



Depth of Knowledge

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[Twitter](#)

Presentation Link...

<https://goo.gl/uhZBuX>









“Don’t be bread, be pizza” --Ron Clark



OR



[Don't be bread, be pizza](#)



I DON'T WANT TO GO TO
SCHOOL! I HATE SCHOOL!
I'D RATHER DO *ANYTHING*
THAN GO TO SCHOOL!



Survey

[Click here](#)

<https://goo.gl/forms/mA84a9AKrtr9ZvEt1>



Let's try this...

$$\begin{array}{r} 423 \\ + 187 \\ \hline \end{array}$$



Use the numbers 1-9 no more than one time, to create an addition problem that has a sum larger than 800.



SUM TO 1,000 – TWO ADDENDS

Directions: Arrange the digits 1-6 into two 3-digit whole numbers. Make the sum as close to 1000 as possible.

$$\begin{array}{r} \\ + \\ \\ \hline \end{array}$$


Credit: <https://www.openmiddle.com/sum-to-1000-two-addends/>



What did you notice???



What is Depth of Knowledge (DOK)?

- **Created by researcher Norman Webb**
- **Originally for Math and Science Standards**
 - **All Content Areas**
 - **Doing Math (operation) vs. Thinking Math**



WHY DOK?

- Can be anything you want it to be
- Increase student collaboration
- Increase Rigor
- Increase Student Understanding
 - Research...
- Standard → Assessment → Instruction



Why Depth of Knowledge (2)

youcubed.org

DEPTH > SPEED

We no longer need students to compute fast
(we have computers for this)

We need them to think:
deeply, connect methods, reason, and justify.



How I got to DOK?

- Had a need
 - Started with HA kids
- Stuck in “basal”
- Deeper in standard
- Did not want to jump into 6th grade



Depth of Knowledge Level 1

- Recall/Reproduction
- Recall of a Fact, Information or Procedure
- Examples of DOK 1
 - Can you recall...?
 - When did ...happened?
 - Apply a well known algorithm
 - Turtle head
 - 5 "W's"



Depth of Knowledge Level 2

- Skills/Concepts
- Use information or conceptual knowledge, connecting ideas
- Examples of DOK 2
 - Can you explain how...affected....?
 - What do you notice about...?
 - Provide justification for steps in a solution process



Depth of Knowledge Level 3

- Requires Reasoning/Defending
- Developing a Plan
- May not have a single correct answer or approach
- Examples of Depth of Knowledge Level 3
 - How is...related to...?
 - What facts would you select to support...?
 - Generalize a Pattern



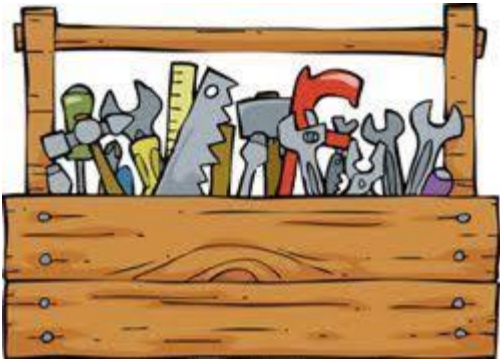
Depth of Knowledge Level 4

- Extended Thinking
- Investigation or Project
- Extended time spent of complex problems
- Examples of DOK 4
 - Apply information from one text to another text to develop a persuasive argument.
 - Genius Hour



Teacher Toolbox

Choose 4 power standards or opportunities for improvement



DOK Level 2 (Skills/Concepts)

Math

- Provide Limits

Credit: openmiddle.com

Language Arts

- Determine the author's purpose--including how it affects the interpretation of text (DOK 3)



Create your own...



DOK Level 3 (Strategic Thinking)

Math

- Provide Limits

Reading

- Ask “what if”
 - What if (character?)
(standard?)...



Create your own...



Error Analysis

- Exactly like it sounds
- Identify Error
- Write what went wrong
- Solve it

Example...

Identify Theme...is it correct why or why not

- What went wrong?



Create your own error analysis...



Which one doesn't belong

- Give correct and incorrect options
- Include why doesn't it belong

Example

LA Option: 4 different inferences from a text



Create your own WODB...












How to access

Proficiency Scale

- 1 Star--3rd Grade
- 2 Star--4th Grade
- 3 Star--5th Grade (3 on RC)
- 4 Star-- 5th Grade (DOK 3)



How to access (2)...

Day 1	 &  Exit Ticket on 2 Star
Day 2	  &  Exit Ticket on 3 Star
Day 3	 &  Ent. Ticket on 3 star
Day 4	 &  Ent. Ticket on 3 star
Day 5	Team Created CFA



Choose 1

Choose one thing from previous list to make proficiency scale.

[MN ELA Standards](#)

[MN Math Standards](#)



Recap

- Goal is to pull students thinking out
 - More formative information than classic problem
1. Provide Limits
 2. Which one doesn't belong
 3. Error Analysis



Resources

- [Sci-Math MN](#)
- [Open Middle](#)
- [Inside Math](#)
- [Robert Kaplinsky](#)
 - [DOK Tool](#)
- [Google Drive](#)
 - [Question Stems](#)
 - [Content Areas](#)
- [NRICH](#)

- [Karin Hess DOK in Reading](#)
- [DOK in Science](#)
- [DOK in Social Studies](#)

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Standard → Assessment → Instruction

- DOK and PLC Aligned
- Answers PLC Questions
 - 1. What do you want students to know?
 - 2. How will you know if they have it?
 - 3. How will we respond if they don't?
 - 4. How will we respond if they do?
- DOK should be used in all scenarios!

