

Failure to Disrupt: Why Technology Alone Can't Transform Education

failuretodisrupt.com

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FAILURE TO DISRUPT

Why Technology Alone Can't Transform Education



Three Genres



INSTRUCTOR



ALGORITHM



PEER

Who guides the sequence of learning activities?

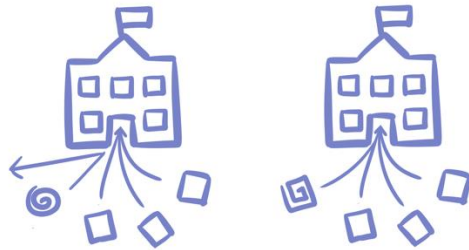
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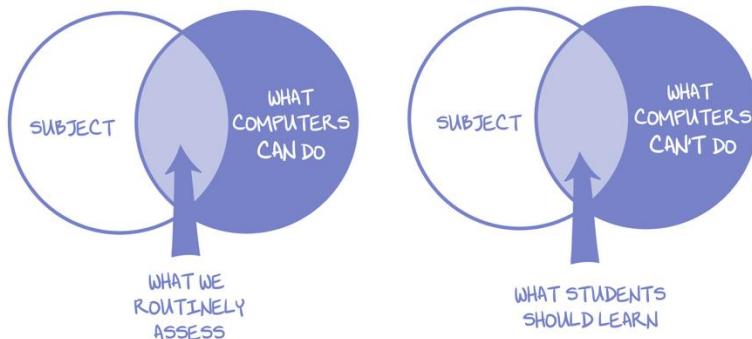


JUSTIN
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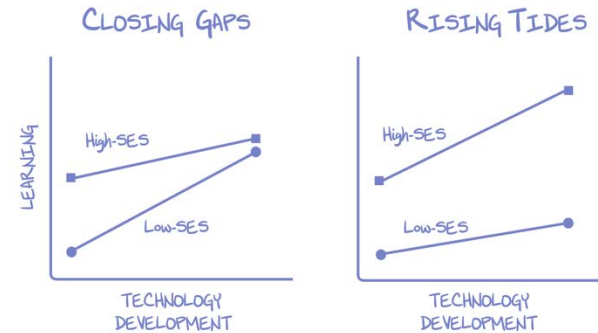
Four “As-Yet Intractable Dilemmas”



