

“Today’s test is 70% of your final grade which makes up 35% of your grade for the semester and 20% of your GPA for 50% of your scholastic career for 15% of the curriculum. If you can explain this to the person next you, you pass the test.”



Assessment

What and how?



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An example

- In a school for Vocational education
- All teachers said: they can not make calculations

$$18 + 9$$



17 + 19

$$\begin{aligned} \text{like doe } 17 + 20 &= 37 \\ 37 - 1 &= 36 \end{aligned}$$

$$19 + 1 = 20 + 16 = 36$$

$$40 - 4 = 36$$



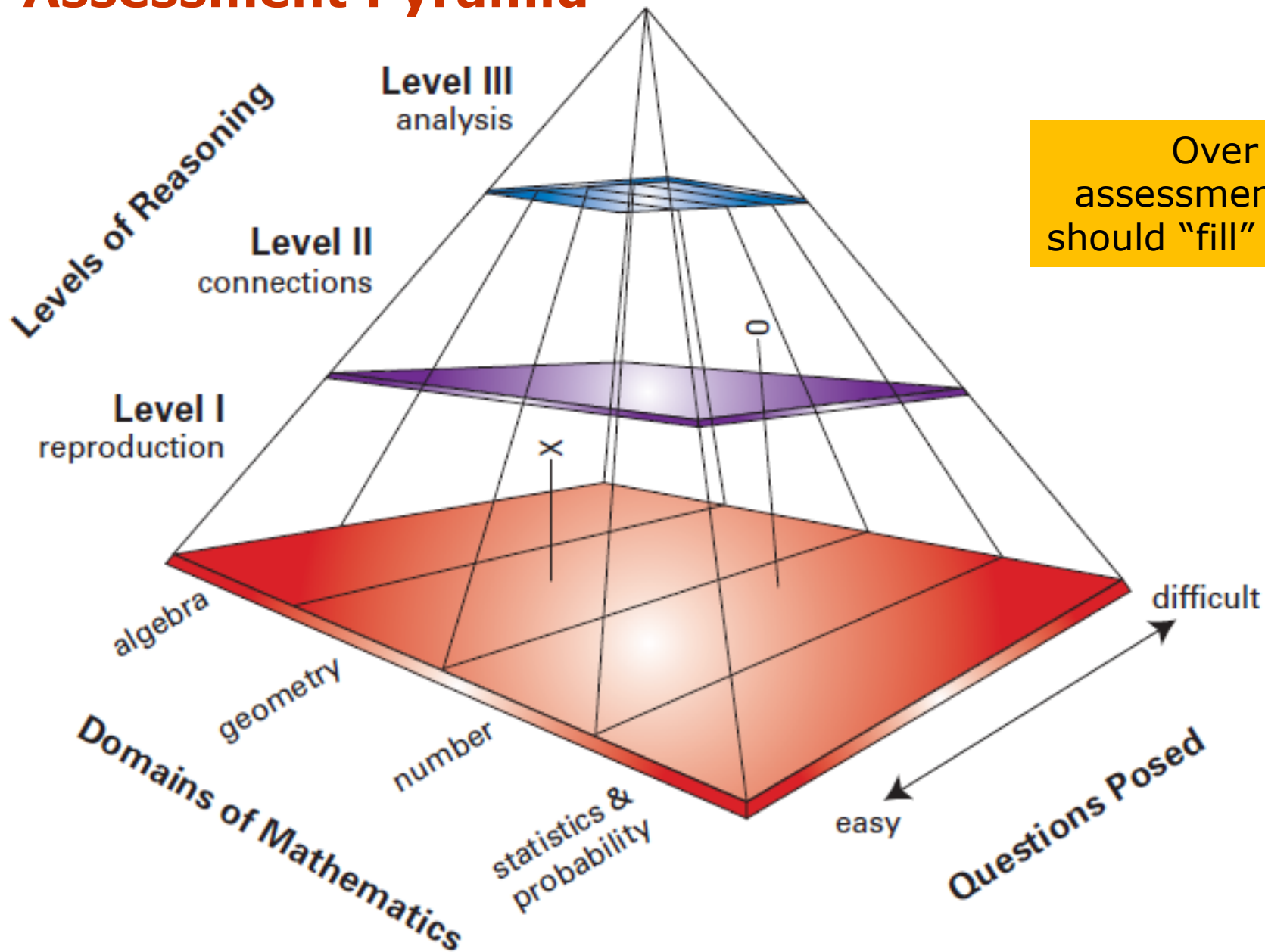
The role of assessment?

Why do we assess?

