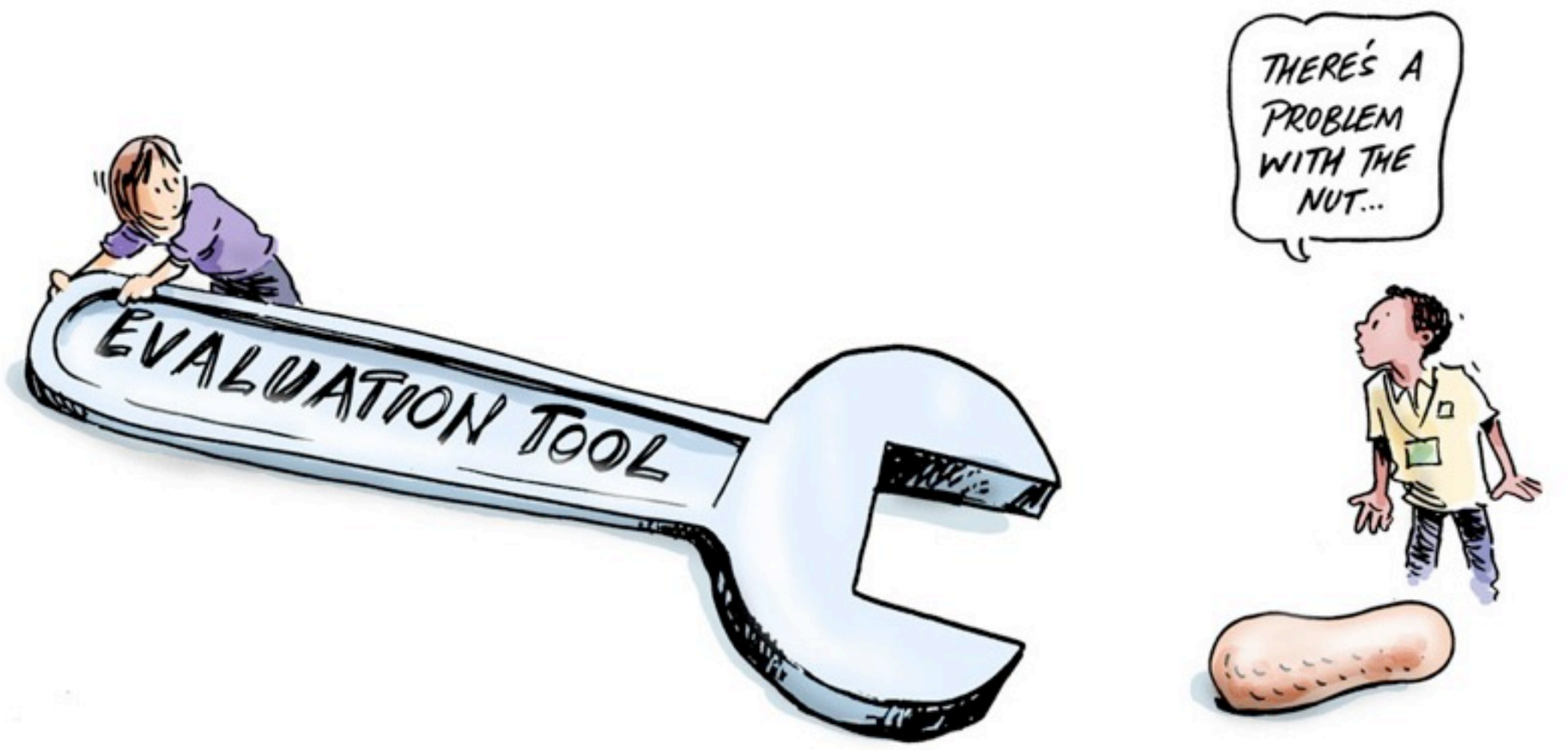
Assessment and evaluation in a cooperative learning community

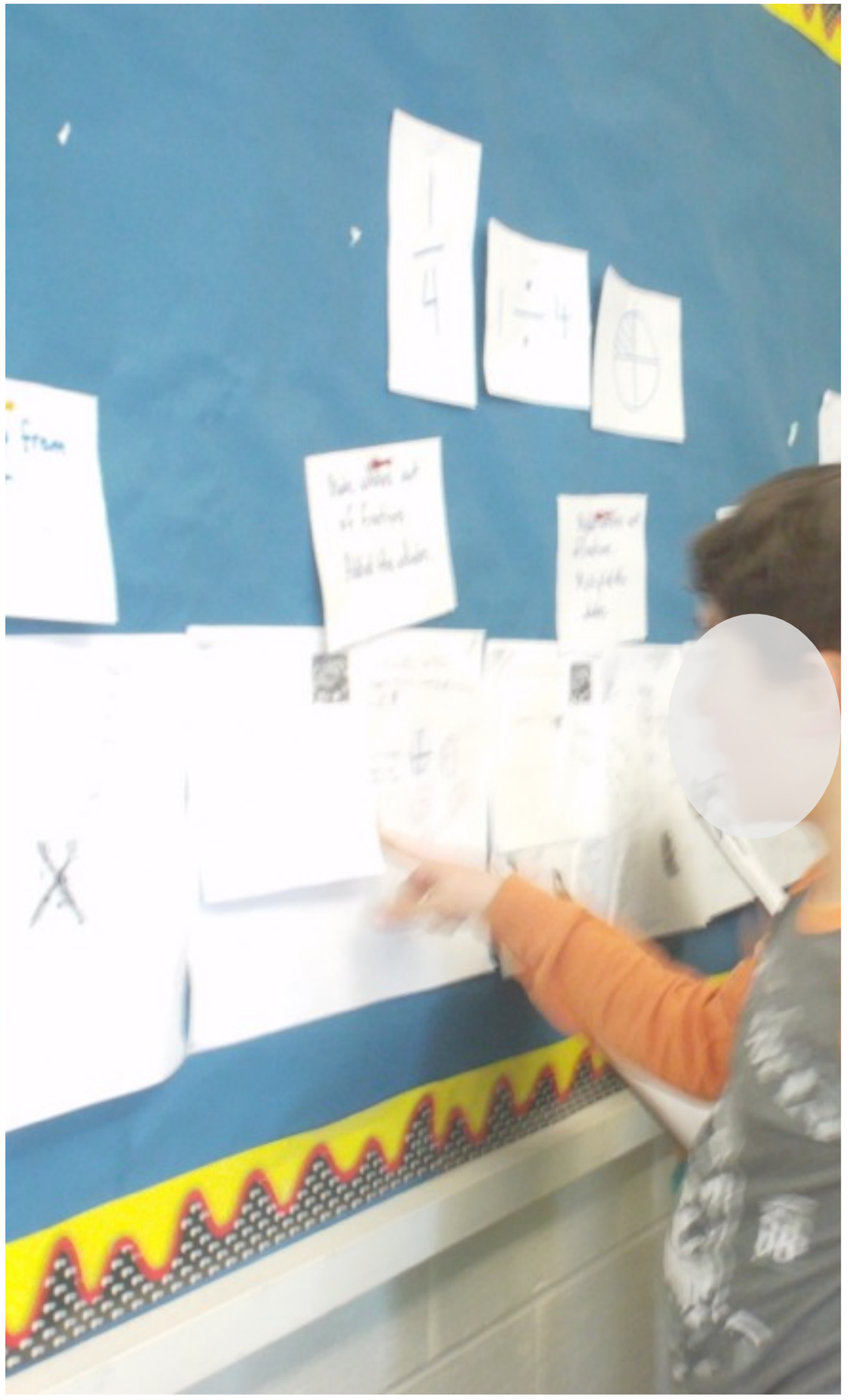


Grade 3/4

- 24 students
- 8 IEPs
- Middle level LOI
- Amazing parents
- 1 Twitter feed
- 1 Youtube channel