Curse of the Familiar



Trap of Routine Assessment



EdTech Matthew Effect



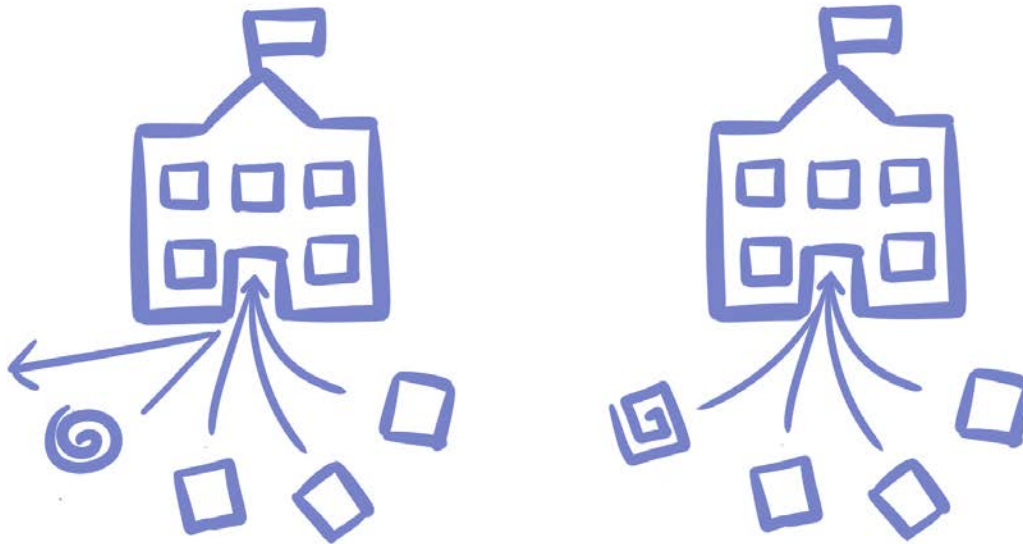
3 Toxic Power of Data and Experiments

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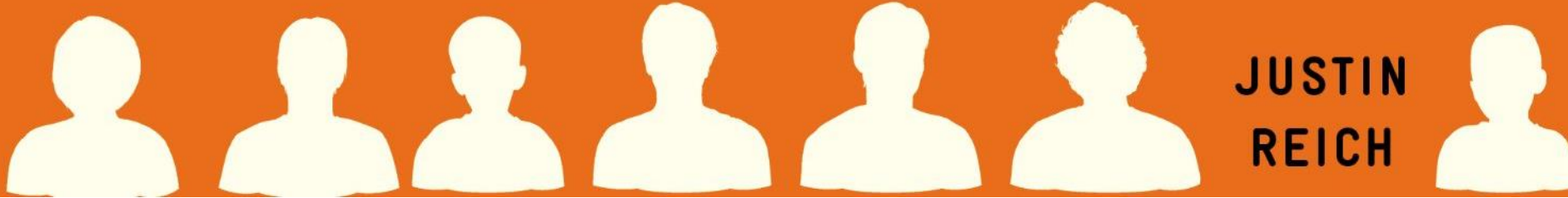


