

Teaching and Learning: The Millennials and Generation Z



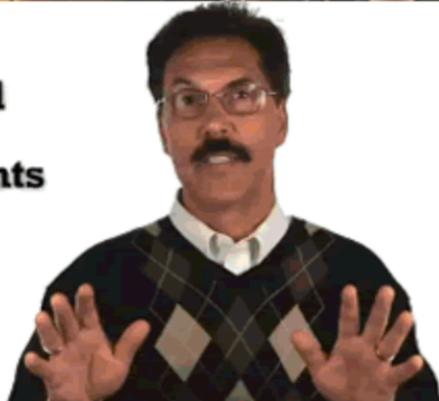
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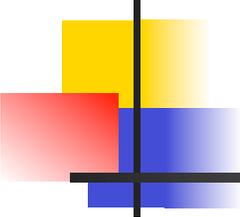
ACHIEVEMENT STRATEGIES, INC.

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**Successful
Learning
Environments**





Three Learning Goals

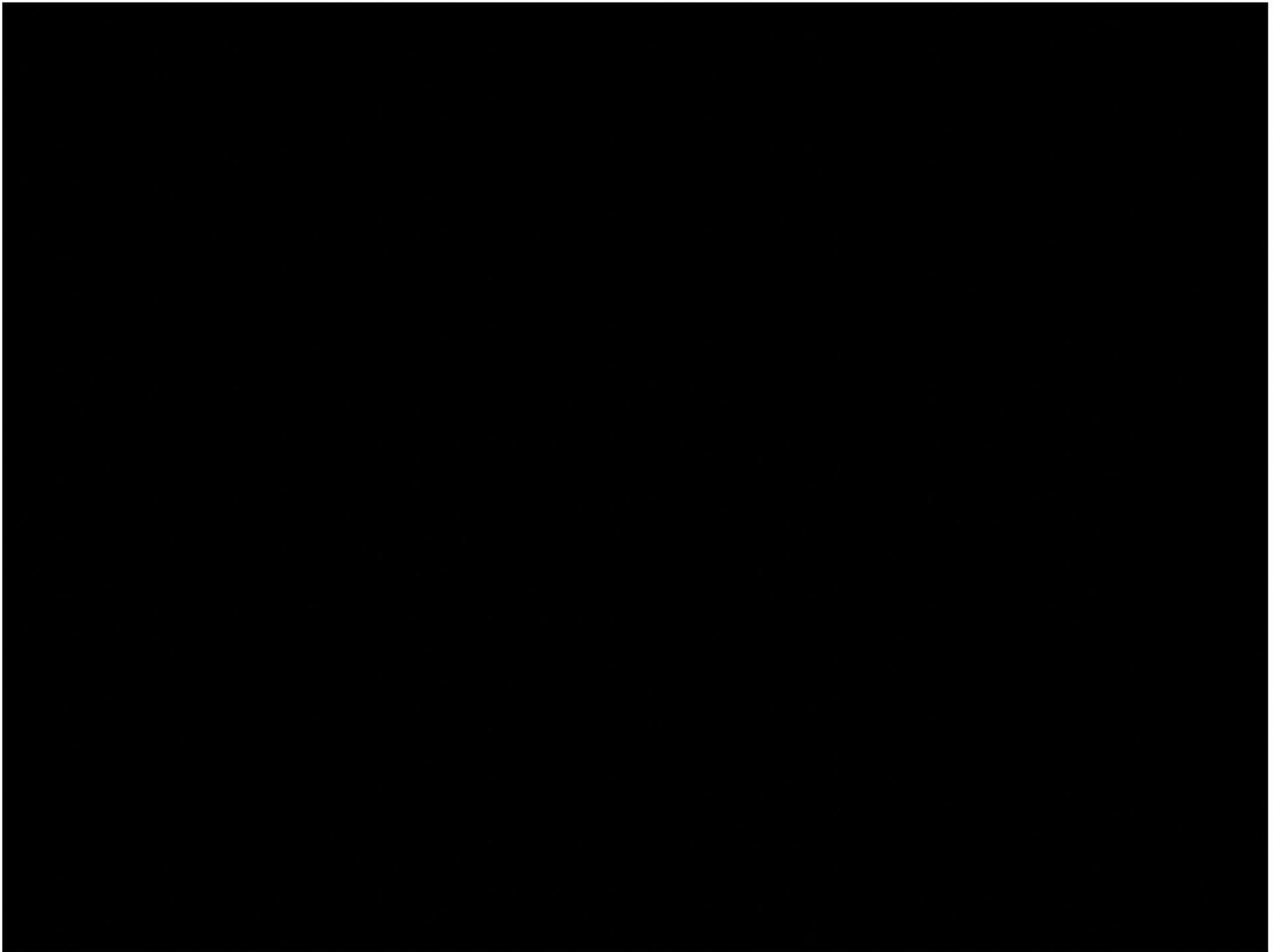
1. Explain key points and challenges about inspiring today's students to have a passion and ability to achieve.
2. be familiar with a practices to get, use, and keep student's attention.

Generations

Generation	Years
Veterans/The Greatest Generation	1922-1945
Baby Boomers	1946-1964
Generation X	1965-1980
Generation Y/The Millennials	1976-1995
Generation Z	1995-2016

THE MILLENNIAL LEARNER





- 142 Titles/Headlines
- 68 Static Graphics/Images
- A Montage of 40 Separate Video Clips
- Thousands of Words and Hundreds of Phrases
- All within a 30 Second Time Period



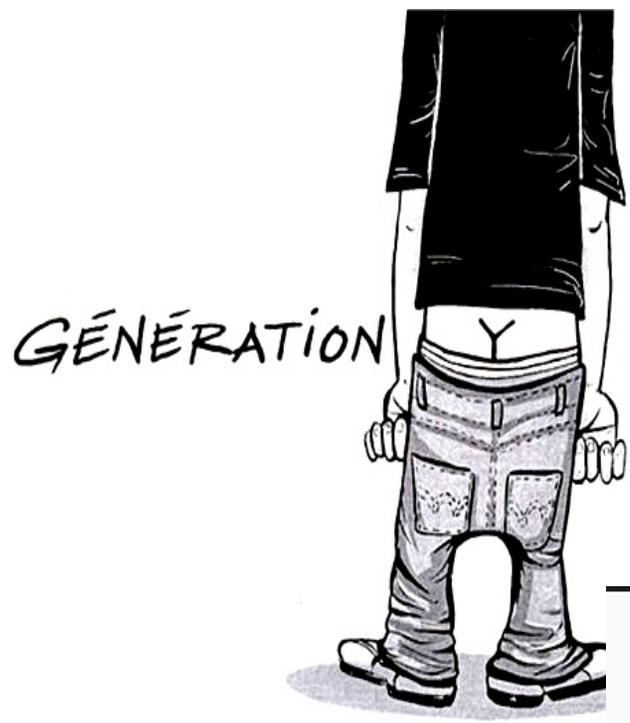
Active Reading
Problem Solving
Higher-Level
Thinking

THE MILLENNIAL BRAIN

- ✓ Multi-tasking
- ✓ Multiple streams of sensory and cognitive input

- ✗ Single-tasking
- ✗ Sustained Focus
- ✗ Concentration
- ✗ In-depth thinking

Students have gone from . . .



To . . .



To . . .

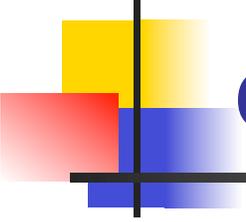


The students have changed.