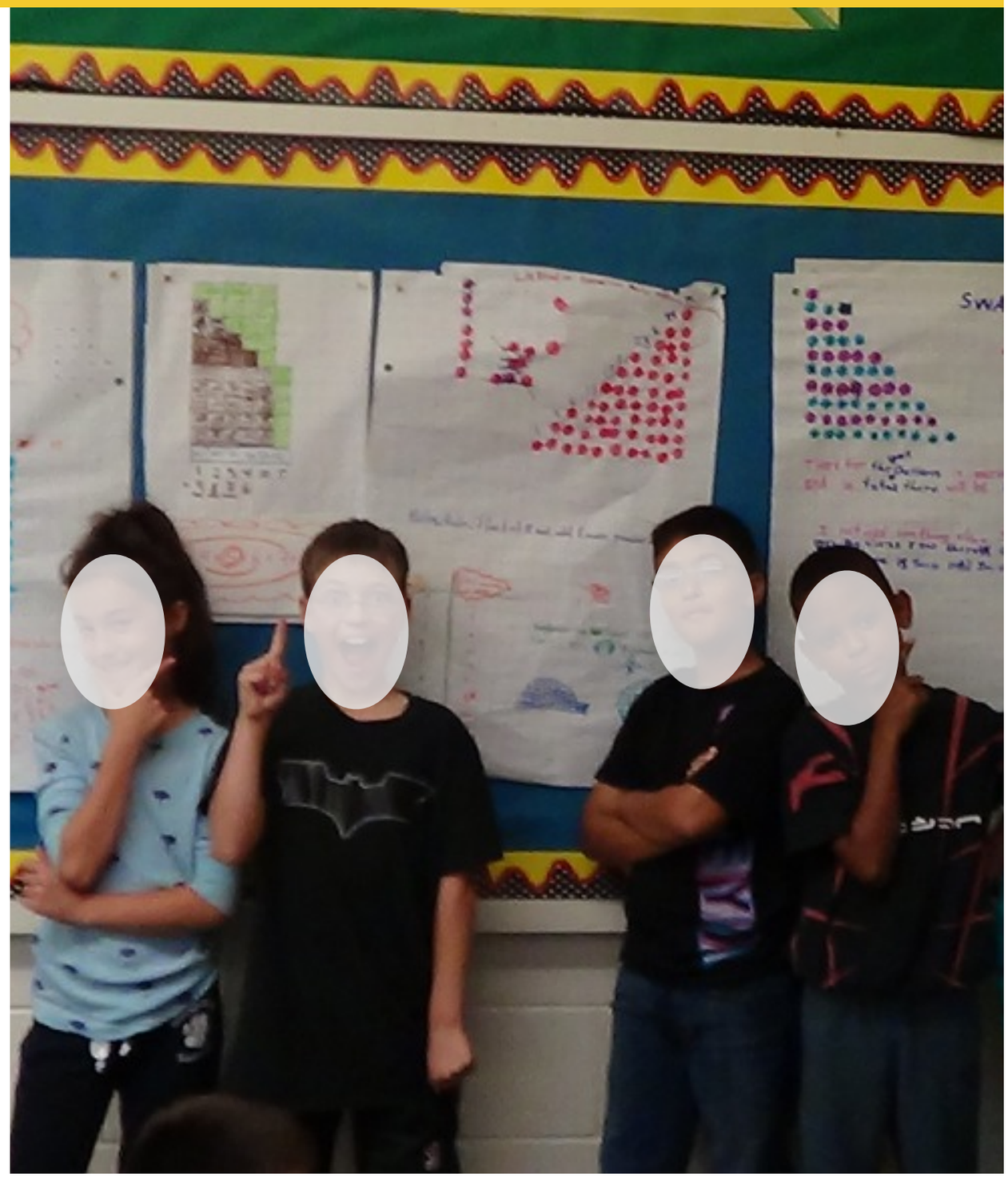
Learning through problem solving

Intentionally public about sharing our learning



Group work - we all achieve

- Grade level standards - a good place to start.



Curriculum

Ontario

Ministry of Education

REVISED

The Ontario Curriculum
Grades 1-8

Mathematics

2005

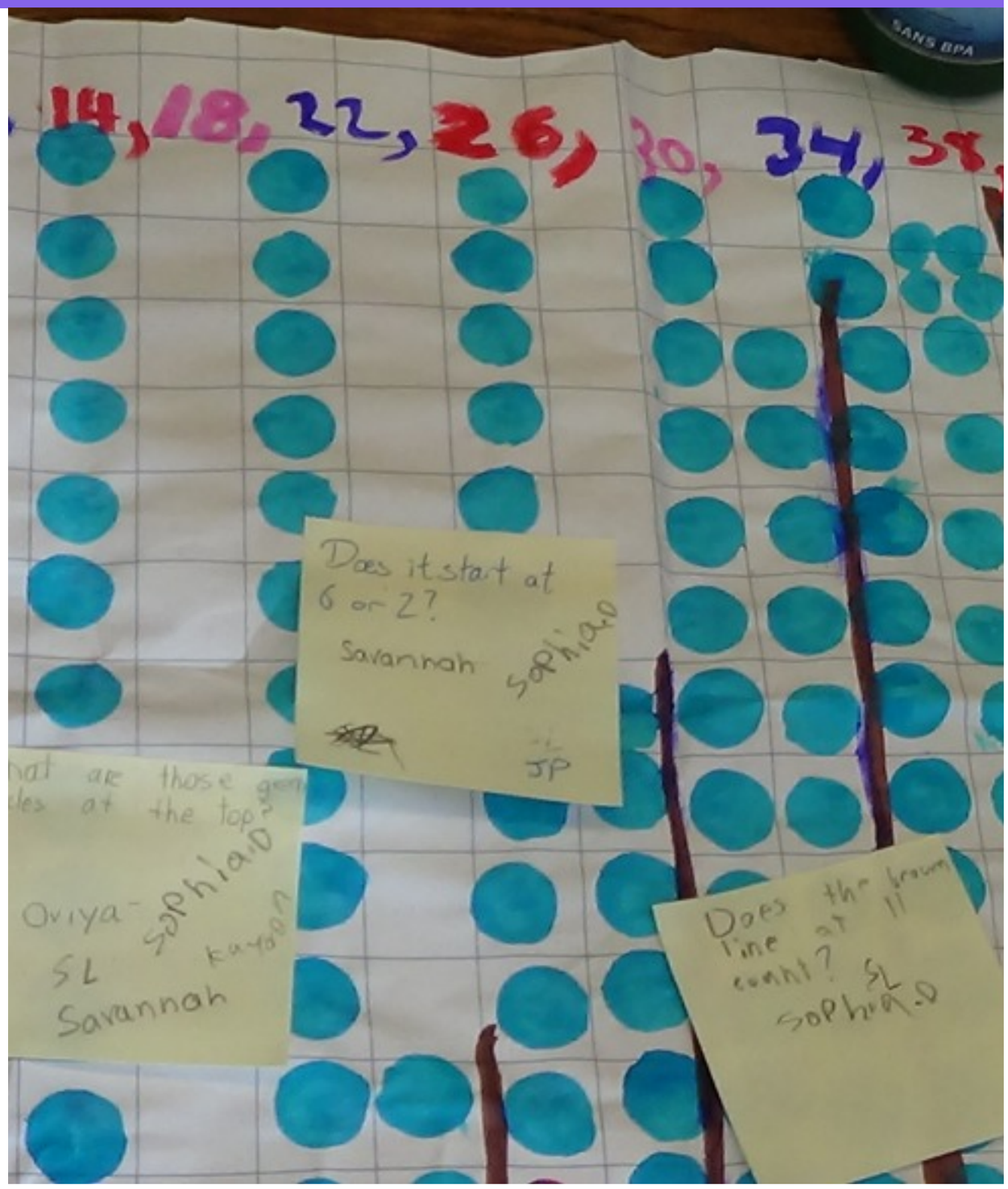
- Begin here - always.
- Visit often.