Curse of the Familiar



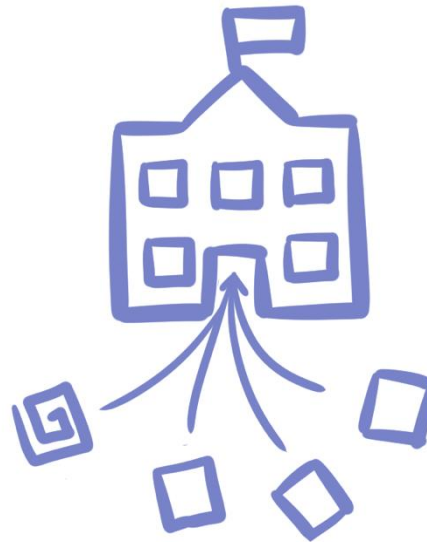
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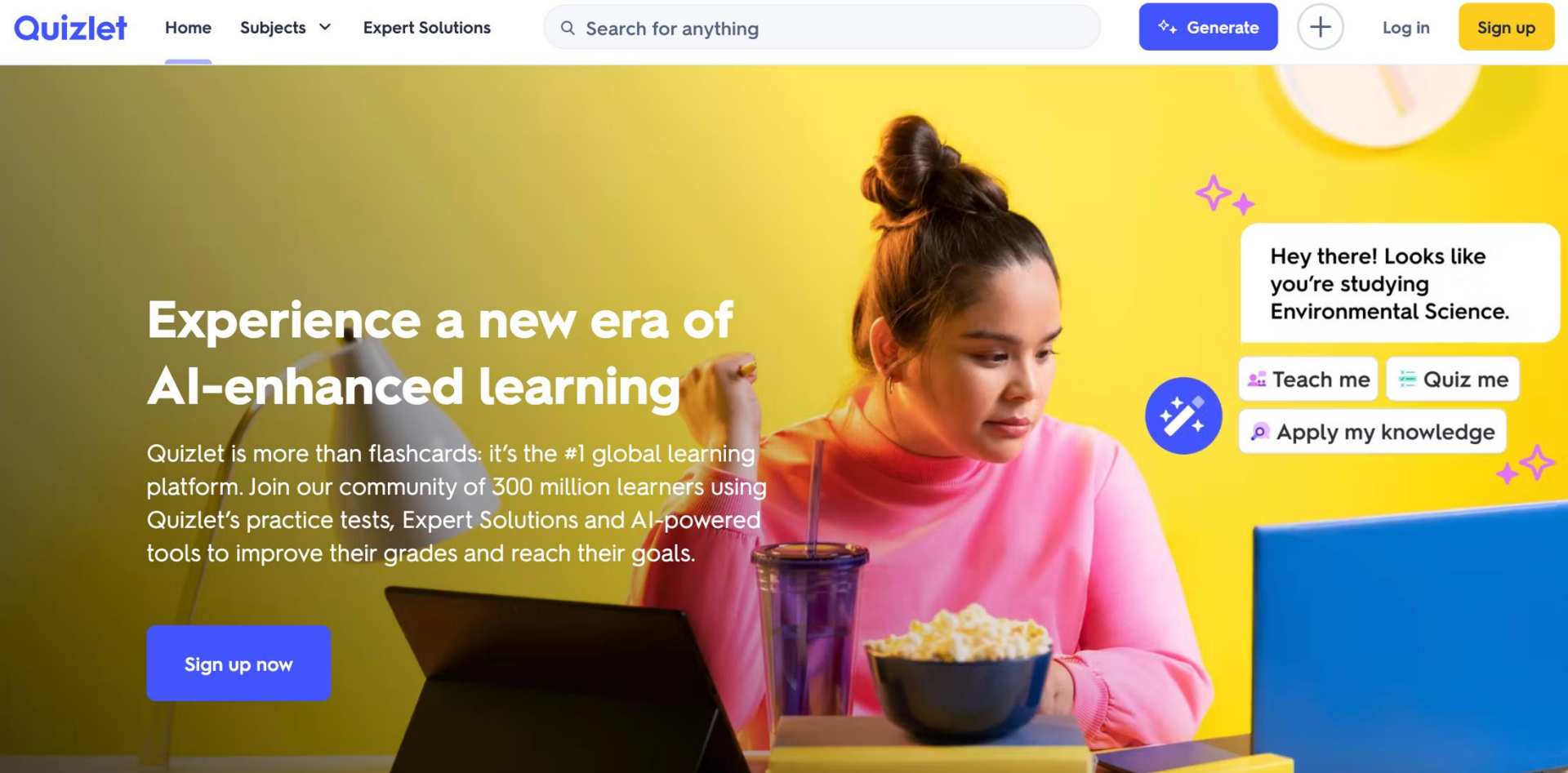
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Curse of the Familiar