1. Shorter Attention Spans and Visually Preferred







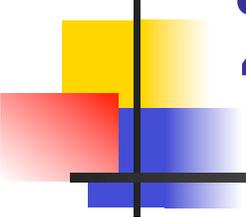
Their brains are being wired for a certain kind of learning.



<p>1. Short attention spans and hate to be bored.</p>	<p>Boredom 8-12 minutes</p>
<p>2. Visually preferred</p>	<p>DVD High Definition </p>
<p>3. Want immediate gratification</p>	<p>“I want it now!” “Is it done yet?”</p>
<p>4. Choose to be interactive and hands-on</p>	<p> </p>
<p>5. Love challenge and are curious</p>	
<p>6. Want to succeed (win) using strategies, practice, and do-overs</p>	<p> </p>

What have you done to adapt to the Millennials and New Generation Z?

Students . . .	What does this mean?
1. have short attention spans and hate to be bored.	•Use optimal learning time (7-12) minutes and then apply what they learn.
2. are visually preferred.	•Use graphic organizers and pictures.
3. want immediate gratification.	•Use short-cycle challenge and feedback.
4. choose to be interactive and hands-on.	•Create challenges that use multiple neuropathways. •Use cooperative learning.
5. love challenge and are curious.	•Be explicit about objectives and cause curiosity.
6. want to win using strategies, practice, and do-overs.	•Explicitly teach learning-to-learn strategies that work. •Use re-takes and re-dos.

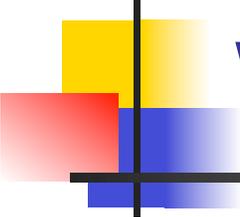


Kids will play a video game or other activity an average of 100 hours to “get good “ at it.

- They don't . . .
 - get grades
 - get extra credit
 - win money
 - get public acclaim
- And they rarely play a game a second time without knowing/learning . . .
 1. Objectives/goals
 2. Strategies and skills
 3. Vocabulary
 4. How well they are doing
 5. What to do better next time

ALL students can improve skills and develop strategies with . . .

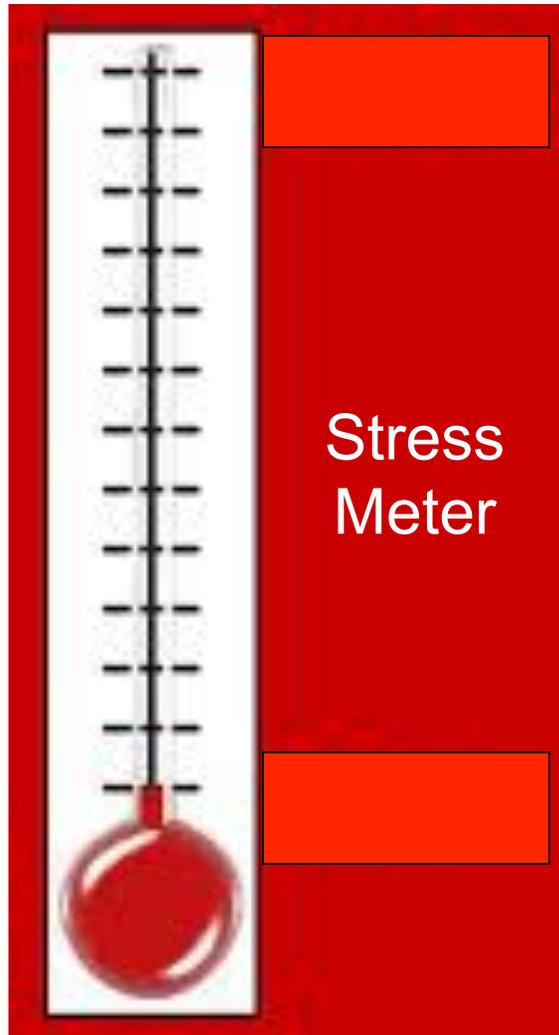




What do 20 Somethings Want

- Challenge me.
- Let me work with others.
- Let's have fun.
- Respect me.
- Be flexible.
- Mentor me.
- Encourage me.
- Make me curious.
- Give me feedback a lot.
- Learn from me too.
- Let me give you my ideas.
- Make sure I know what the goal is, why it is important, and the parameters and boundaries for me to do my work.

How do you feel about the motivation and achievement of today's students?



I am totally **freaking** out.



I'm worried. I need some . . .



I will survive . . .



It use to be easier . . .





**TAKE THIS JOB
AND SHOVE IT**

I'M OUTTA HERE

Predicting and Preparing for the Future (2012).

DID YOU
KNOW



Is there something in the room for schools
where some students are not successful
yet?



Why do college students fail and underachieve?



1. Lack of skills
2. Lack of confidence
3. Lack of motivation
4. Lack of perseverance/determination
5. Lack of respect for the culture of school/education
6. Lack of vision for the role school plays in career preparation and lifestyle
7. Lack of connection to positive relationships with teachers and/or peers

Some students choose defiance and resistance. Defiance is often a . .

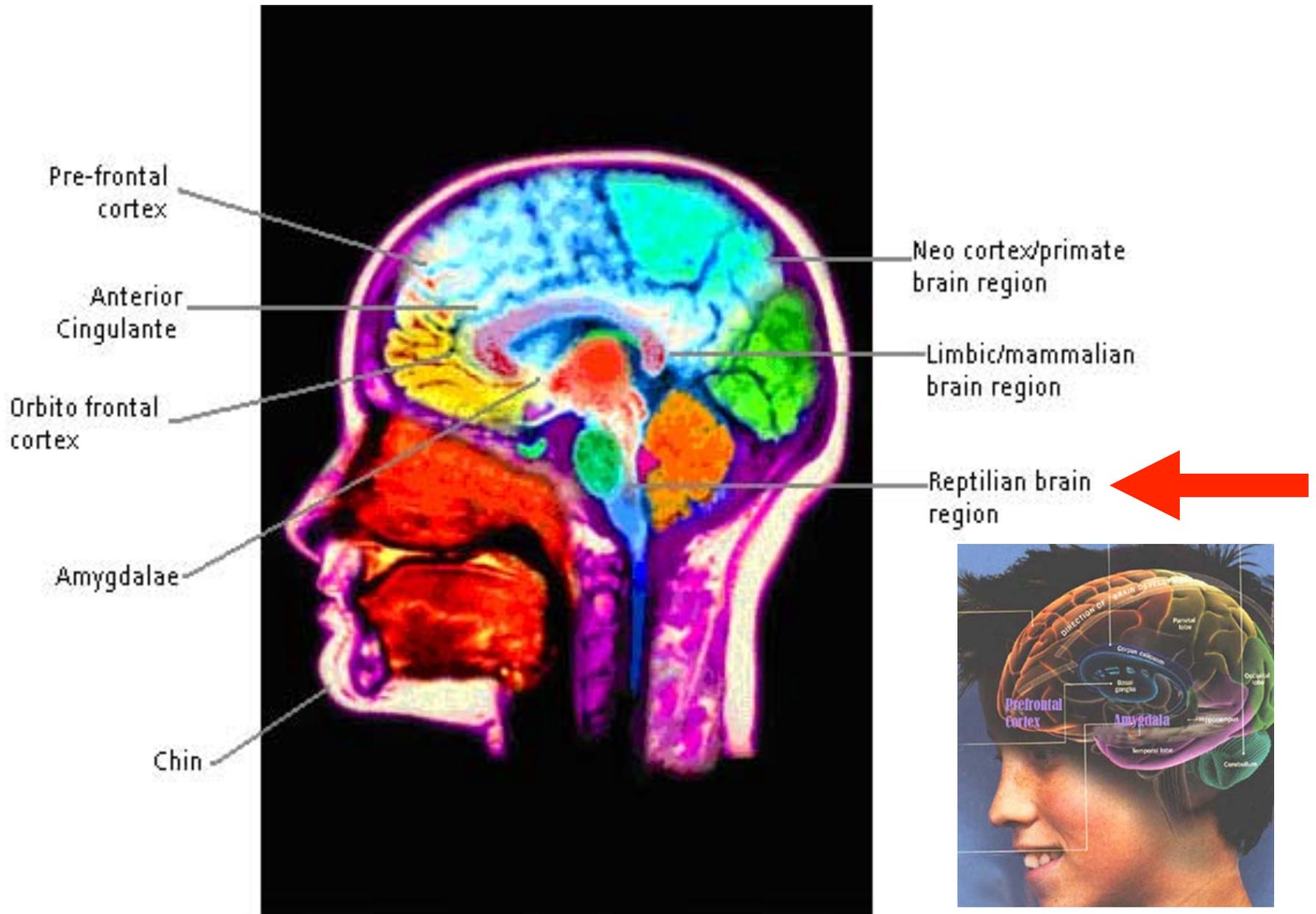
- response to too much anxiety.
- result of the student feeling out of control.
- result of the student trying to cover up feelings of impotence and/or incompetency.

