

(TITLE SLIDE)

YOU'LL GET TO FILL THIS IN SOON

Assigned in GC on:
[] (put the date)

An Honest Self Assessment with Groupwork

Instructions: Think about all the groups you've been in, in math class and in other classes. There are many things that can be strengths that contribute to the well being of a group – it may be contributing ideas, deep listening, inviting others into the conversation, making people laugh, etc. And there are things that are weaknesses – maybe you don't share your voice enough, you might come across as condescending, you lose focus quickly, etc. There are a million ways to be strong or weak in a group. Do an honest digging into yourself. Don't be humble or prideful. Just be honest.

My Perceived Strengths:

My Perceived Weaknesses:

THE HIDDEN WOMEN OF STEM VIDEO

(Alexis Scott)



“I am invisible, understand, simply because people refuse to see me. [...] When they approach me they see only my surroundings, themselves or figments of their imagination, indeed, everything and anything except me.” -- Ralph Ellison

My thoughts:

What is something that piqued your interest, surprised you, gave you a different way to view things, or made you think about something (maybe in your own life, or about the life of someone close to you)?

My thoughts:

The Great Trapezoid Debate

Click through to the slides linked above and read some arguments for whether we should use the Exclusive or Inclusive definition of a trapezoid. Be sure to read the Speaker Notes as well to get a full sense of the arguments being made.

Which side do you think is more compelling? Why?

Sometimes there is no mathematical consensus, as in the case of the definition of a trapezoid. How do you think this affects the mathematical community? Do you think this is a good thing or a bad thing?

Assigned in GC on:
[] (put the date)

Reflection on Celebration of Knowledge #1

Instructions: Go to [this google doc](#) and make a copy of it. Then put the link to your completed copy in the space below.

Link to my Reflection: [here]

LATHISMS: Get Introduced to a Mathematician

Instructions: I want you to leave our class hearing stories of mathematicians. Most students in high school don't know of many mathematicians (but the names like Pythagoras, etc.) but not who current mathematicians are and what they do. Go to this webpage [<https://www.lathisms.org/podcasts>] and click through the different years/see the different mathematicians. Either listen to the interview or read the transcript. (I love *listening* to the interviews!) and fill in the blanks below. *Note: If you need more room, feel free to add an additional page to write more!*

Mathematician's name:
[here]

*Put a picture of your
mathematician
below:*
[here]

Write down three specific things that you learned about your mathematician that interested you, and make a note of what kind of mathematics your mathematician works on:

• [here]

• [here]

• [here]

• The mathematics that my mathematician works on is: [here]

What is something that the mathematician experienced that you thought “hey, me too!” Or if not, what is something that your mathematician experienced that you never experienced?

[here]

INDIVIDUAL ANALYSIS of ME IN MY GROUP

As we end the first unit, think about what you contributed to your group and answer the following reflection questions. [Feel free to use another slide.]

1. What were your personal role(s) in the group? What are places you shine, and what are places you need to grow?

[here]

2. Have you changed at all since the start of the year as a group member? If so, how? If not, why do you think that is?

[here]

3. What is one thing you love about your current group that you want to make sure happens in your next group? What actions do you think you can do to make sure that thing you love happens in your next group?

[here]

4. What is one thing you didn't have in your current group that you want to make sure happens in your next group? What actions do you think you can do to make sure this happens in your next group?

[here]

5. (optional) If there is someone in your group or our class that you want to give a shoutout to, because they've done something that has been really helpful in your learning, include it here. Who are they, and what is the shoutout for specifically? I'll make sure to let them know!

[here]

WHOLE GROUP ANALYSIS of GROUP WORK

Between you and me, you know your group better. And y'all know I value honest reflection, as I see them as places to grow. As a group, write a single top-level paragraph (5-7 sentences) analyzing your groupwork. Think about the positive aspects of your group and the ways y'all think your group could have improved or been better. One helpful way to do this is to think about if there was a recording of your groupwork every single day. What would these recordings reveal to an outsider? Things to think about... How *consistent* were you with your strong qualities: for each, was it constant, fairly regular, occasional, or rare? How was your communication, and what made it work or not work? What actions did you take (or didn't take) to ensure that everyone was learning and being included? What was the vibe that you created? How noisy or not-noisy was your group? What did y'all love about your group? What do y'all wish your group could have been better at by the end of working together? Was there something y'all worked on deliberately as a group -- and how did that go? How did you do with your group commitments?