Digitizing
Existing
Routines





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Hey there! Looks like you're studying Environmental Science.

Teach me

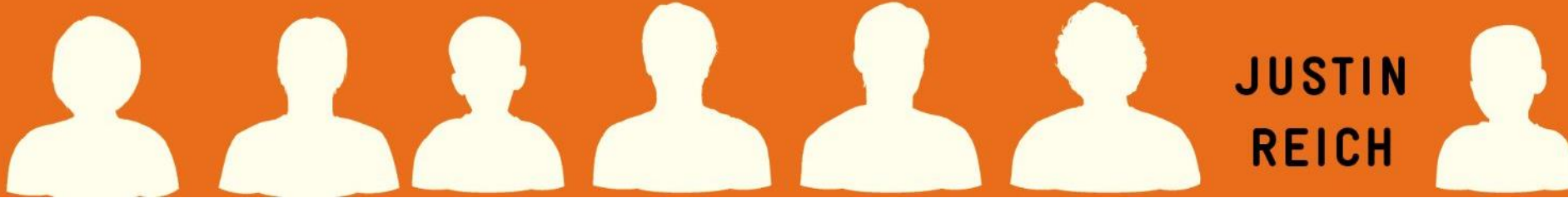
Quiz me

Apply my knowledge

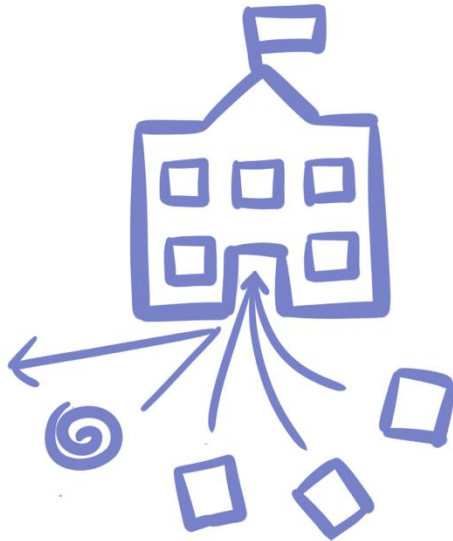
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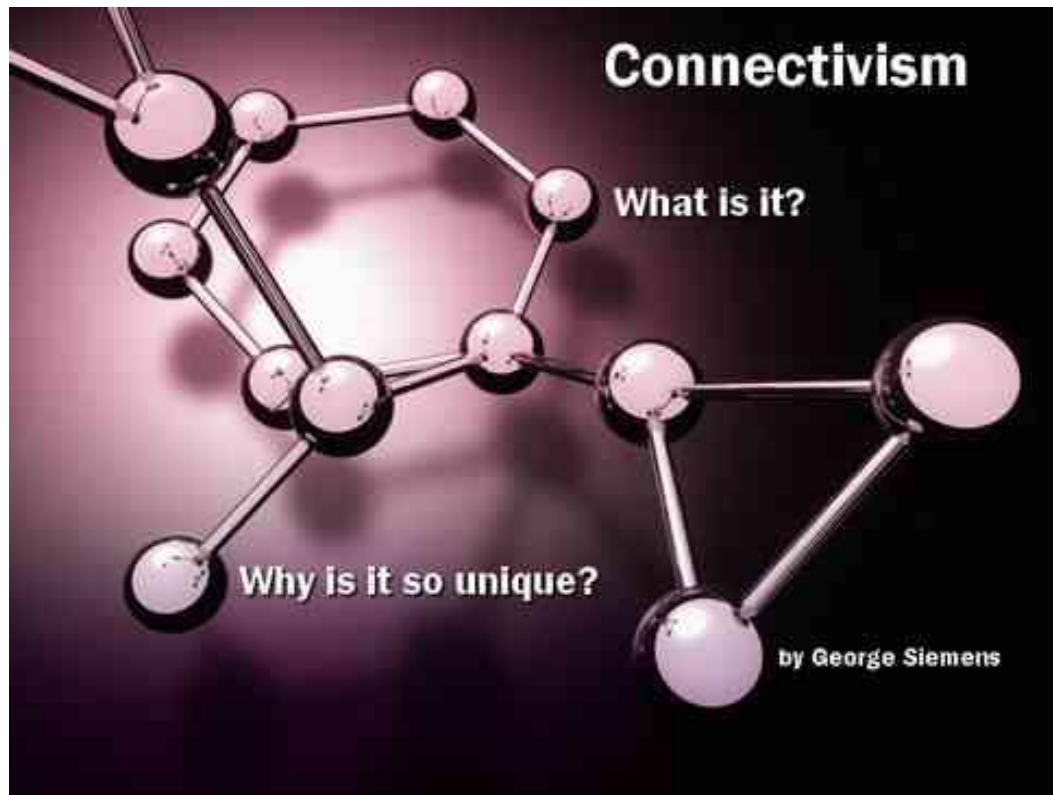
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Curse of the Familiar



Rejecting
Novel
Approaches



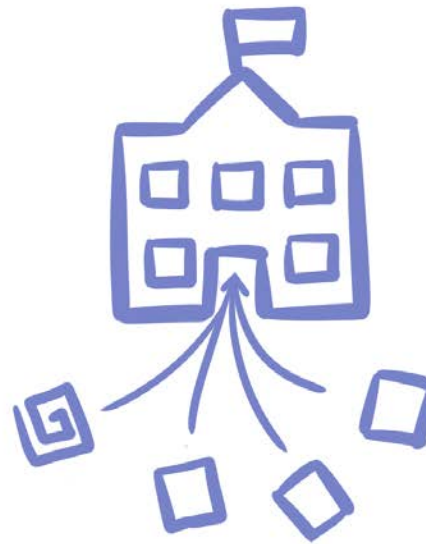
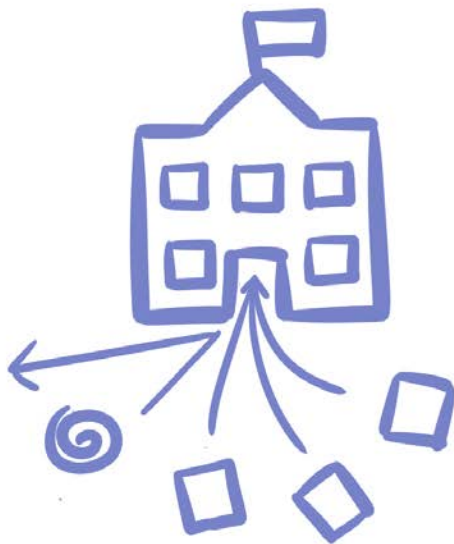
George Siemens