Defiance is a . . .

- response to an overwhelmed limbic system--
flight or fight.



Defiance is a predicted response to anxiety overload.



Skills to WIN at School!

Content Area Knowledge and Skills

Learning-to-Learn Skills

1. Memory Storage and Retrieval
2. Note taking
3. Vocabulary Attainment and Development
4. Writing/Summarizing
5. Reading for Information and Literary Analysis
6. Solving Multi-Step Math and Scientific Problems

Executive Functioning Skills

1. Goal Setting
2. Planning
3. Organization
4. Problem Solving
5. Self-Assessment/
Monitoring
6. Focusing Attention
7. Impulse Control
8. Self-Advocacy

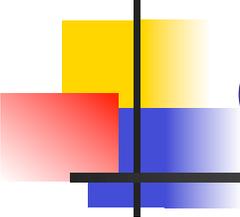
Students . . .	We need to . . .
1. have short attention spans and hate to be bored.	•Use optimal learning time (7-12) minutes and then apply what they learn. Pacing
2. are visually preferred.	•Use graphic organizers and pictures.
3. want immediate gratification.	•Use short-cycle challenge and feedback.
4. choose to be interactive and hands-on.	•Create challenges that use multiple neuropathways. •Use cooperative learning.
5. love challenge and are curious.	•Be explicit about objectives and cause curiosity.
6. want to win using strategies, practice, and do-overs.	•Explicitly teach learning-to-learn strategies that work. •Use re-takes and re-dos.

Inspiring a passion to achieve
is a lot about . . .

IMPROVING PACING



the rhythm of
the classroom

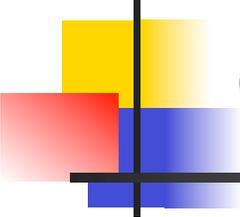


Two Key Points about Pacing and Creating Passion to Achieve

- Good pacing gives students the *illusion* of speed. Pacing is the skill of *creating a perception* that a class is moving at “just the right speed” for students.
- Good pacing means students recognize they are learning (i.e., achieving) and feel as if the material is moving fairly quickly.

the illusion of
SPEED





Changing to Keep Pace

Changing the type of . . .

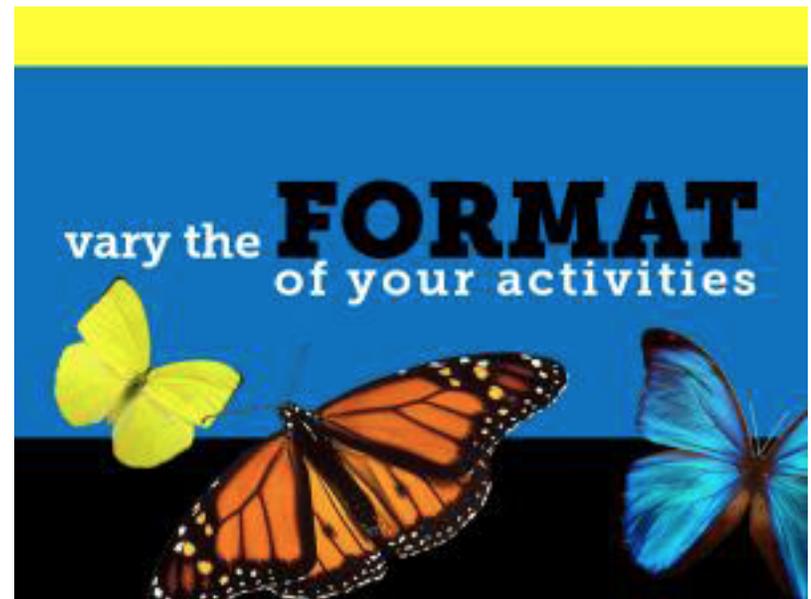
- work or activity
- the method of presentation
- the way students are grouped

Changing topics too often, however, can create confusion in a classroom and be distracting to students;

