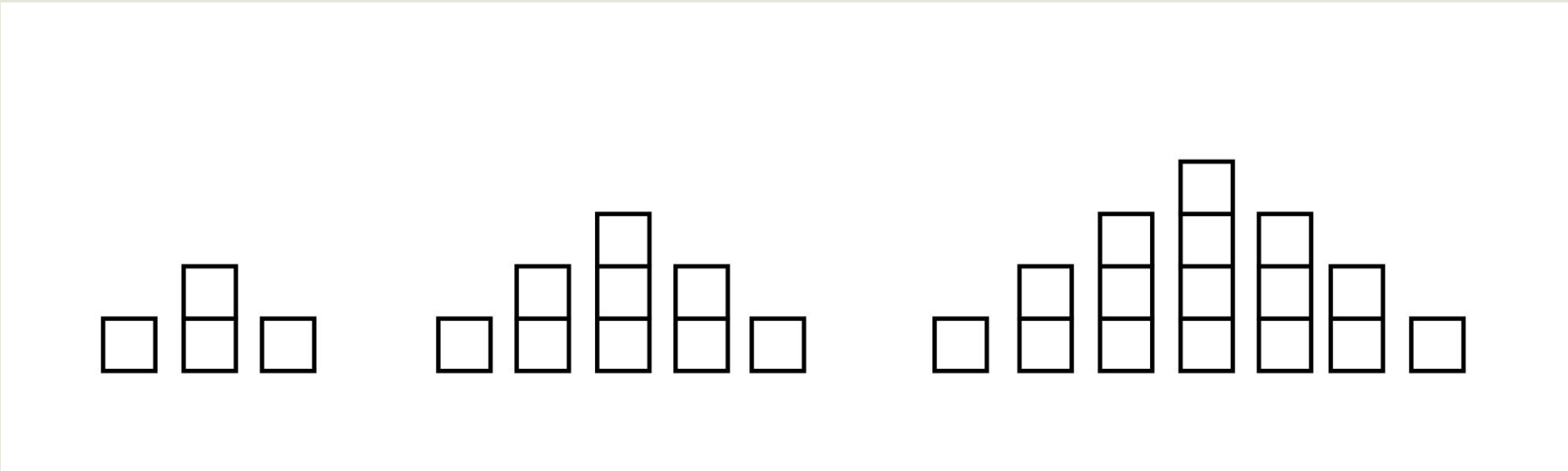
Van de Walle

Fig 12.9 – pg 244



- Model each step with an expression that gives the total number of squares and matches how you see it.
- Describe Step n symbolically and in words.
- Make a poster that shows your thinking.

How do you see the shapes growing?



Add a Slide Title - 3



[Home](#) [Lessons](#)

How Much Does A 100×100 In-N-Out Cheeseburger Cost?



<http://robertkaplinsky.com/work/in-n-out-100-x-100/>

Give Your Problem a

HIGH 5

1. **Context:** Tell the story.



2. **Table:** Organize the information.



	+2.888
	+5.000
	+1.500
	+1.125
	+1.062

3. **Sentence:** Describe the problem.