Stephen Downes

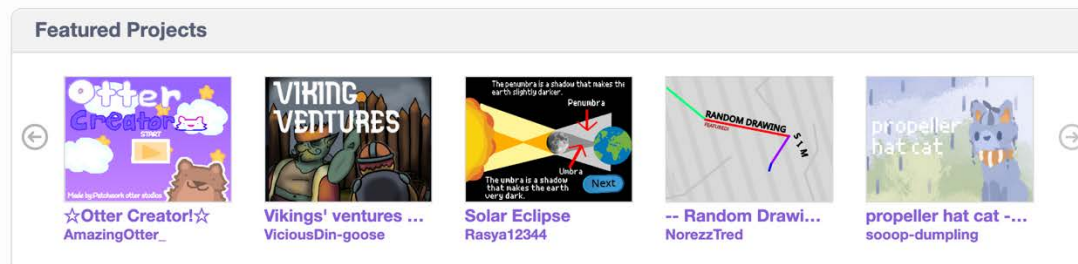
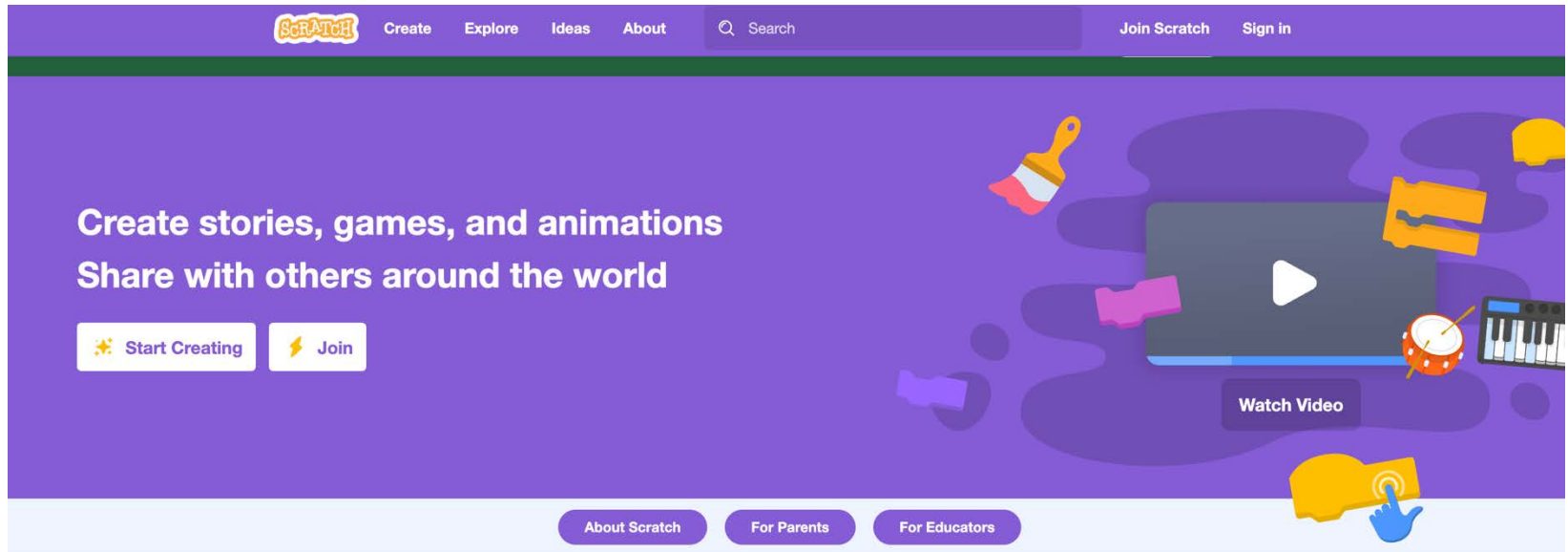
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Start with the familiar
then go new places