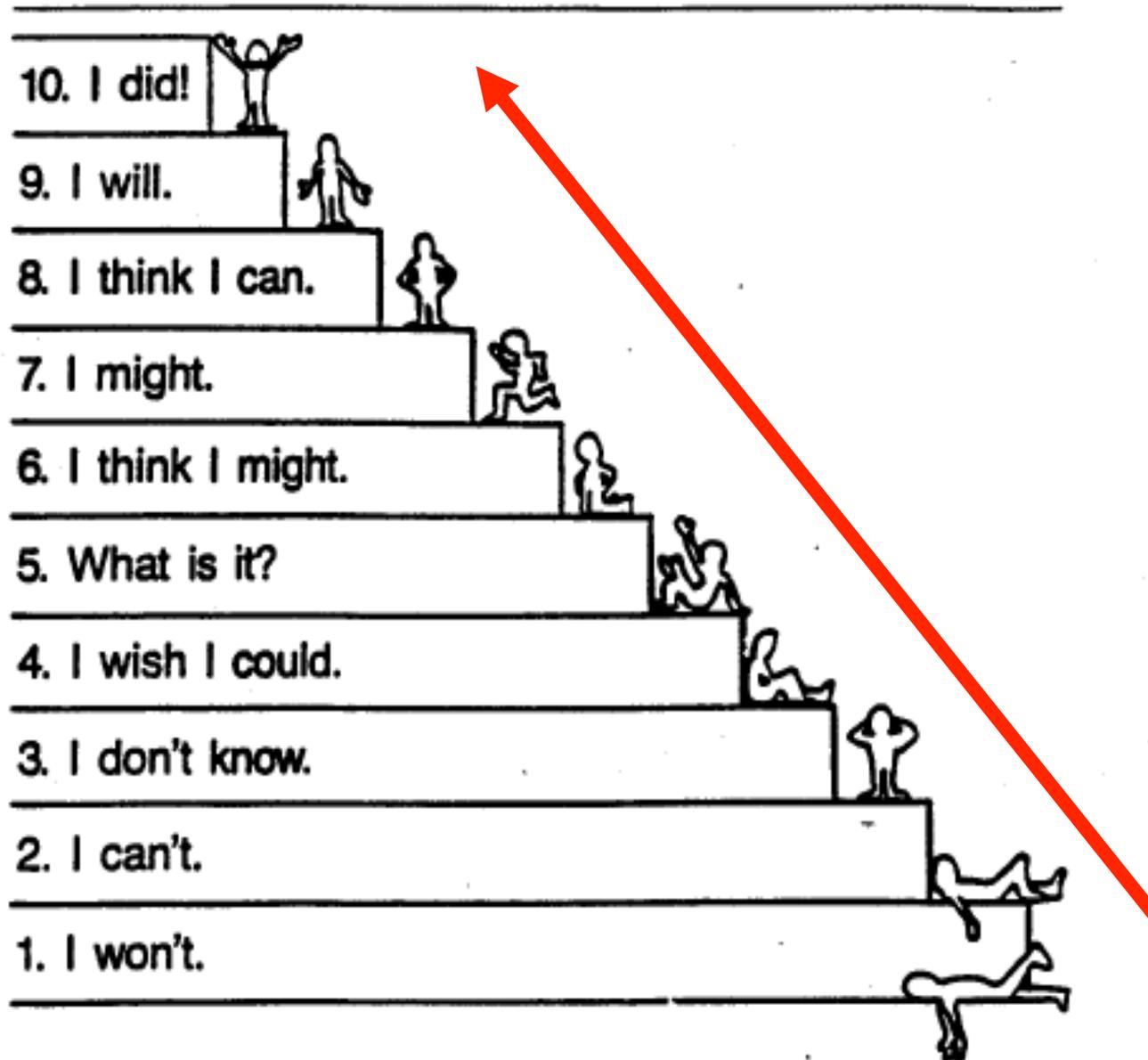
For example----

How do you use . . .

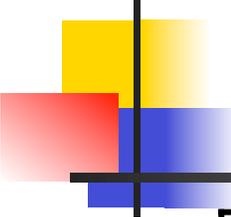
- **T**otal group/class
- **A**lone
- **P**artners
- **S**mall groups



POWER THINKING



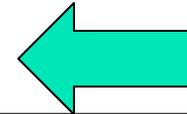
Marzano,
Tactics in
Thinking, 1989



Stages of Learning

Accessing/Acquiring Information

Input



Creating Meaning/Processing Information

Process

Producing/Presenting/Communicating
Information

Output

Monitoring Progress and Making Adjustments

Reflect and Improve

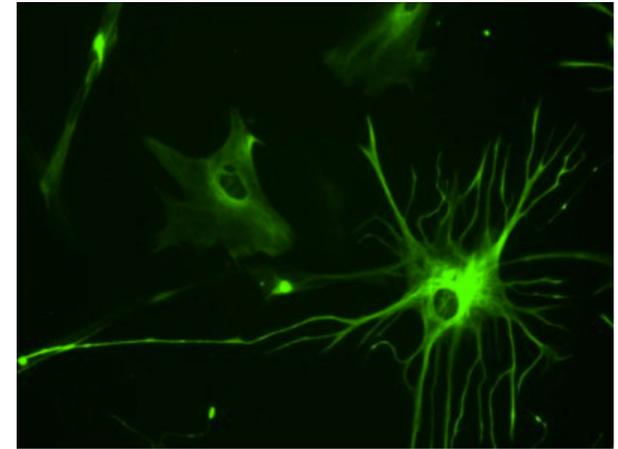
Why is . . .

- 10 seconds to 4 minutes important?



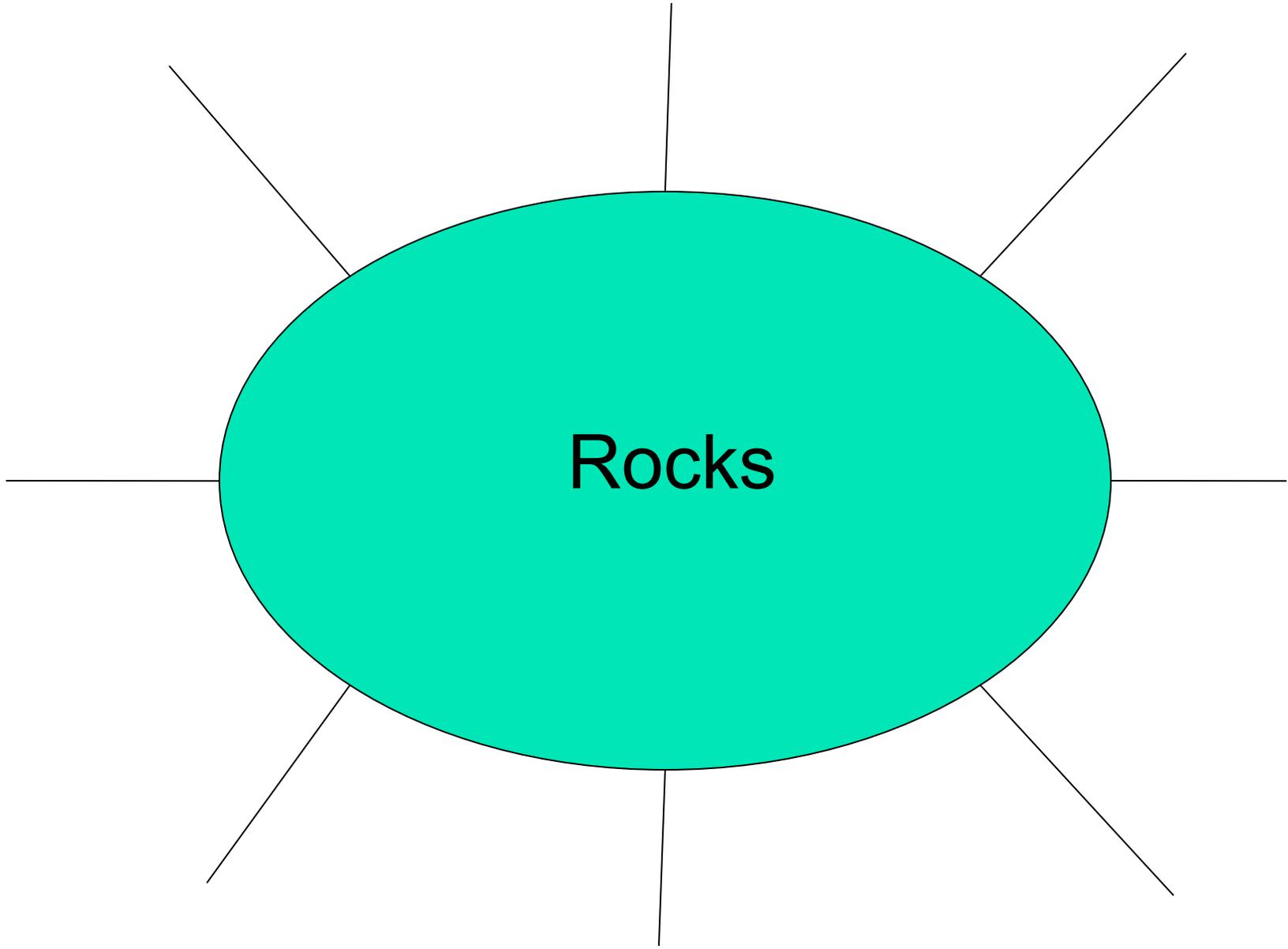
Paying Attention is Important

- Researchers at MIT have found a neural circuit that helps us build long-lasting memories.
- This neural circuit works best when the brain is paying attention and understands goals.