Then on the next slide, provide a set of bullet points which provides specifics/evidence/examples for your analysis.

Paragraph about groupwork: [here]

WHOLE GROUP ANALYSIS of GROUP WORK

A set of bulletpoints which gives specifics/evidence/examples for the paragraph analysis

-

CHOICE: Read about a Mathematician or a Math Event

Instructions: You have a choice to do (A) or (B).

Choice A: Read this [Q&A with Autumn Kent](#) on being a Trans Mathematician. Write down and explain two parts of the interview that made you think. What was being discussed in the interview, and what did it make you think about?

Choice B: Read this [article about the origins of the LGBT Math Reception](#). Write down and explain two parts of the article that you want to know more about. What history or events are being talked about, and why do you want to learn more about it?

I am doing choice:

1)

2)

The Illusion of Explanatory Depth

Instructions: Read the article [linked here](#), then respond to the prompts below..

#1: In what ways is the concept of the illusion of explanatory depth relevant to our math class?

#2: A common saying among teachers is “the person who does the talking does the learning.” How is that related to the illusion of explanatory depth? How does it relate to your group work?

SLIDE 1: INDIVIDUAL THOUGHTS OF MY SECOND GROUP

1. You have been with your second group for a while. I want you to think on a scale of 1 to 5, (where 5 is an ideal group, where everyone is concerned with each other's learning, amazing conversations, great questioning, a safe space... and 1 is a bit of a disaster group, where people don't really work together, there aren't a lot of conversations, and people aren't great about making others feel comfortable) where would your group fall?

I would give our group a [number here].

Explain why you gave that score (write at least 4 thoughtful sentences): [here]

2. Think about something you know you can improve on in terms of being a group member. What's a specific goal you're going to make based on this to be a stronger group member? What are you going to do, that is specific, so we can look back and you can see if you were successful or not?

Specific goal here, and how you're going to achieve it

SLIDE 2: INDIVIDUAL THOUGHTS OF MY SECOND GROUP

3. What's something you feel really good about when it comes to your work with your group?

Specific goal here, and how you're going to achieve it

4. In terms of my individual contribution to the group, on a scale of 1 to 5, I would give myself a [number here].

Explain why you gave that score (write at least 4 thoughtful sentences): [here]

Optional: Do you want to give any of your group members a shoutout? If so, write their name below along with a specific reason for the shoutout!

[here]

Four Moments of Reflection

(1) A specific instance from class when I've contributed to the learning of others (write it as a mini-story):

[here]

(2) Something I've learned that was interesting to me, and why it was interesting to me, is...:

[here]

(3) Something I am proud of (that isn't related to the assessment/grades) in this class:

[here]

(4) A specific instance from class when someone has contributed to my learning (write it as a mini-story):

[here]

Euclid's Elements

[Here](#) is a PDF of Euclid's Elements (translated). Read the Introduction on page 4, read the Definitions, Postulates, and Common Notions on pages 6 and 7.

1. What is the difference between a definition and as postulate?
2. Copy a definition you find strange/confusing/weird and write down why it is strange/confusing/weird.
3. Copy a definition that is new to you.
4. What are common notions?

[put your responses here]

1. [here]

2. [here]

3. [here]

4. [here]

Mathematically Gifted and Black

Each year during Black History Month, a website called [Mathematically Gifted and Black](#) shares short biographies of Black professionals who use mathematics in their careers. [Here](#) are the current honorees from this year, and [here](#) are all previous honorees. The biographies are short! Read through 5 (or more!) of them.