Cultivate professional
communities



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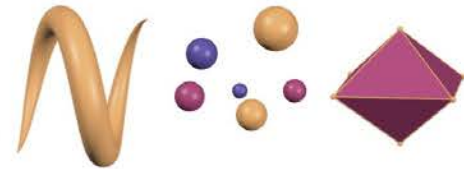
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How Educators Are Using Scratch

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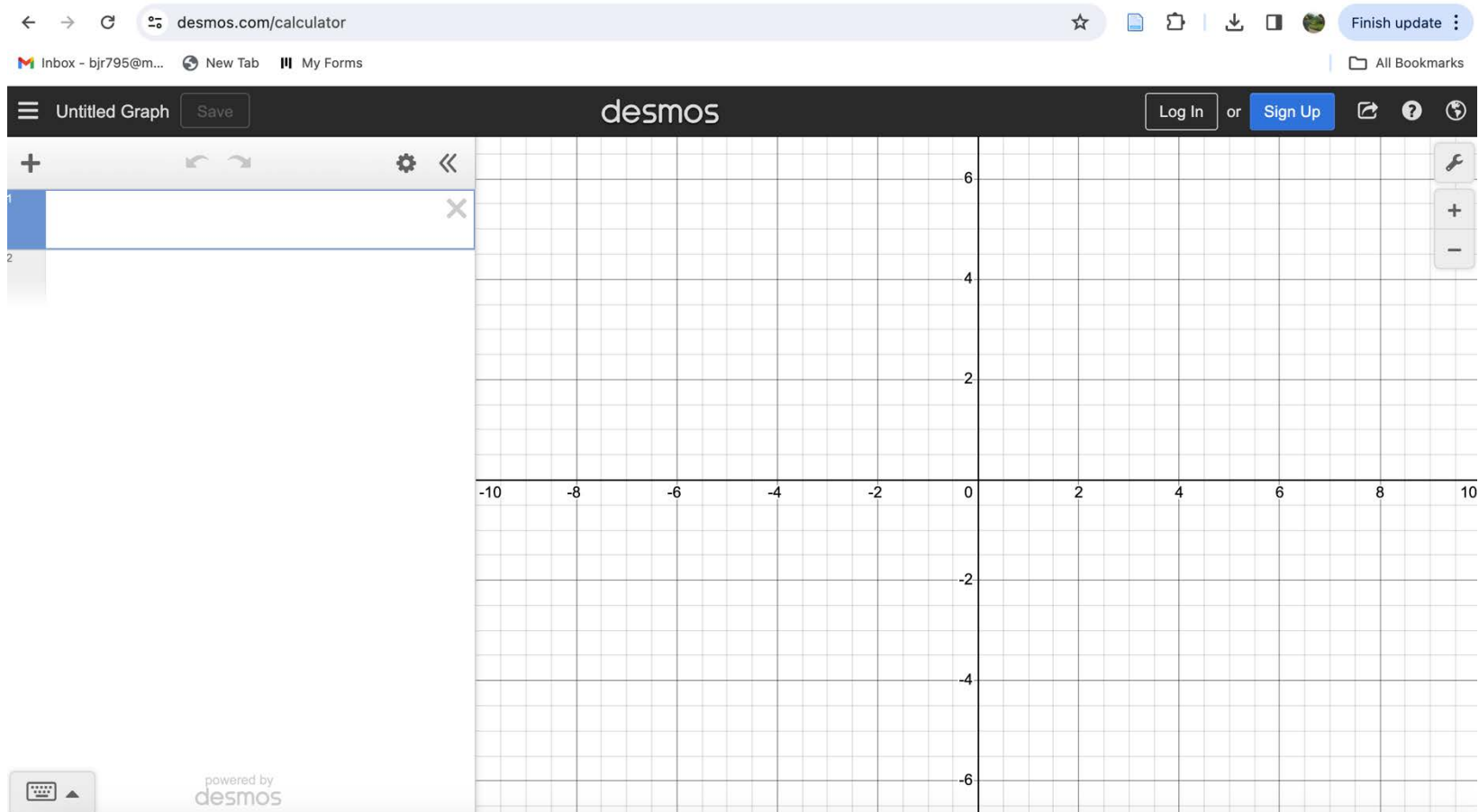
Open Geometry