Group work - individual learning

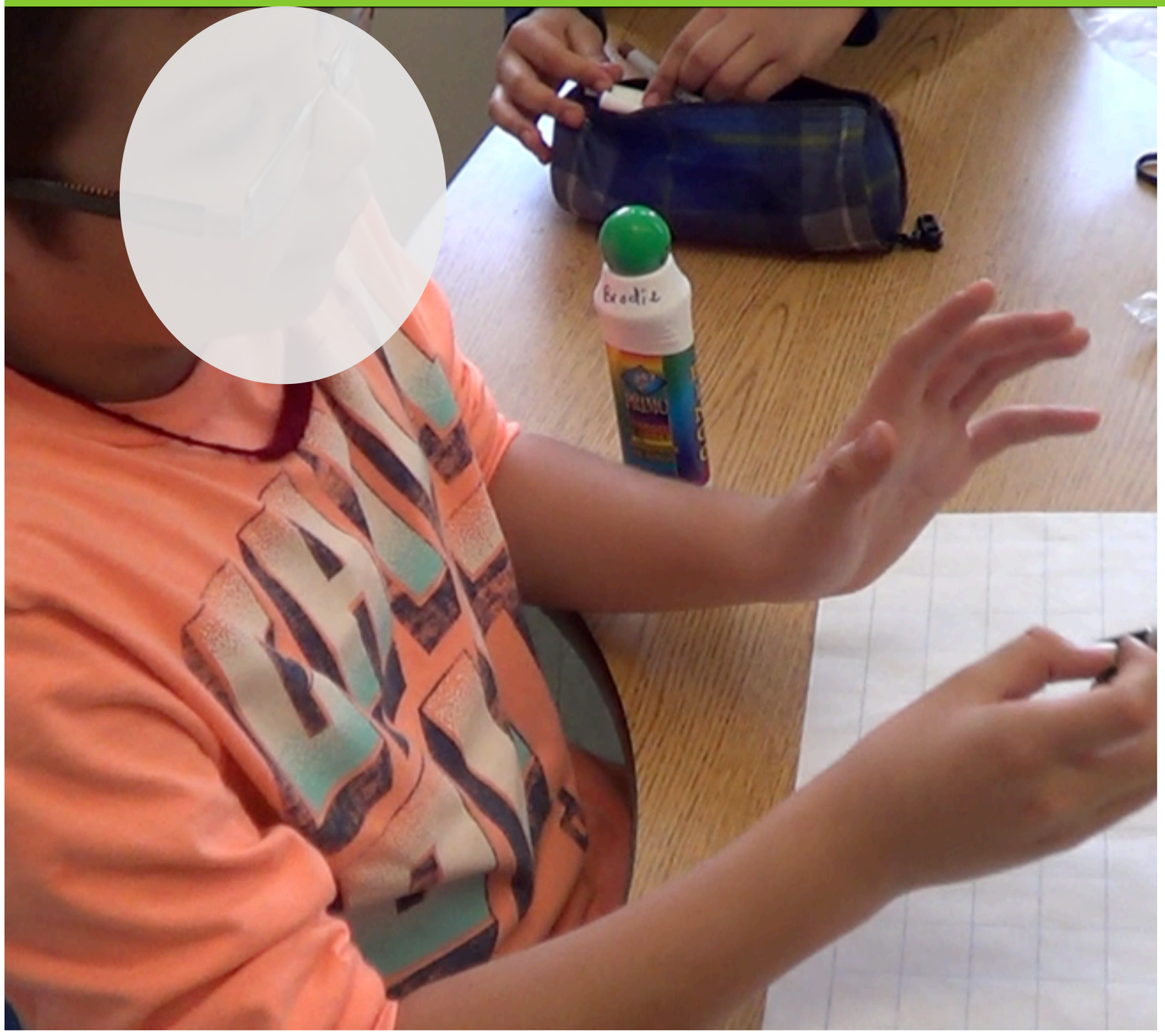
- To accommodate and differentiate for the largest number, we learn together.

Interdependence

- Good questions are perhaps better than good answers.



If you don't know…ask



- Observation is good enough for research scientists, why not teachers?

Assessment ≠ Evaluation

Evaluation vs. Assessment

- Evaluation from the root word value.

- When we evaluate, we are assigning a value to a body of work or learning in the form of a mark.

- Assessment is the process of gathering information that accurately reflects how well a student is achieving the curriculum expectations in a subject or course.

From *Growing Success*

Evaluation vs. Assessment

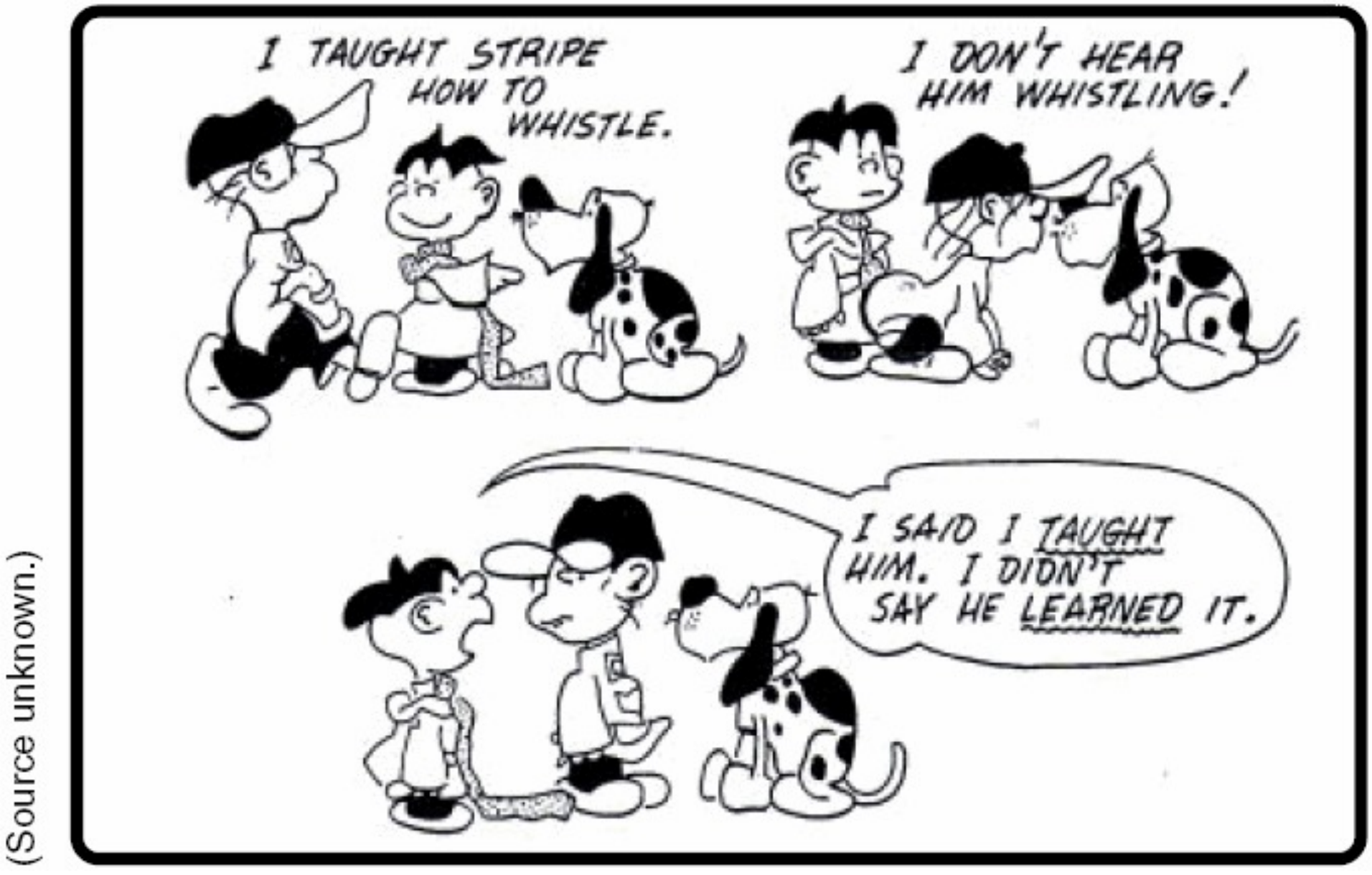
- The primary purpose of assessment is to improve student learning.