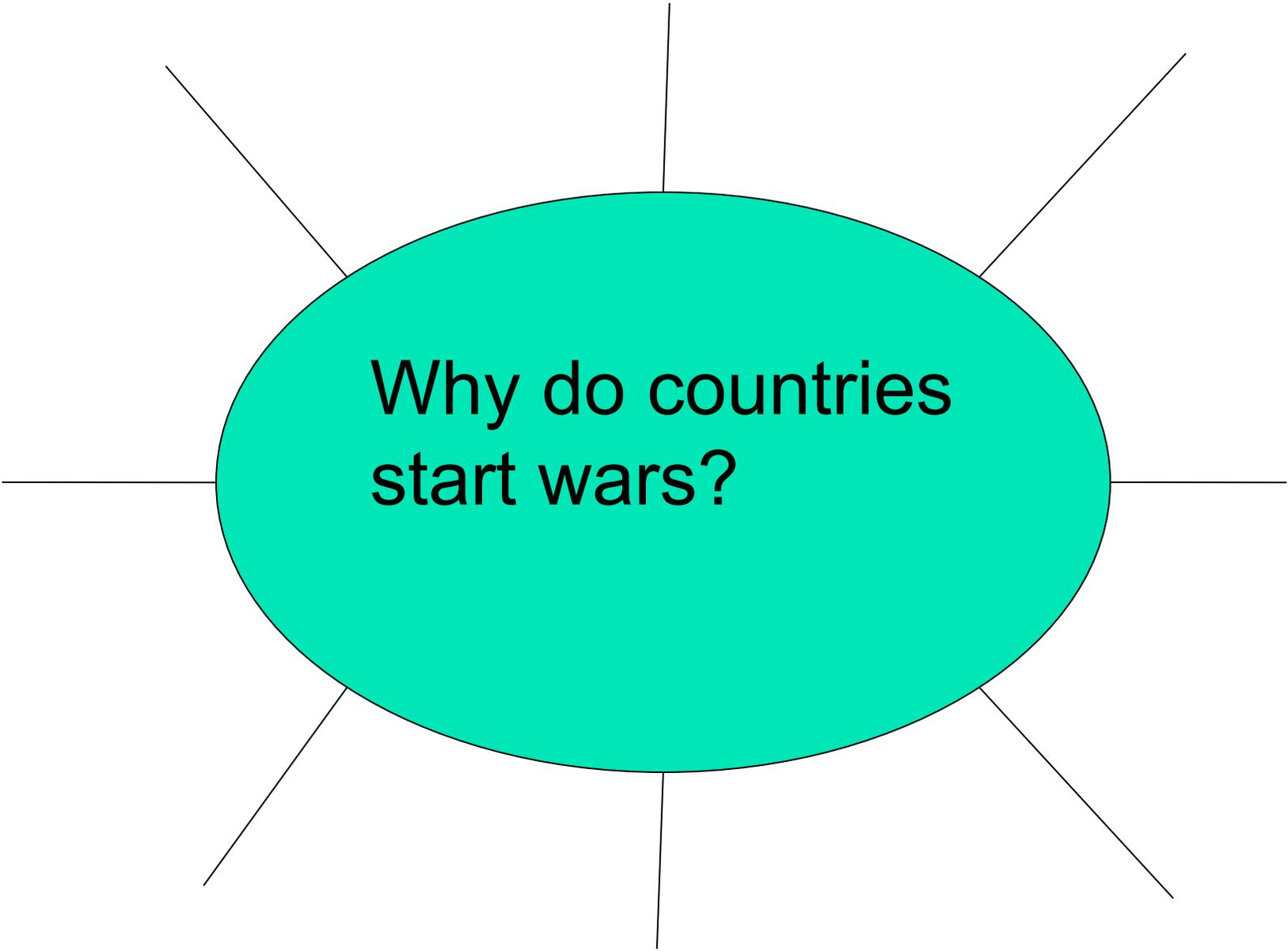


MIT

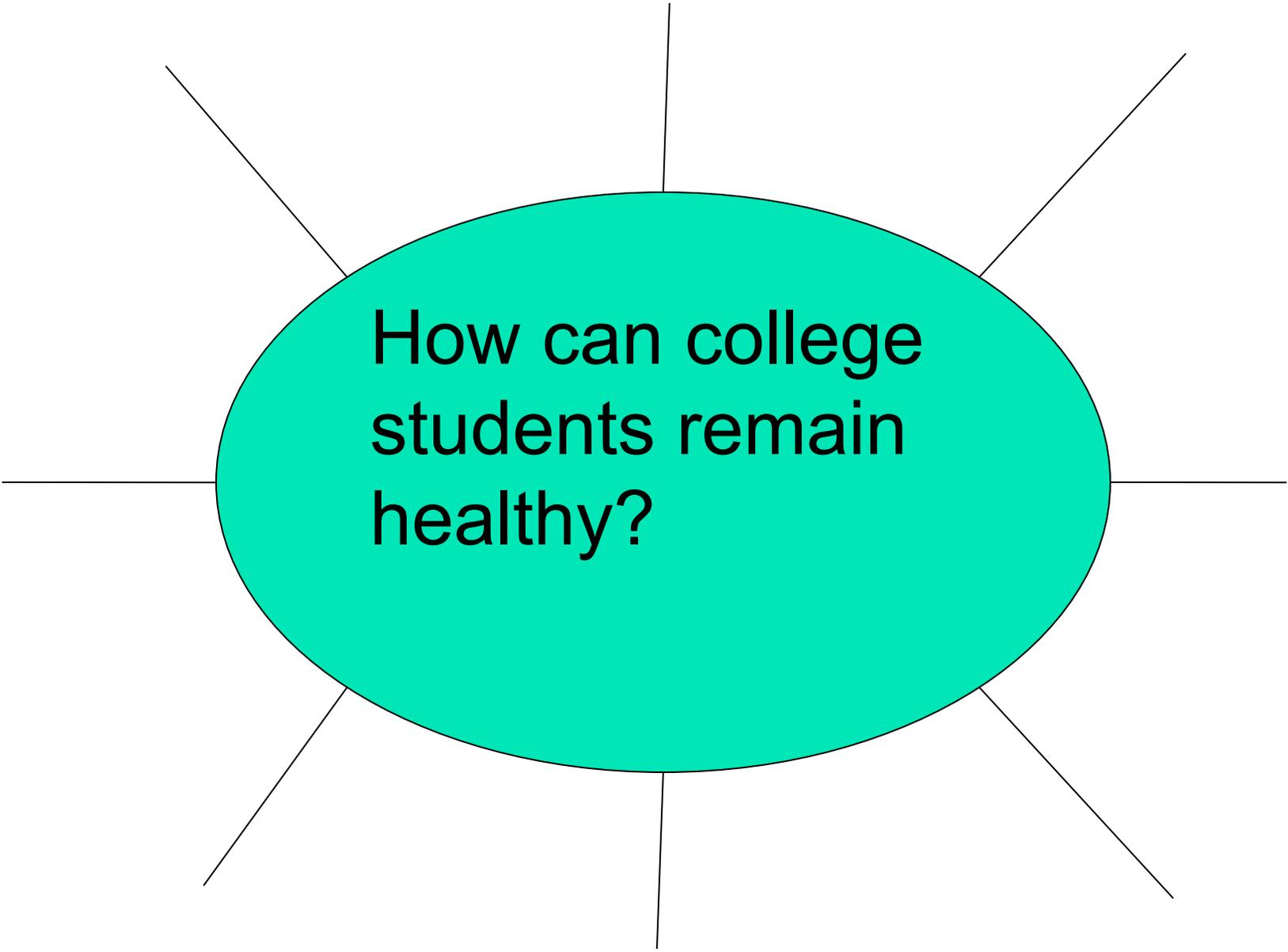




