

# Differentiation and Flexible Tasks

What features of a task make it accessible to students?



# Ensuring access

In your notebook (no discussion yet):

1. What can prevent a student from accessing a piece of mathematics? Make a list.
2. What features of a math task make it more (or less) accessible to an individual student?



# What is differentiation?

Instruction can be differentiated by focusing on...

- 1) Content
- 2) Process
- 3) Product
- [4) Learning Environment]



# What is differentiation?

Instruction can be differentiated by focusing on...

1) Content

2) Process - Questioning

3) Product

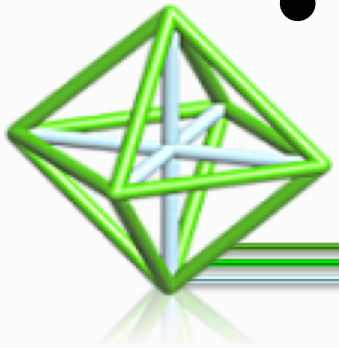
[4) Learning Environment]





# ASCD 4 Levels of Questioning

- LEVEL 1: Details
- LEVEL 2: Characteristics
- LEVEL 3: Elaborations
- LEVEL 4: Evidence



# ASCD 4 Levels of Questioning

## LEVEL 1: Details



# ASCD 4 Levels of Questioning

## LEVEL 1: Details

- Asks students to recall or recognize details about specific types of information



# ASCD 4 Levels of Questioning

## LEVEL 2: Characteristics



# ASCD 4 Levels of Questioning

## LEVEL 2: Characteristics

- Asks students to describe the characteristics of a given category



# ASCD 4 Levels of Questioning

## LEVEL 3: Elaboration



# ASCD 4 Levels of Questioning

## LEVEL 3: Elaboration

- Level 3 questions ask students to elaborate on the characteristics of and elements within a category. Typically, such questions require students to explain the reasons something happens.



# ASCD 4 Levels of Questioning

## LEVEL 4: Evidence





# ASCD 4 Levels of Questioning

## LEVEL 4: Evidence

- Level 4 questions require students to provide support or evidence for their elaborations. They might ask students to identify sources that support their elaborations.



# Question Grids

- helps teachers create and organize questions into categories
- can be modified to a teacher's preferences
- give sentence starters
- can be used to keep track of which students are answering which types of questions (when used with a seating chart/roster)



## Question Grid

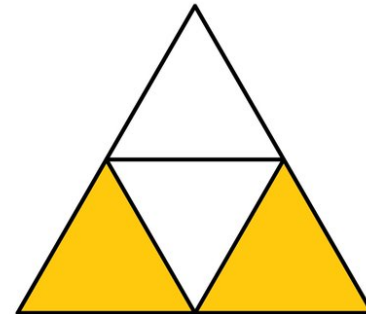
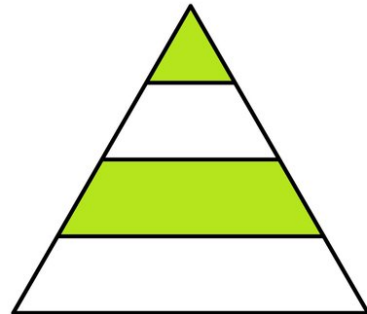
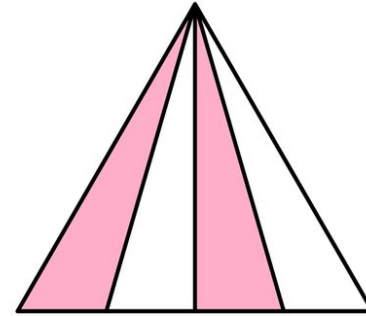
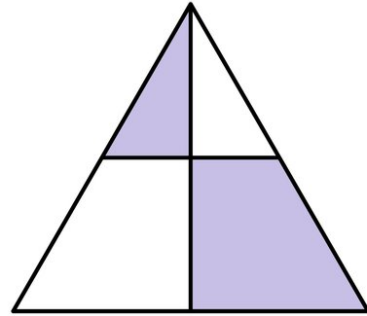
	Is/Are	Did/Do?	Can	Would/Should	Will	Might/Could
What						
Where						
When						
Who						
Why						
How						