From *Growing Success*

What do we do to accomplish this in a cooperative setting?

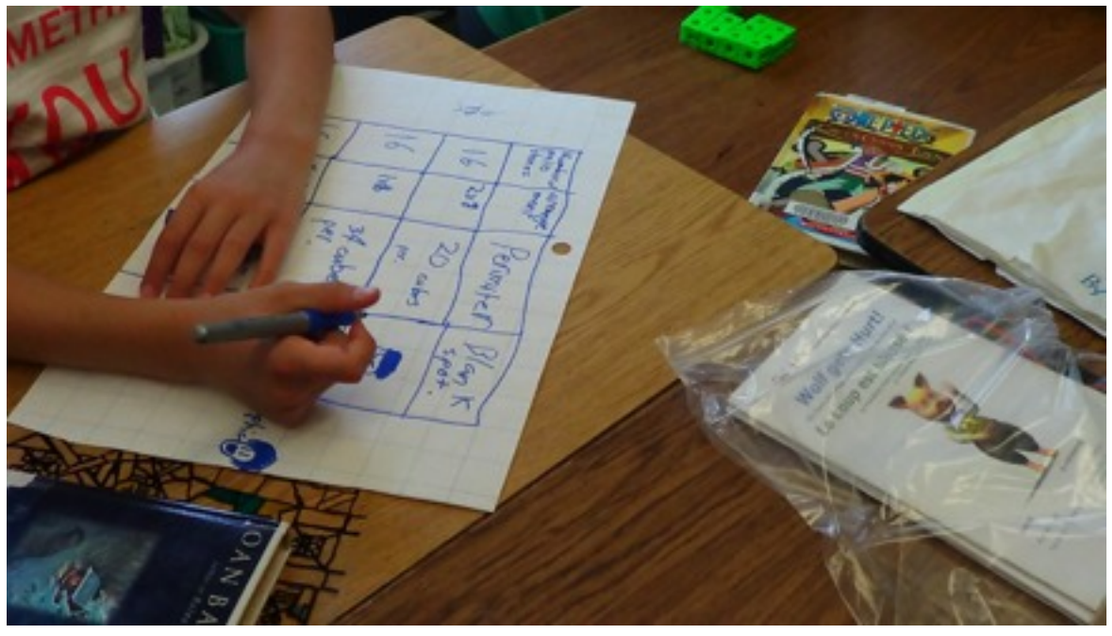
Example 1

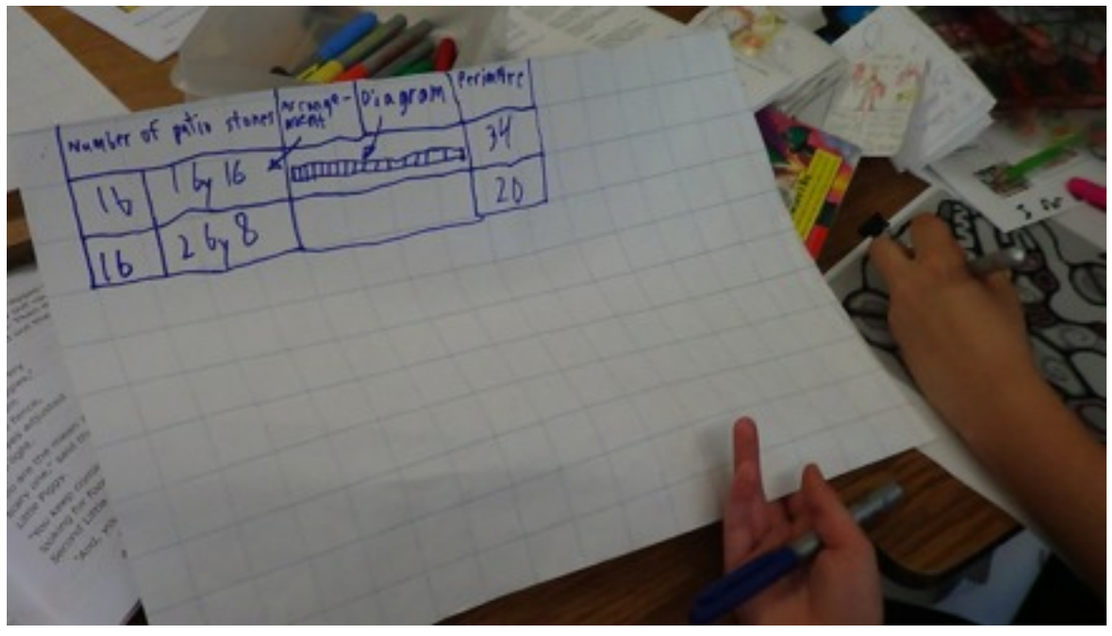
Assessment for Learning



(Source unknown.)