- To see where the students are
- To see what students know/can do
- To show students where they are
- To motivate students by giving properly feedback
- Where to start
- To reflect on previous teaching: what to do next.
- For a grade



Assessment Pyramid





The Levels of Competencies

1. Reproduction, procedures, concepts and definitions
2. Making connections, integration and problem solving
3. Mathematizing, mathematical thinking and reasoning, generalizing and insight





Example of Level 1

Knowledge of Facts and Definitions

- How many degrees are the angles of an isosceles triangle?
- What units would be the best to measure the weight of an egg?
 - A. centimeters
 - B. millimeters
 - C. grams
 - D. kilograms



Examples of Level 1

Use of Routine Procedures

- What is the approximate surface area (A) of a cone whose slant height (s) is 6 inches and whose radius (r) is 3 inches?

Use the formula: $A = \pi r^2 + \pi r s$

- Only **\$139.99** plus 8.25% salestax.
What is the price of this walkman, tax included?





Level 1 or 2?

gouda
Jute zak gevuld met 100 theelichtjes
à 4,5 uur brandtijd.

100 STUKS

6.99

Theelichtjes
in cup

75 STUKS

2.99



Level?

In a calculus class, 15 of the students play soccer. Find the total number of students in the class if 3 out of every 5 students play soccer.



3 out of every 5 play soccer

Sample strategy 1	
15 students play soccer:	
soccer	
3	5
3	5
3	5
3	5
3	5

So the total number in class is 25



3 out of every 5 play soccer

Sample strategy 2

3 out of 5 is the ratio, so I solved

$$\frac{3}{5} = \frac{15}{x}$$

$$\frac{15}{25} = \frac{15}{x}$$

$$x = 25$$



3 out of every 5 play soccer

Sample strategy 3				
	3	6	12	
total	5	10	20	25

+

So the total is 25





Examples of Level 3

- Thinking problems
- A-lympiad (Monica, Dédé)
- Other presentations?





What is a balanced assessment?

Depending on the specific chapter or unit that is assessed, we sometimes use the following general rule of the distribution of time and scoring points:

TIME NEEDED		
Level 1 55%	Level 2 30%	Level 3 15%
SCORING POINTS		

Or L1 : L2 : L3 = 3 : 2 : 1



Grading?

- How would you value a 60% score on a balanced assessment?

TIME NEEDED		
Level 1 55%	Level 2 30%	Level 3 15%
SCORING POINTS		



Choose your activity

- Analyze an assessment:
Models You can Count on (From Mathematics in Context)
- Evaluate student work

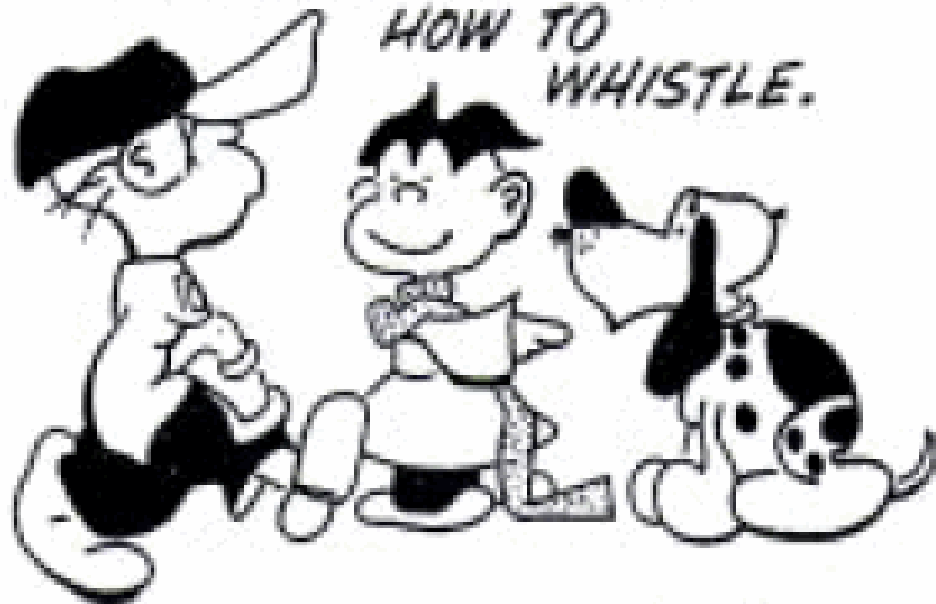




A test should reflect
previous teaching



I TAUGHT STRIPE
HOW TO
WHISTLE.



I DON'T HEAR
HIM WHISTLING!



I SAID I TAUGHT
HIM. I DIDN'T
SAY HE LEARNED IT.

