## The video was showing the "Mandelbrot

 Set"The formula for the Mandelbrot Set is:

$$
z_{n+1}=z_{n}{ }^{2}+C
$$

All of the numbers that makes this equation work create that picture!!!

## HR Representative

Created by Mr. Lischwe

## Warmup 8/(The grade you're in)

***If you completed a job application, turn it into the tray now.*** ***If you did not write on your job application, put it back into the pile next to the tray.***
***If you wanted to apply for a job, but you forgot to fill one out, please fill it out now, then turn it in. You have five minutes!!!***

1. Look at the growth mindset poster above the whiteboard. The phrases in white are harmful ways of thinking (fixed mindset). The corresponding phrases in color are more productive ways of thinking (growth mindset). Read all of the phrases. Choose a few that you feel would be especially helpful for you to remember, and why. You do not have to write them down - you will have the opportunity to discuss with your group and the class.
2. Estimate: How tall is Mr. Lischwe?

## A simple question:

- How many of these styrofoam cups would I have to stack up to equal my height? (Any guesses?)
- TALK WITH YOUR GROUP: What information would be helpful for you to know here?
- I am 5 feet, 3 inches tall, which is 160 centimeters.
- YOUR TASK: With your elbow partner, decide how many cups you think you would need to stack up to equal my height. You will get three cups, a ruler, and a calculator.


## GROUP WORK EXPECTATIONS

1) Respect one another.
2) Everyone must contribute.
3) Help each other understand!
4) Work together, not separately.
5) Don't distract each other by talking.
6) Get your group-mates back on track if they are distracted.

## Expectations:

- Show all work on your task paper.
- You may decide who writes, who measures, who uses the calculator, etc. However your group works together best!
- When your group has your estimate, show Mr. Lischwe.
- If you finish before the other groups, you can get a head-start on your homework. However, when we start PART 2 of this task, you will need to put this homework away.


## How many cups? Estimates (2 $\left.2^{\text {nd }}\right)$

| Group | Estimate |
| :--- | :--- |
| Nicolas \& Helen | 151 |
| Mia \& Drake | 152 |
| Zyann \& Tyler | 152 |
| Ryan \& Araceli | 102 |
| A'yana \& Abhi | 151 |
| Zilah \& Lexi | 152 |
| Carlos \& Matt | 192 |
| Bryan \& Jack | 115 |
| Emma \& Jason | 61 |
| Rachael, Isabelle, Jenaleyse | 44 |

## Stacking Cups Task: Part 2

- https://www.101qs.com/1897-stacking-cups--act-1
- How many cups must be in each stack for them to have the SAME HEIGHT??? (There must be the same number of cups in each stack)


## Homework: Lischwe Age Problem

- If you solve this math problem correctly, you will find out how old I am!
- EXTREMELY IMPORTANT: On your paper, I want to see your entire problem-solving process. Do not erase anything you do - even the stuff that doesn't work. Instead of erasing something, mark a single line through it.
- ALSO EXTREMELY IMPORTANT: Do NOT say my age out loud. Even if you know it's wrong. If I hear you saying something like "Oh, I just got it! He's 21!!!" you will lose points on the assignment.
- Due tomorrow.


## Homework:

- Finish Lischwe Age Problem