Global Art Contest

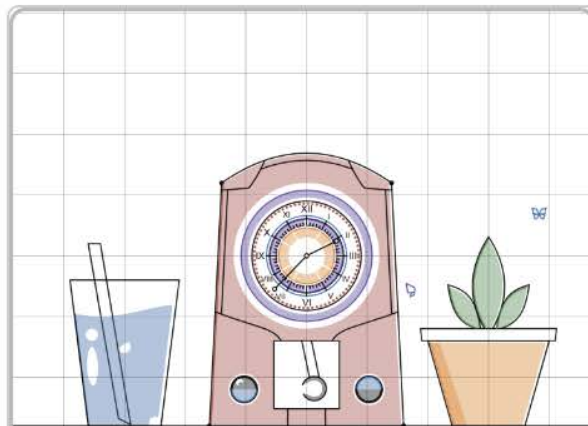
Visit the 2023 Art Contest gallery, featuring 100 incredible graphs from around the world.

Open the gallery

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22



$$x^2 + y^2 \leq 230^2 \left\{ x^2 + y^2 > 150^2 \right\} (x - \sqrt{3})$$

23



$$x^2 + y^2 = (250)^2$$

24

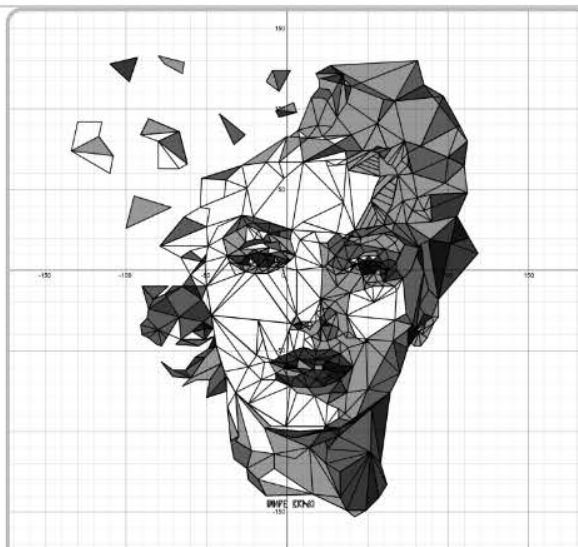


$$x^2 + y^2 = (330)^2$$

25



$$x^2 + y^2 = (305)^2$$



257



$$\text{polygon}((60,28),(42,25),(46,20))$$

258



$$\text{polygon}((65,24),(69,20),(60,23))$$

259

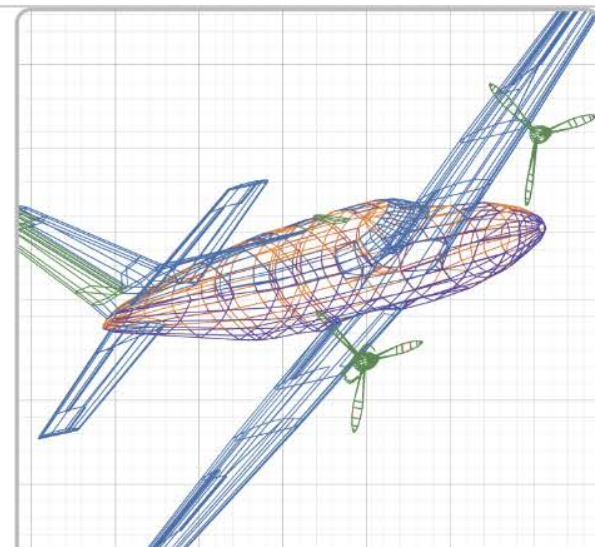


$$\text{polygon}((67,29),(74,29),(82,14),(73,16))$$

260



$$\text{polygon}((37,22),(42,25),(46,20))$$



4

$$\alpha = a \cdot \frac{\pi}{180}$$

$$\alpha = 2.18166156499$$

5

$$\beta = b \cdot \frac{\pi}{180}$$

$$\beta = 3.61283155163$$

6

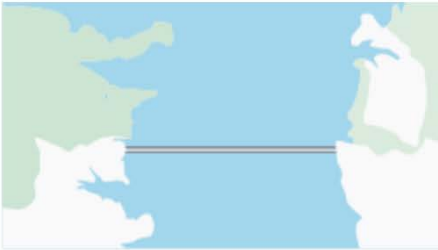
$$I = \left(\frac{\sin(\beta) \cos(\alpha) \sqrt{3}}{2} - \frac{\sin(\alpha) \sqrt{3}}{2}, \cos(\beta) \right)$$