# Mathematical Image 1

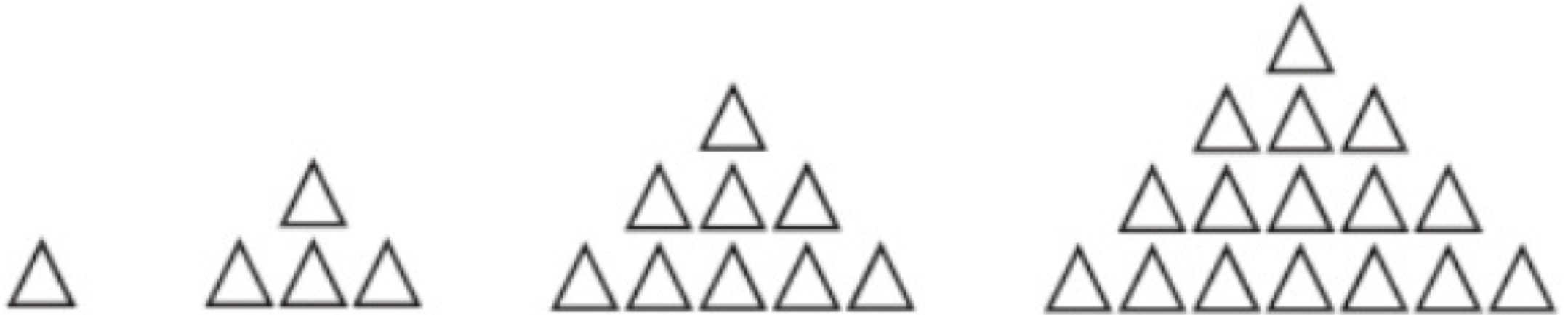


# Mathematical Image 2





# Mathematical Image 3



# Analyzing Question Grid

What were some things you liked about the question grid and/or the process of filling one out?

What was limiting about the question grid and/or the process of filling one out?



Question Grid

	Is/Are	Did/Do?	Can	Would/Should	Will	Might/Could
What						
Where	DETAILS			ELABORATION		
When						
Who						
Why	CHARACTER- ISTICS			EVIDENCE		
How						





# Questioning Grid

	Is / Are	Did / Do	Can	Would / Should	Will	Might / Could
What	Factual					
Where						
When						
Who						
Why	Analytical					
How						





**?**  
**QUESTION GRID**

Ask better questions.

	<b>IS?</b> PRESENT	<b>DID?</b> PAST	<b>CAN?</b> POSSIBILITY	<b>WOULD?</b> PROBABILITY	<b>WILL?</b> PREDICTION	<b>MIGHT?</b> IMAGINATION
<b>WHAT?</b> EVENT						
<b>WHERE?</b> WHERE/WHEN						
<b>WHEN?</b> CHOICE						
<b>WHO?</b> PERSON						
<b>WHY?</b> REASON						
<b>HOW?</b> MEANING						

Don't leave any answer unquestioned.

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# Higher Order Questioning Grid

	is	was / were	do / does / did	can / could	shall / should	would	might
Who	1 Point Questions						
What							
When							
Where							
Why							
How							
	isn't	wasn't were not	don't didn't	can't couldn't	shouldn't	wouldn't	might not



# Question Grid



## Word Bank

Predict  
Evaluate  
Compare

What  
When  
Why

How  
Prove  
Model

Elaborate  
Discuss  
Dispute

Reproduce  
Estimate  
Construct

Classify  
Represent  
Modify

Revise  
Speculate  
Explain



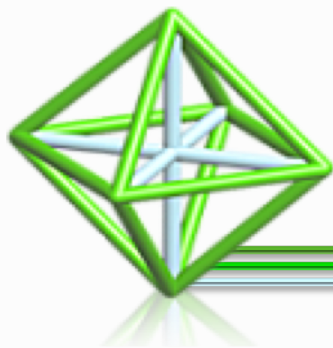
## Question Grid

Date:

Objective:

Essential Question:

	Is/Are? (Present)	Did/Do/Does? (Past)	Can? (Possibility)	Would/Should? (Probability)	Will? (Prediction)	Might/Could? (Imagination)
What?						
Where?						
When?						
Why?						
How?						





# Four Views of 1/4

Differentiation (variation within a class)  $\neq$  Adaptation (changing a task for your whole class)

- Look at / try all four tasks with your table.
- With a different partner: pick a task.
- Without adapting the central task into a different one, how could you differentiate it to add access points and/or sufficient challenge?



# References

"Asking Questions - At Four Different Levels", *Art and Science of Teaching*, February 2013, Volume 70, Number 5, ASCD