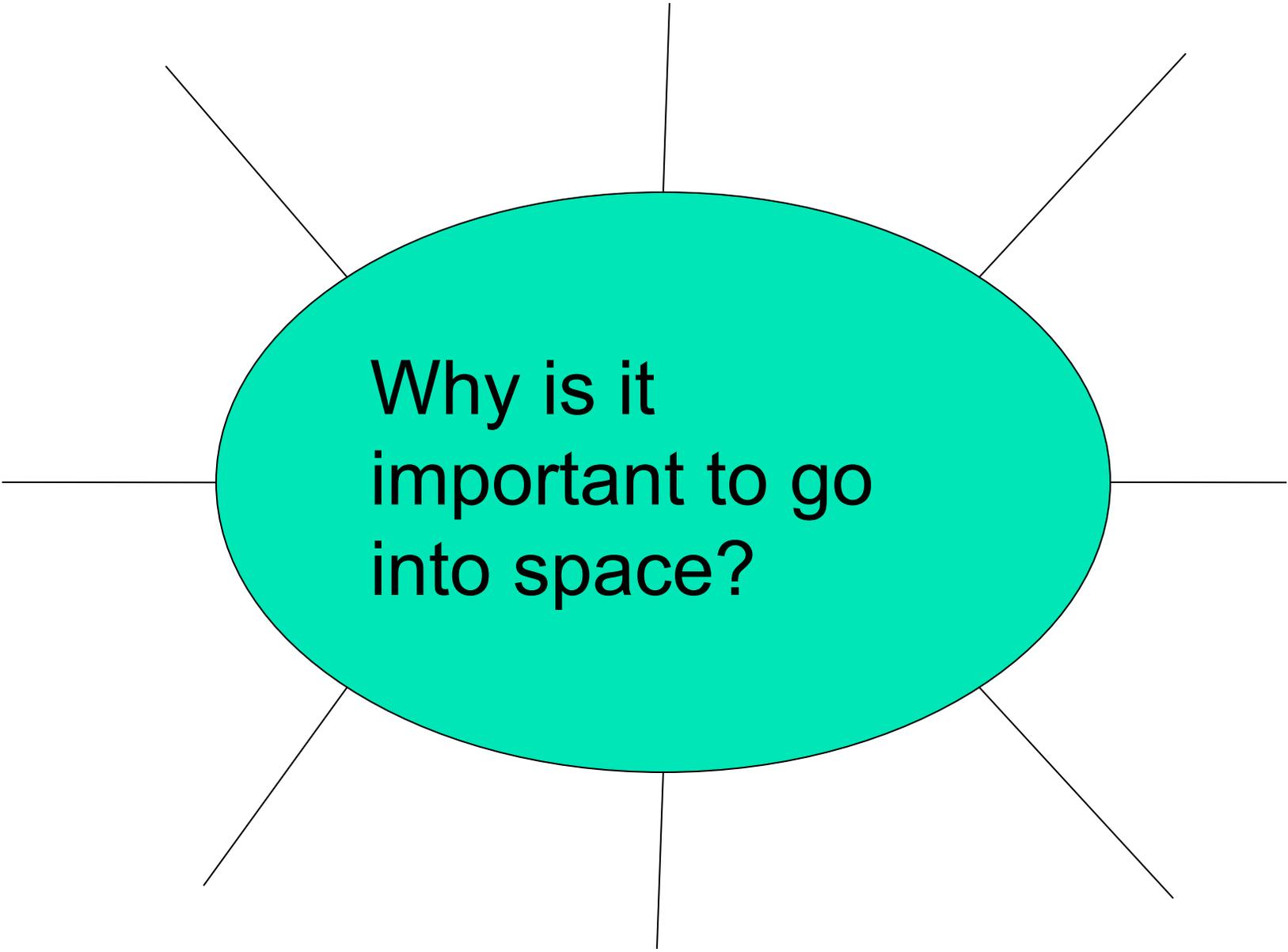
Rocks



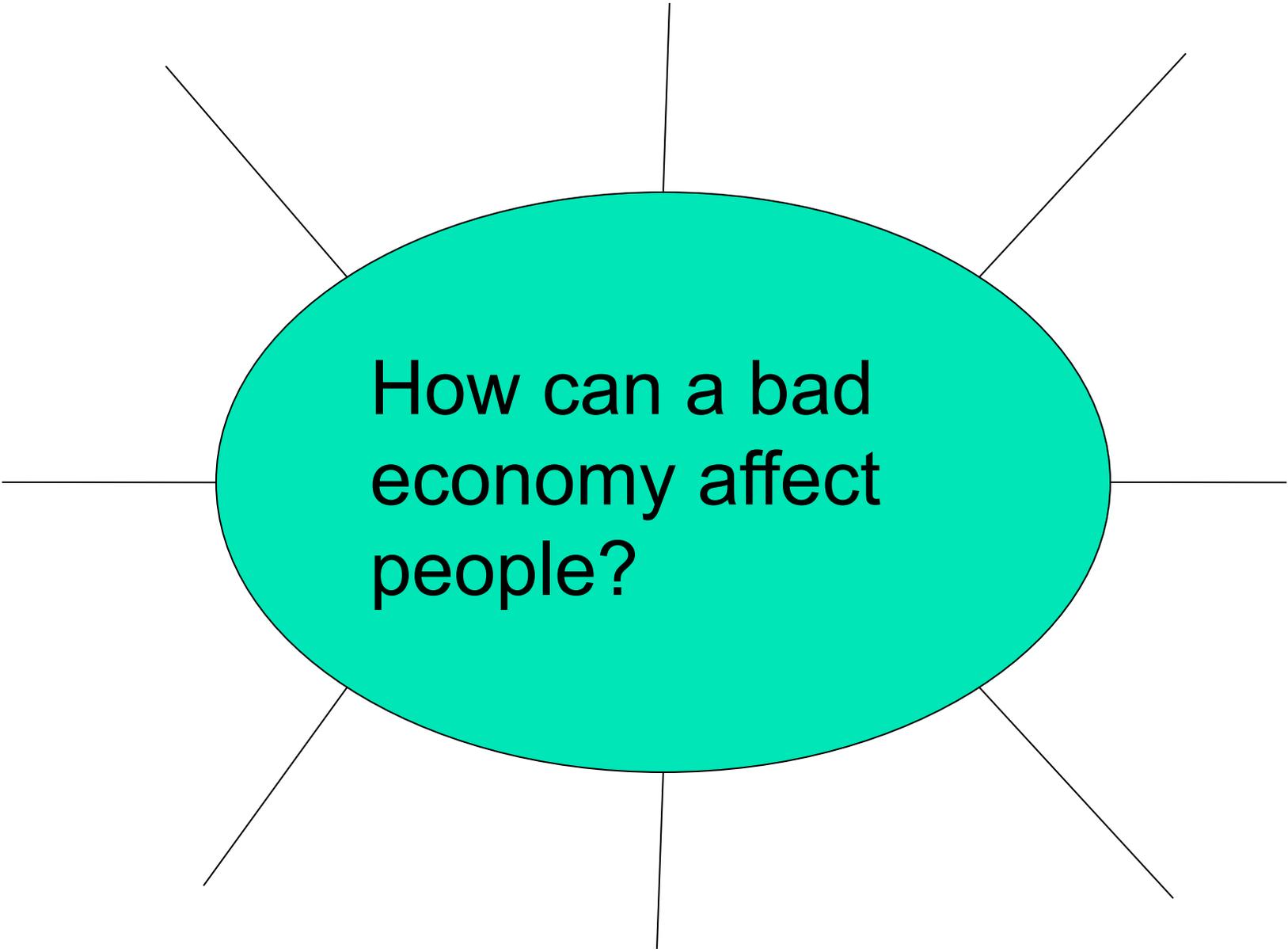
Why do countries
start wars?