Finding perimeter given a fixed area

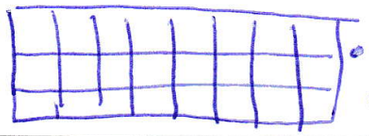




Assessment for Learning

Assessment for Learning

Grade: 3/4
Unit Title:
Task/Question: Perimeter & Area



cube array of fixed area, find diff peri

Curriculum Expectations:

3s - peri - std units
area - grid, arrays

4s - relationship btwn area/peri
- meaningful probs distinguish peri/area

Students Names	Student's Thinking	Errors & Misconceptions	Observations & Anecdotal Notes
	1, 2		Student's Thinking
	1 2		1. identifies perimeter
			2. identifies area
	1, 2		
	2	B	3.
		B	
		C	4.
	1, 2		
	1		
	4 2	B	
	1,		

Assessment for Learning

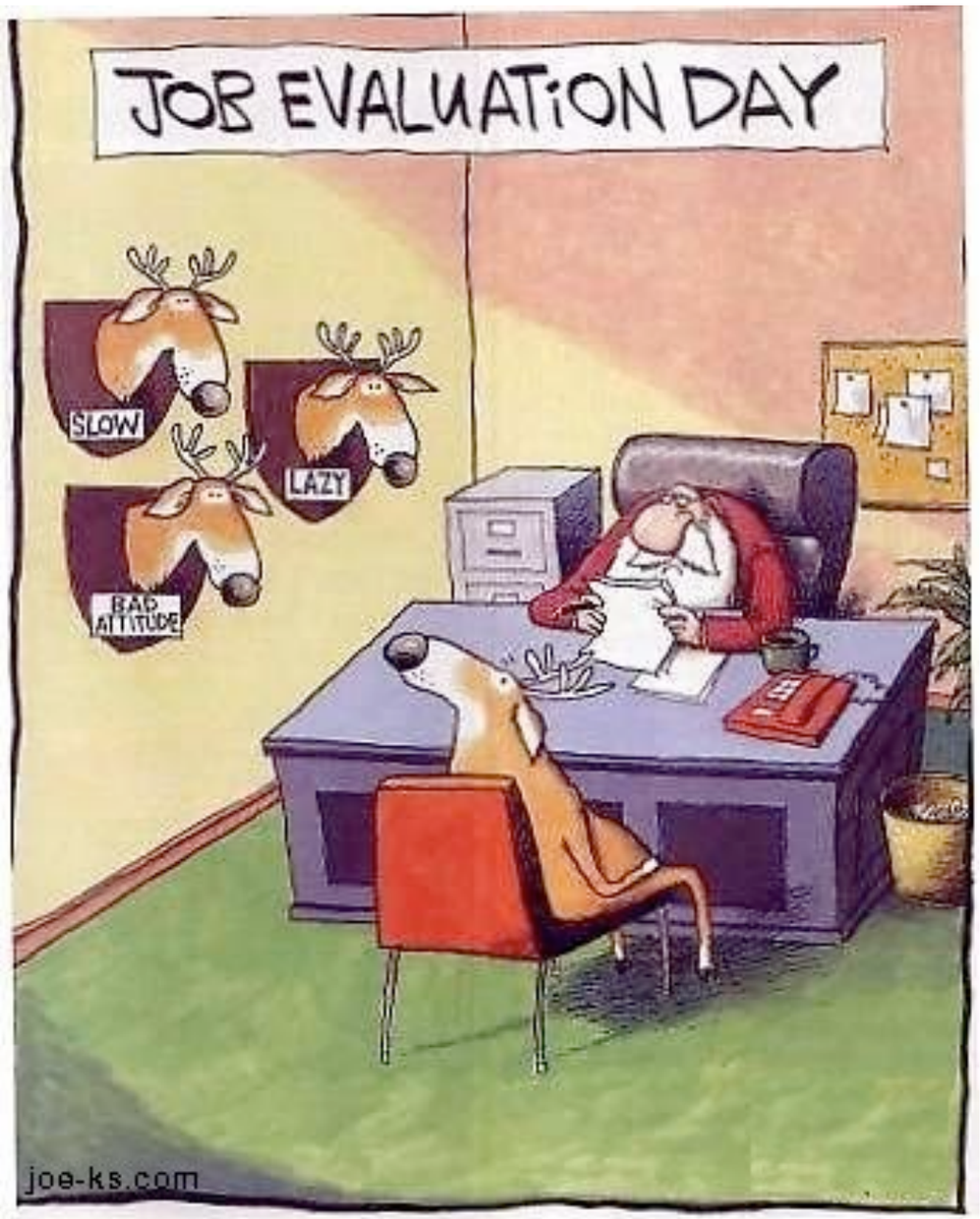
		Student's Thinking
1, 2		
	B	
	C	4.
1, 2		
1		
1, 2	B	
1,		
12	A	Errors & Misconceptions
1, 2	A	A. Counts interior blocks (area)
1 2+		
1	C B	B. misses the corner block (perimeter)
1, 2		
1, 2		C. confuses counting blocks counts outside blocks (perimeter)
1, 2		
1, 2		D.
1, 2		
1, 2		

Who are we assessing?

- The students?
- Be precise. What exactly do we know?
- The teacher?
- Be honest with yourself. Were you effective at reaching everyone?