3 ACT MATH

Want to learn more? [Take the free workshop.](#)

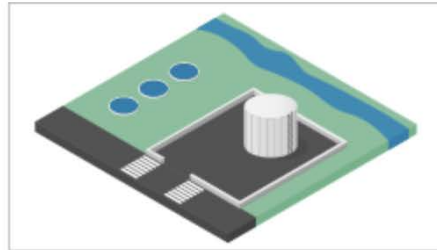
All [3rd](#) [4th](#) [5th](#) [6th](#) [7th](#) [8th](#) [Alg1](#) [Geom](#) [Alg2](#) [Stat](#) [Calc](#)

Bumps on a Bridge



How many bumps?

Water Leak



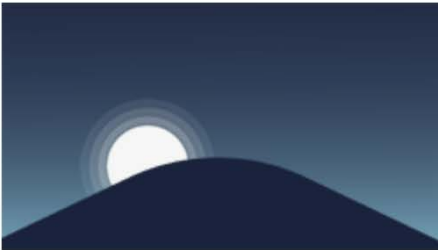
Will service arrive in time?

Dominoes



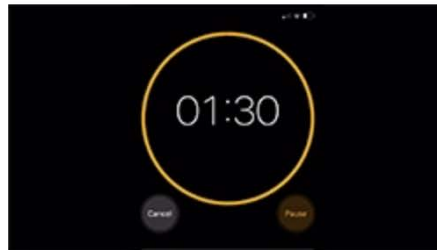
How long will it take?

Moon Rise



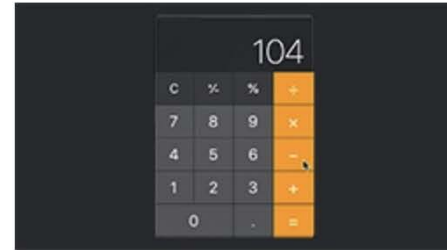
How long will it take?

Timer



How much time is left?

Calculator Countdown

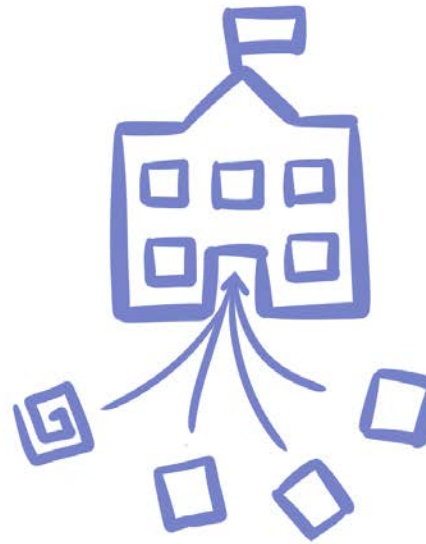
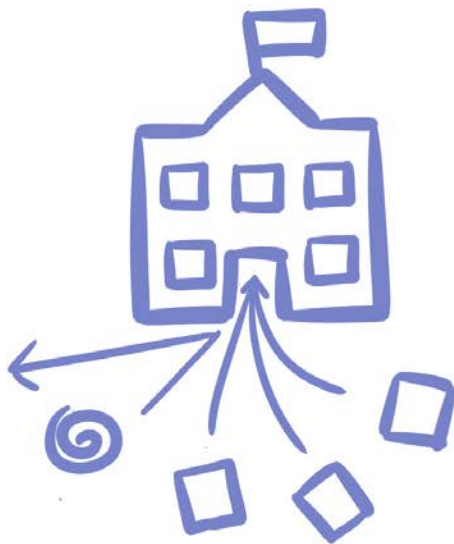


How many times?

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