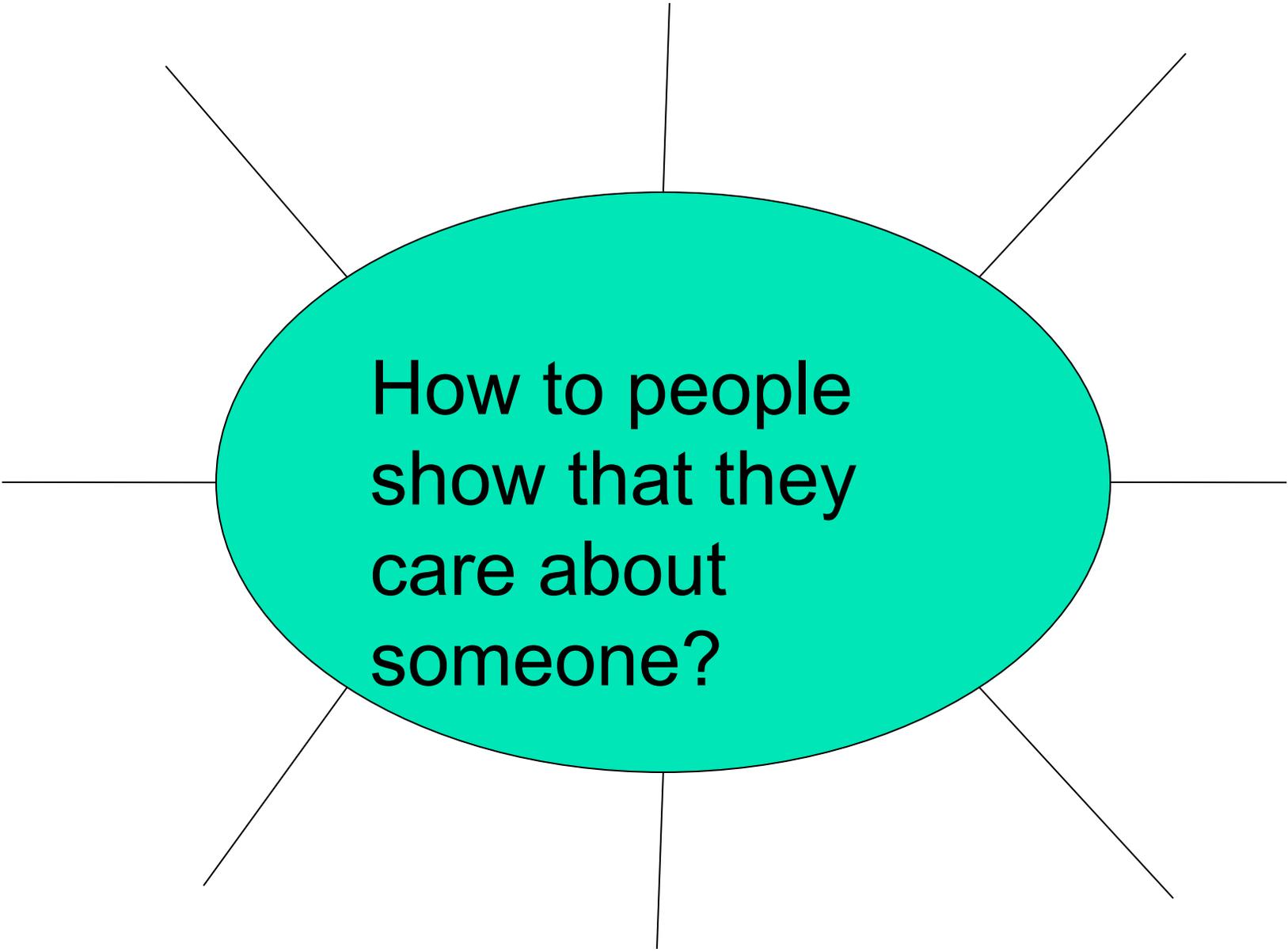
How can college students remain healthy?



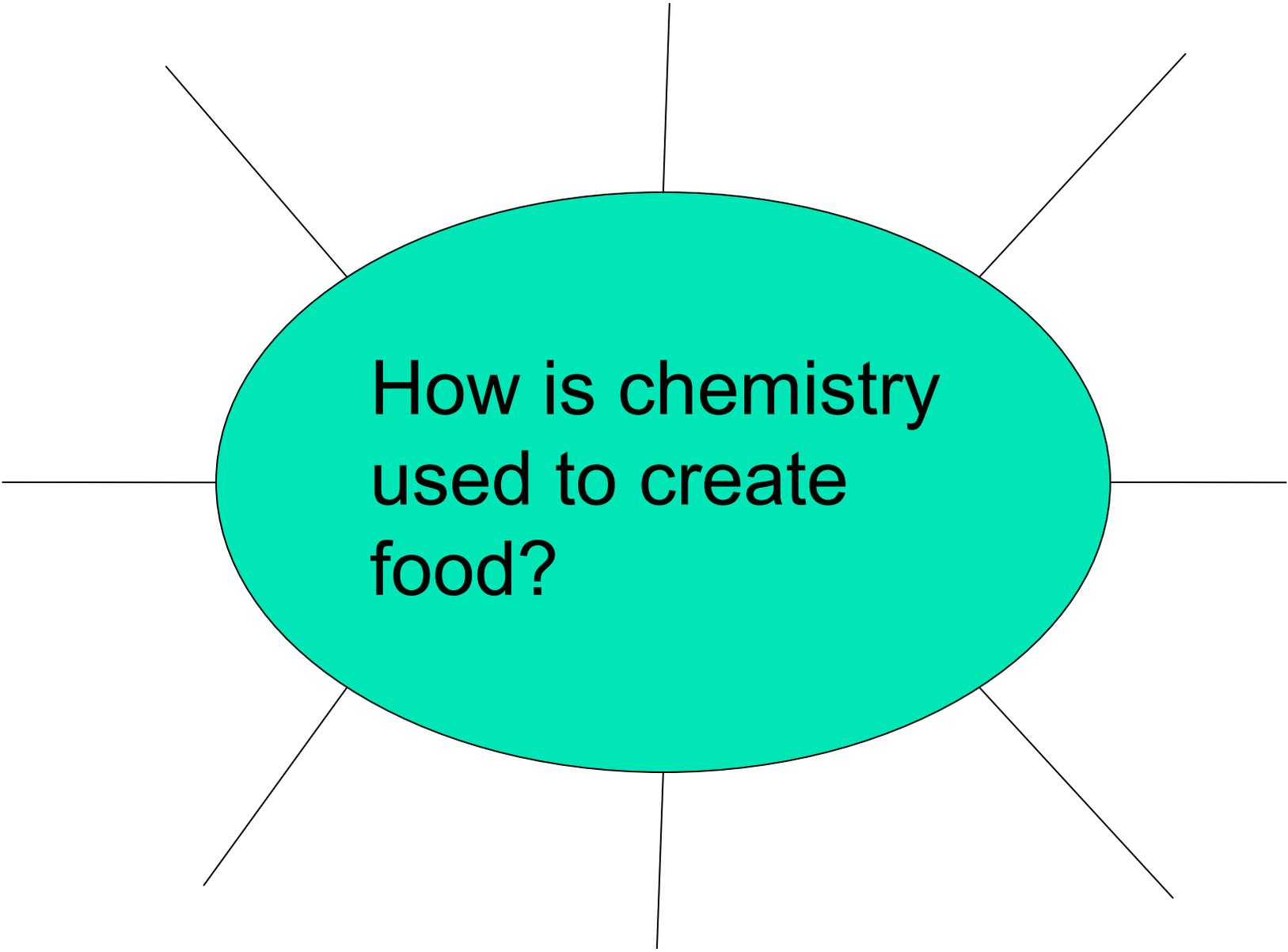
Why is it
important to go
into space?