Here are the 5 people I read about (and make their name a link to their page):

[\[here\]](#), [\[here\]](#), [\[here\]](#), [\[here\]](#), and [\[here\]](#)

One honoree whose bio or interview stood out to me is: [\[here\]](#)

[\[Put a screenshot of their photo here\]](#)

What stood out to me about what I read about the honoree (or something I thought about after reading) is:

[\[here – this should be 6-7 sentences... you may be sharing this with someone else from class... if you had more general/collective thoughts about multiple mathematicians that you read about instead of just one person, you can absolutely include that here instead... However you should specifically reference each person whose biographies or experiences you're talking about which led to those more general thoughts.\]](#)

Wang Zhenyi

Read the excerpt for [Power in Numbers about Wang Zhenyi linked here](#). Write down two thoughts and one question you have after reading the excerpt.

Thought 1: [here]

Thought 2: [here]

Question: [here]

Nazca Lines

As we're learning about dilations, I thought we could read about the Nazca Lines, famous geoglyphs created by indigenous South Americans 1500-2500 years ago. [Read more about them here](#), and [look at some examples here](#), then answer the following questions.

What do the construction of Nazca lines have to do with dilations? [\[here\]](#)

The Nazca lines were rediscovered once humans could see them from the air, in flight, as it is hard to see the shapes from ground level. What does that fact make you think about the creators of the lines? [\[here\]](#)

Which of the figures on the Wikipedia page is your favorite, and why? [\[here\]](#)

What's one other thing you noticed or wondered after reading linked page? [\[here\]](#)

SLIDE 1: INDIVIDUAL THOUGHTS OF MY FOURTH GROUP

1. You have been with your fourth group for a while. I want you to think on a scale of 1 to 5, (where 5 is an ideal group, where everyone is concerned with each other's learning, amazing conversations, great questioning, a safe space... and 1 is a bit of a disaster group, where people don't really work together, there aren't a lot of conversations, and people aren't great about making others feel comfortable) where would your group fall?

I would give our group a [number here].

Explain why you gave that score (write at least 4 thoughtful sentences): [here]

2. Think about something you know you can improve on in terms of being a group member. What's a specific goal you're going to make based on this to be a stronger group member? What are you going to do, that is specific, so we can look back and you can see if you were successful or not?

Specific goal here, and how you're going to achieve it

SLIDE 2: INDIVIDUAL THOUGHTS OF MY FOURTH GROUP

3. What's something you feel really good about when it comes to your work with your group?

Specific goal here, and how you're going to achieve it

4. In terms of my individual contribution to the group, on a scale of 1 to 5, I would give myself a [number here].

Explain why you gave that score (write at least 4 thoughtful sentences): [here]

Optional: Do you want to give any of your group members a shoutout? If so, write their name below along with a specific reason for the shoutout!

[here]

Math News!

There was some big news in the math world over Spring Break. One piece of news is about [two high school students who purportedly created a new proof of the Pythagorean Theorem many thought was impossible](#). Another is [about a new shape that can single-handedly tile the plane aperiodically that solves a 50+ year old problem](#). Read one of the articles and answer the prompts below.

Summarize the article you read (beyond my summaries):

What's one feeling you have after reading?

What's one question you still have after reading the article?

AAPI Heritage Month

In honor of AAPI Heritage month, [follow this link to a blog post about three AAPI mathematicians](#). Choose one of the three mathematicians and follow the instructions (read the linked article or watch the linked video). Then answer the written discussion questions in the space below.

DQ1:

DQ2:

DQ3:

Final Group Reflection

You've been working with your current groups for a while now. Unlike previous groups, these groups were (mostly) self-chosen. Given that, answer the following questions.

- 1) What made you choose your current groupmates?
- 2) Reflecting on how your group has worked, was this the best choice? Explain why or why not.
- 3) What would you do differently when choosing a group in the future?

Kaktovik Numerals

Read this recent Scientific American article about a [new numeral system invented by Inuit schoolchildren](#). Then answer the following prompts.

- 1) What do you notice about the numeral system? What do you wonder?
- 2) How do these numerals compare to Indo-Arabic Numerals (the ones you are used to)? Do you think they are better? (You may wish to do #3 first before answering this.)
- 3) Make up your own arithmetic problems, then write them in Kaktovik numerals, and then solving using the new numerals. Scan your work and include it in the next slide.

Portfolio
OPTI
ONAL

Added to Portfolio on
 (put the date)

OPTIONAL ENTRY: [WRITE TITLE]