Example 2

Assessment as Learning

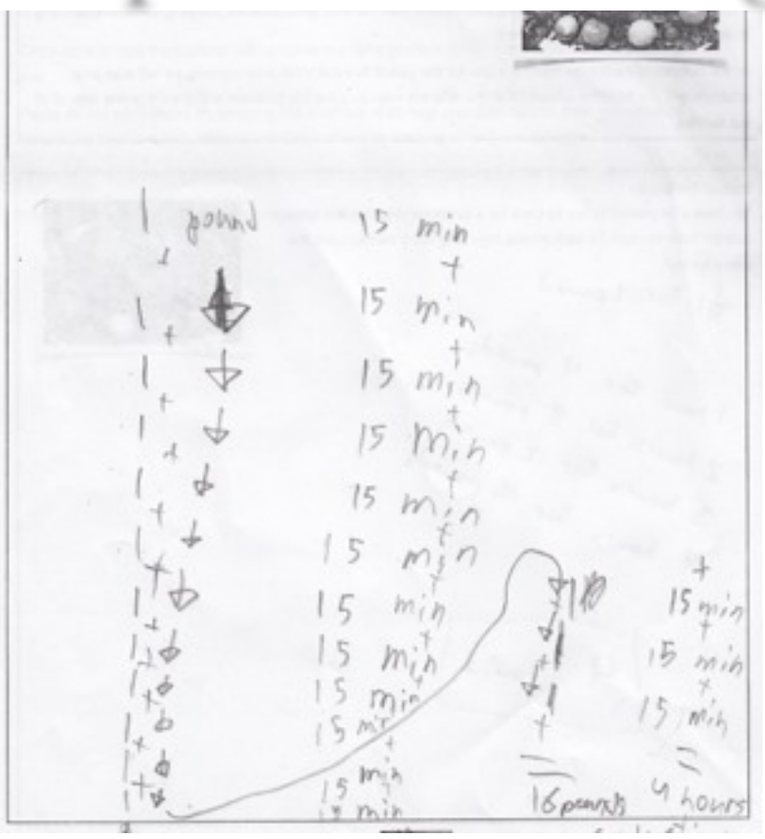


Bansho

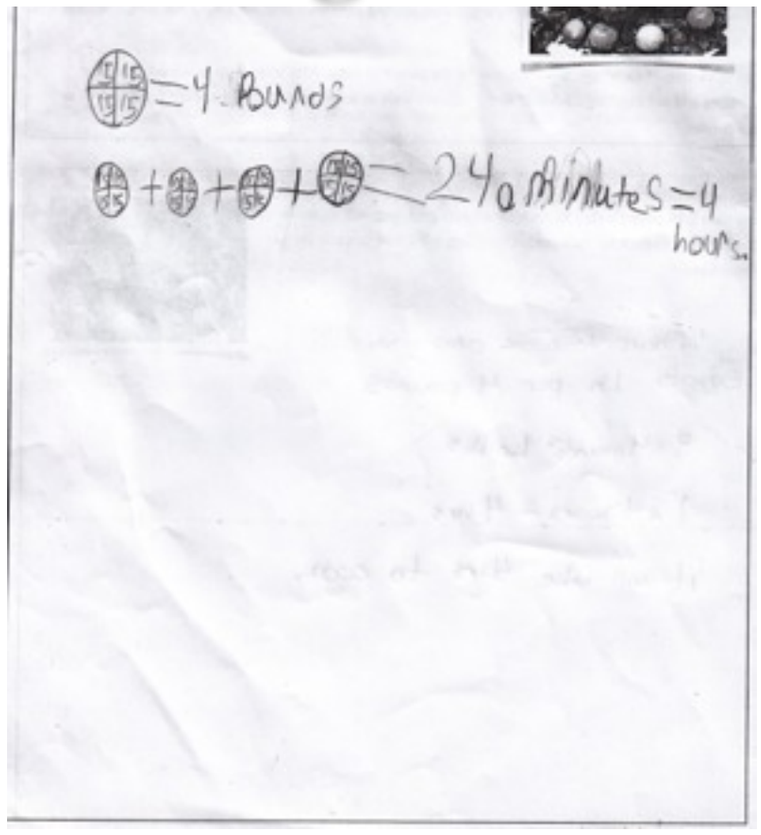

We know that multiplication is repeated adding.
The box method of multiplying

Bansho Basics

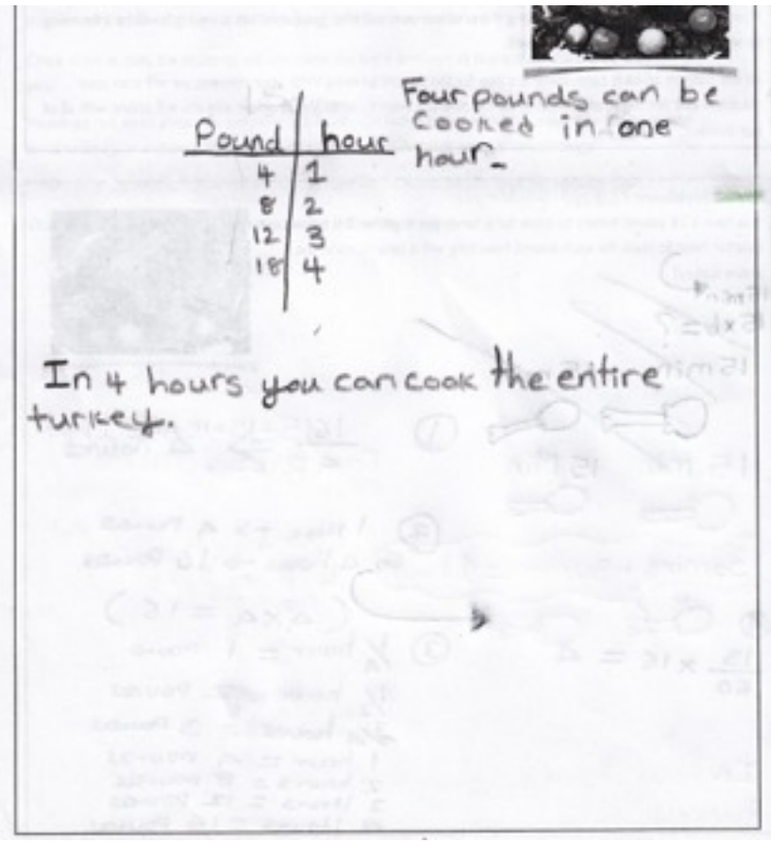
Repeated Adding



Making Wholes

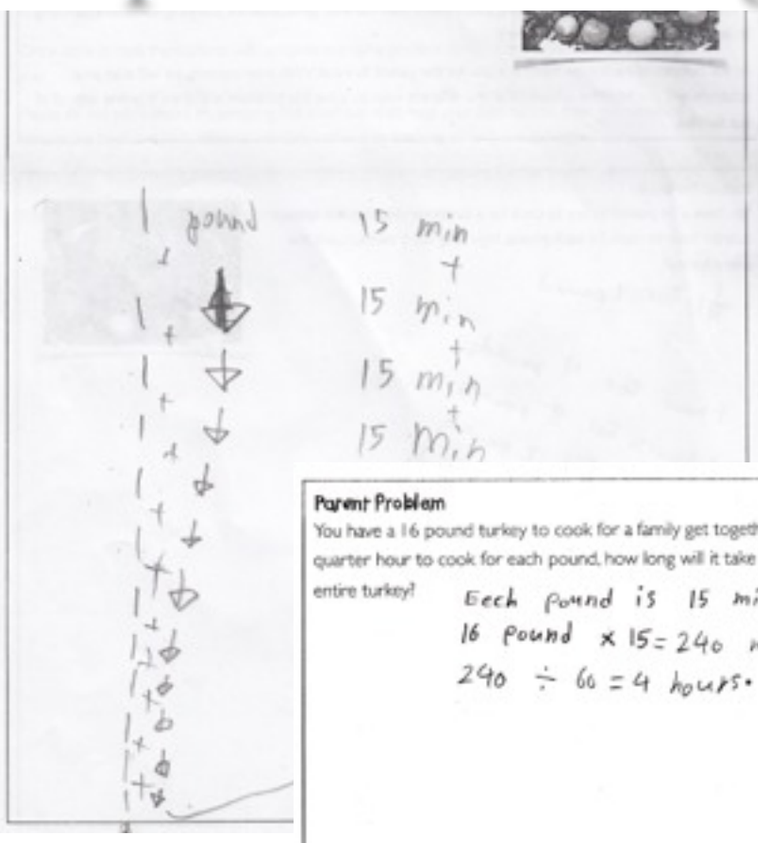


Find and Use a Pattern

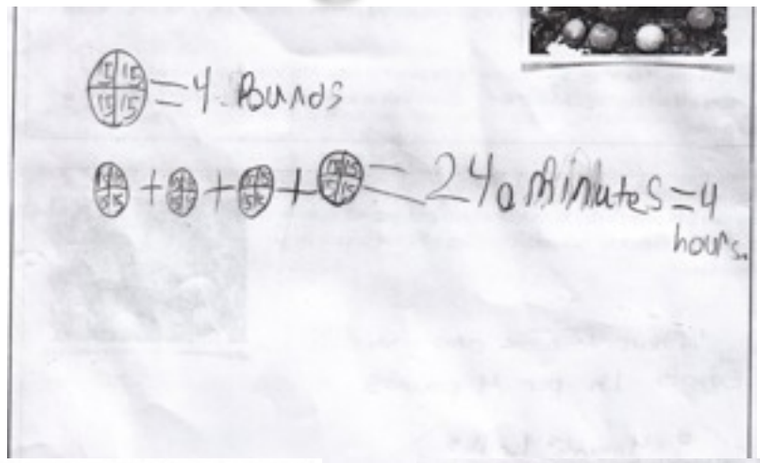


Expanding Bansho

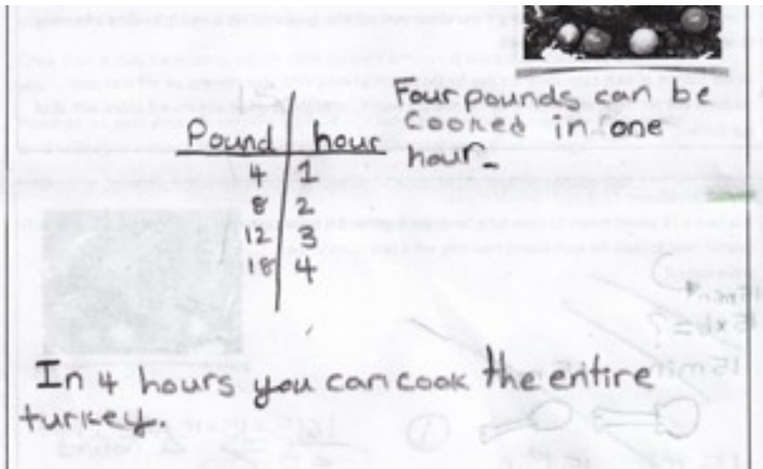
Repeated Adding



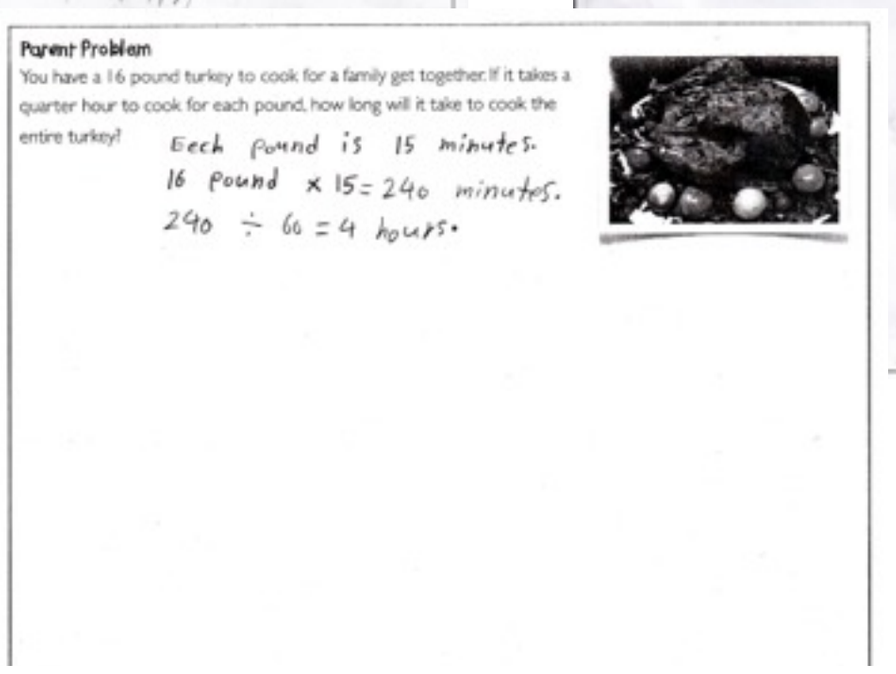
Making Wholes



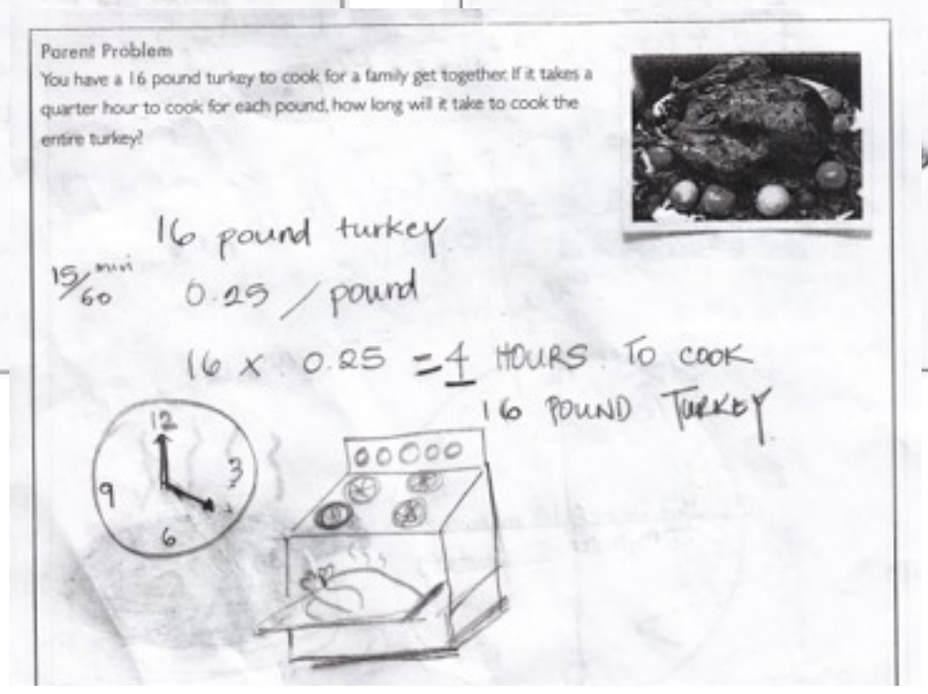
Find and Use a Pattern



Multiplying Minutes



Fractions into Decimals



Summary of Learning

F R A C T I O N T A S K S

Solving Problems Together

Parents and students learn from each other

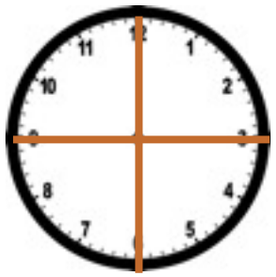
Not a Worksheet Publications Issue Nº 2 Winter 2014

Summary of Learning

F R A C T I O N T A S K S

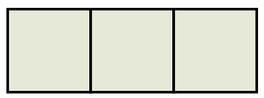
Summary of the Mathematics Concepts

Building learning communities

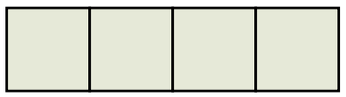


Fractions are always part of something. In this case an hour.

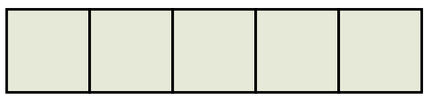
The number of equal parts gives the fraction its name.