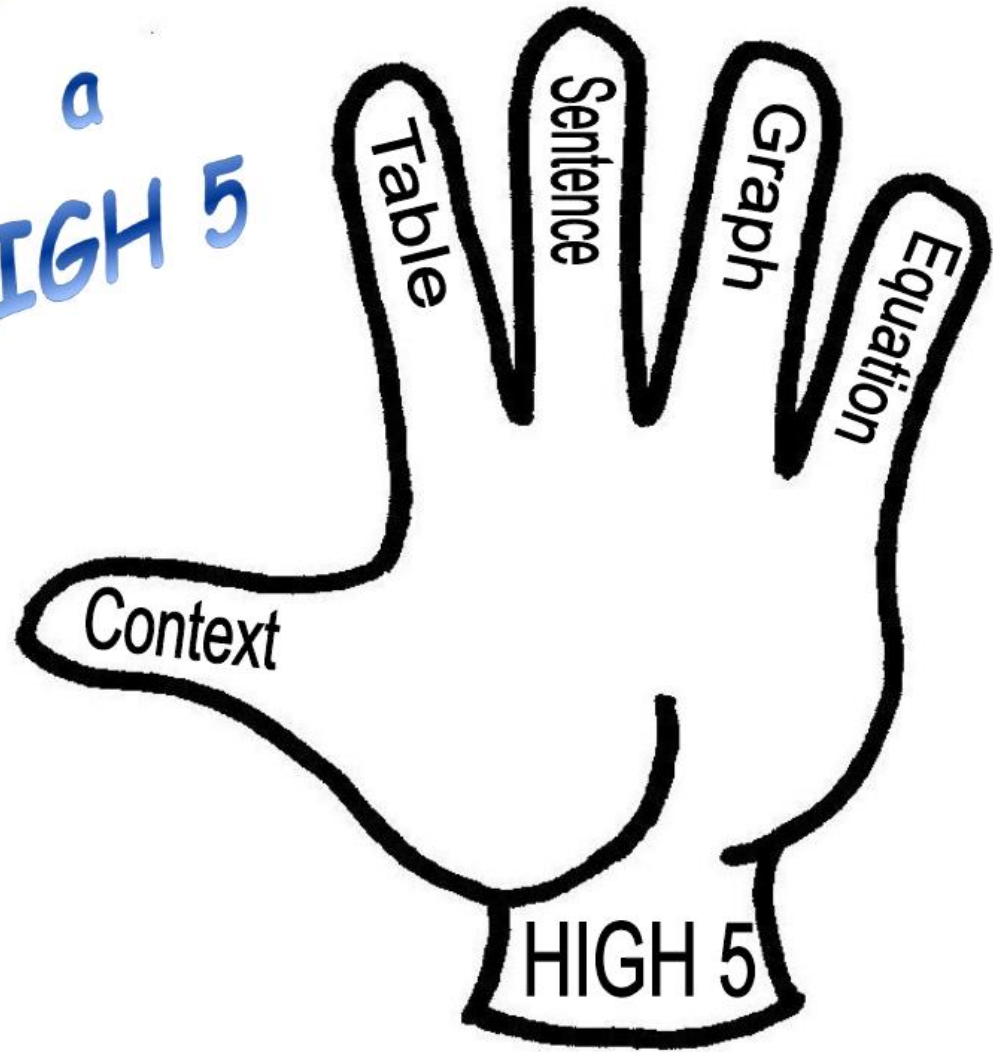


4. **Graph:** Draw the graph.



5. **Equation/Expression:** Write the problem algebraically.

$$a^2 + b^2 = c^2$$



Context (story):

Graph:

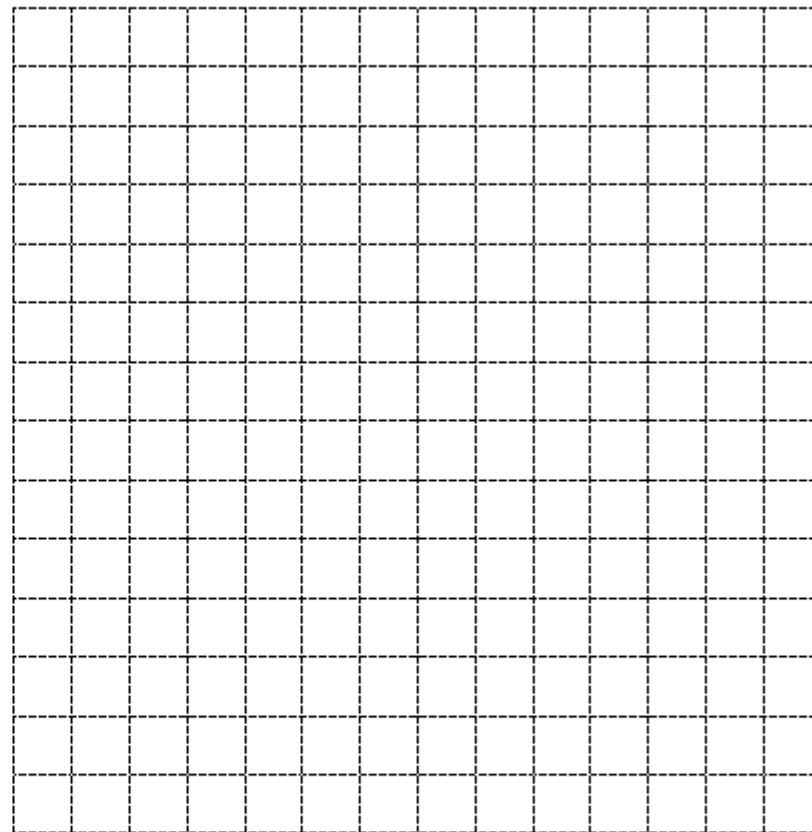


Table:

Summary Sentence:

Equation:

Dan Meyer's three act tasks

https://docs.google.com/spreadsheets/d/1jXSt_CoDzyDFeJmZxnhgwOVsWkTQEsfqouLWNNC6Z4/edit#gid=0

<http://www.101qs.com/3199>

Questions for Debriefing can Include:

- What did the student learn and what is the evidence?
- In what way did our plan enhance or inhibit this learning?
- What might the work reveal and what kind of feedback might we provide we provide each student?
- How might students work products, comments and questions guide follow-up lessons?

Students' Habits of Mind

- Problem sniffing
- Experimenting
- Describing
- Tinkering
- Inventing
- Visualizing
- Conjecturing
- Guessing

Lesson Planning

- Re-visit yesterday's debrief; what worked and what didn't work
- Jackie's goal for the lesson/unit
- Did students meet expectations of yesterday's lesson? (What percent mastered?)
- Next steps, what will the progression of our knowledge package be, today's lesson

Number Talks



http://www.dailymotion.com/video/xv2284_abbott-costello-in-the-navy-7-into-28-goes-13-times_fun

Method 1: Lou multiplies 7 x 3 and gets 21. He then multiplies 7 x 1 and gets 7. Adding these two results, he gets 28.

$$\begin{array}{r} 13 \\ \times 7 \\ \hline 21 \\ + 7 \\ \hline 28 \end{array}$$

Method 2: Lou divides 28 by 7 and gets 13. He states, 7 won't go into 2, so divide 7 into 8 one time. Subtract and get 21. Now divide 7 into 21.

$$\begin{array}{r} 13 \\ 7 \overline{) 28} \\ \underline{-7} \\ 21 \\ \underline{-21} \end{array}$$

Method 3: Checking by addition. Lou adds all of the 3's together, then adds all of the 1's together and gets 28.

$$\begin{array}{r} 13 \\ 13 \\ 13 \\ 13 \\ 13 \\ 13 \\ + 13 \\ \hline 28 \end{array} \quad \begin{array}{l} (3+3+3+3+3+3+3) + \\ (1+1+1+1+1+1+1) = 28 \end{array}$$