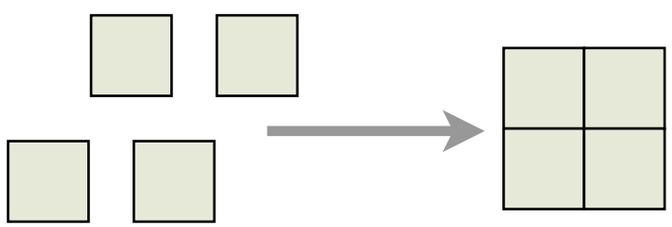
Thirds



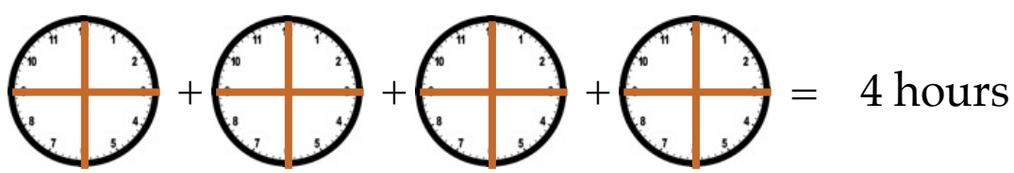
Fourths or quarters



Fifths



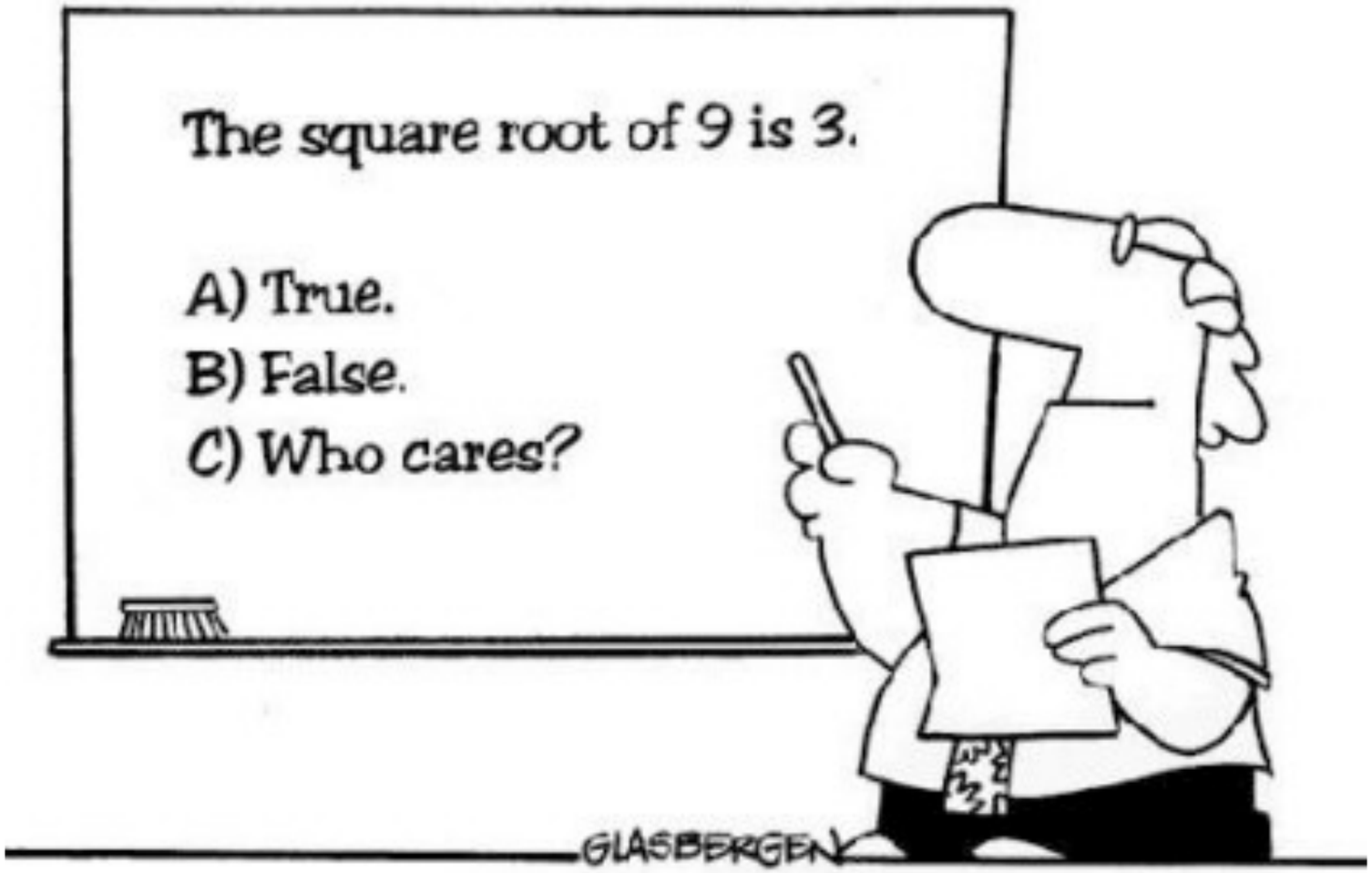
Like fractions can be gathered into wholes.



Fractions can be combined and counted to get a total. They can be added and multiplied, too.

Example 3

Assessment of Learning



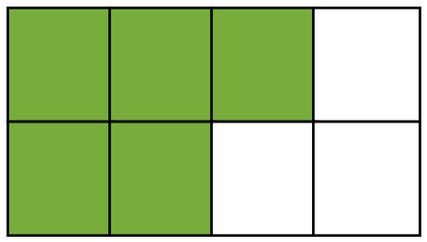
Many students actually look forward to Mr. Atwadder's math tests.

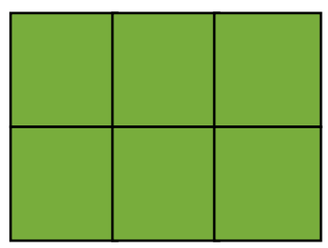
Cooperative Assessment

Name these fractions.

Gr. 3 may use words.

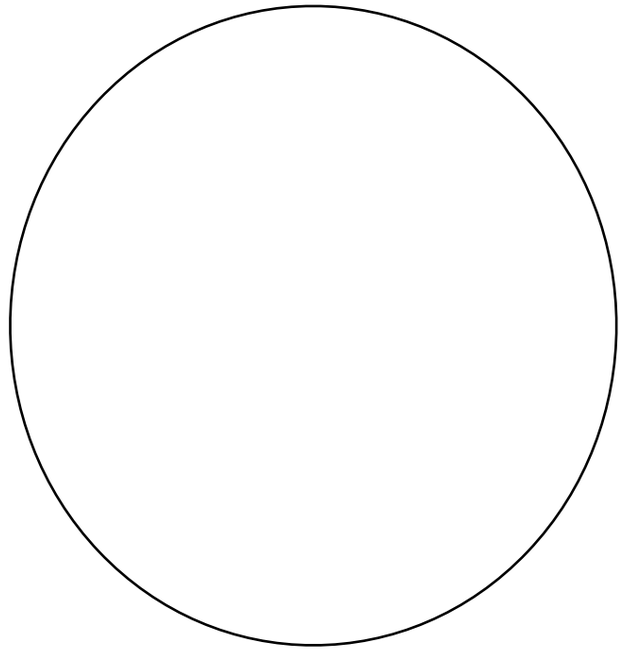
Gr. 4 must use numbers.





Cooperative Assessment

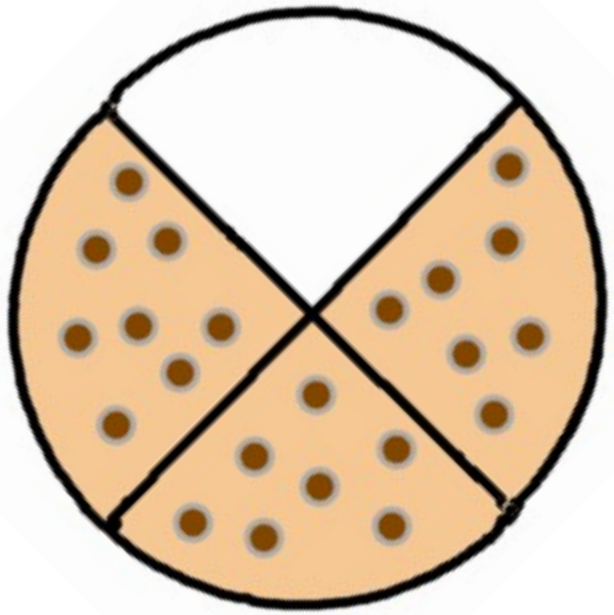
Divide this circle into a fraction. Explain your fraction.



Cooperative Assessment

Four friends want to share the rest of this pizza equally.

Explain how could they do this.



Cooperative Assessment

Famous baseball coach, Yogi Berra, was hungry after a game and went to order a pizza. The pizza chef asked, "Do you want me to cut your pizza into 8 or 12 pieces, Mr. Berra?"

Yogi replied, "Better cut it into 8. I'm not all that hungry."

Explain what Mr. Berra does not understand about fractions.

Summary

- Observing is good
- Questioning and talking to students is even better
- Public knowledge is shared knowledge that can be built upon
- Children can help make assessment tools

- Children are much smarter and more capable than they are given credit for
- Parents are much more valuable partners than is thought in the literature

Thank you