How can a bad economy affect people?

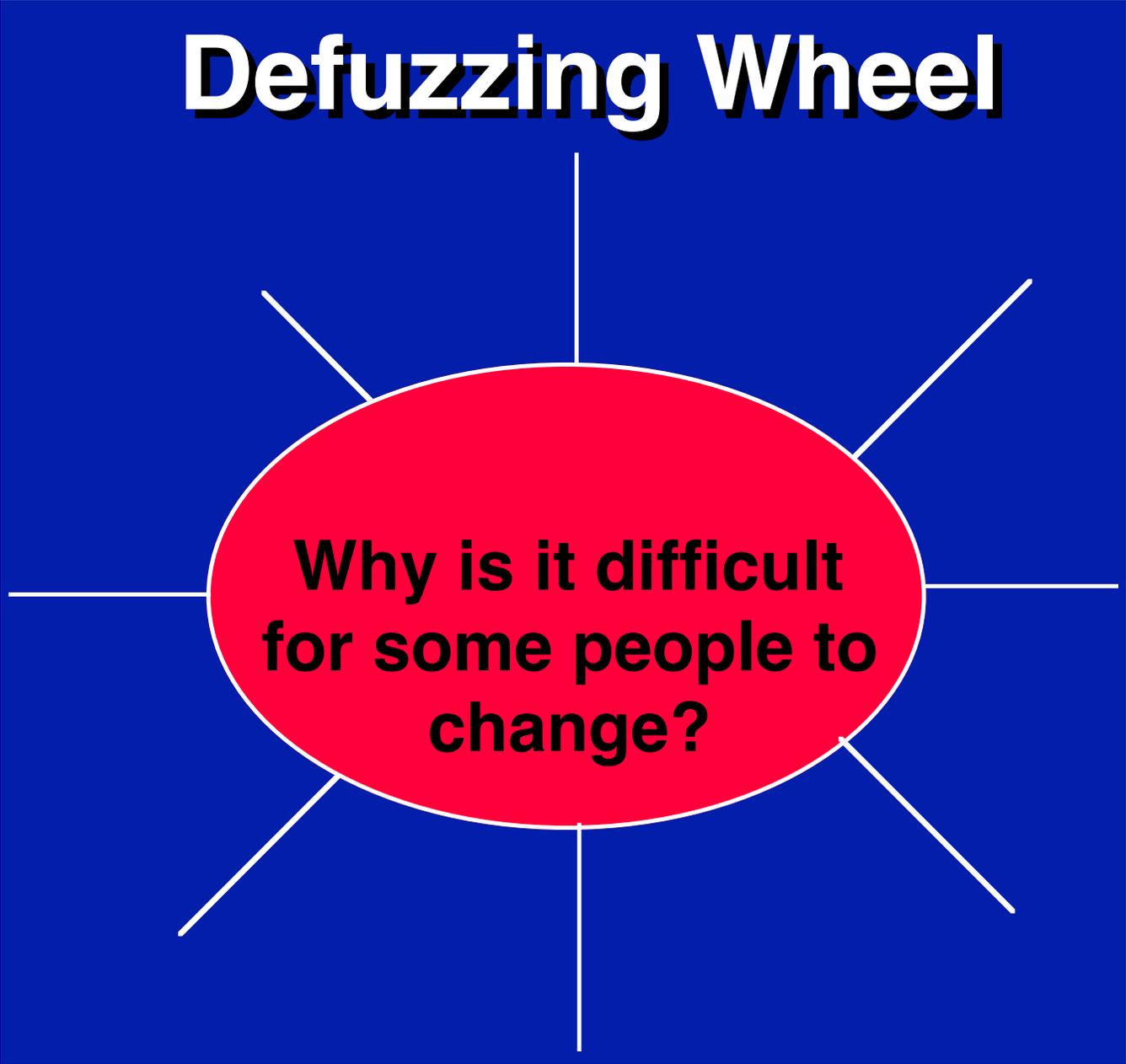


How to people
show that they
care about
someone?



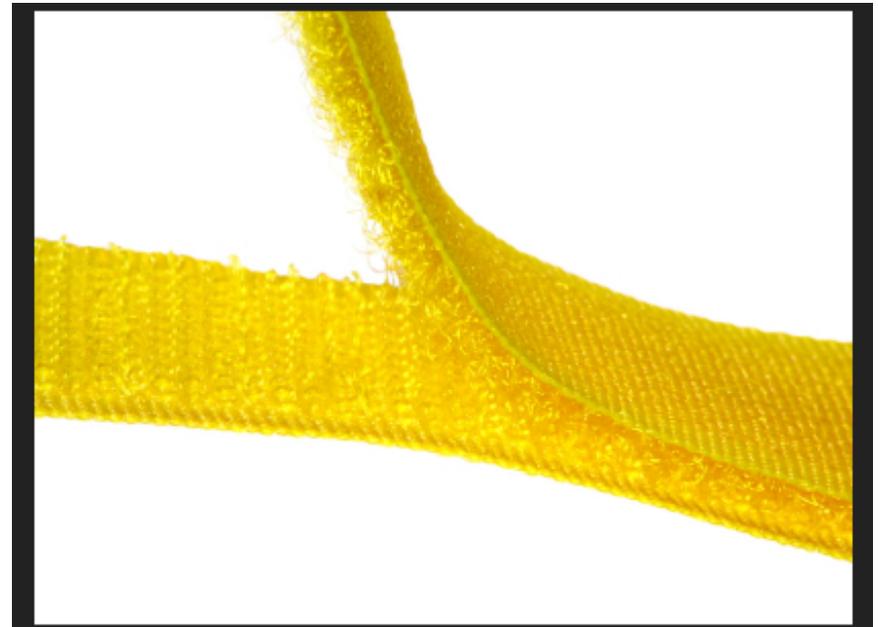
How is chemistry
used to create
food?

Defuzzing Wheel

The diagram features a central red oval with a white border. Inside the oval, the text 'Why is it difficult for some people to change?' is written in bold black font. Eight white lines radiate from the perimeter of the oval, extending towards the corners and midpoints of the blue background. The title 'Defuzzing Wheel' is positioned at the top center in a large, bold, white font with a black drop shadow.

**Why is it difficult
for some people to
change?**

Learning is like connecting VELCRO

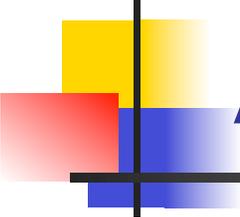


Anticipation Guide:

Content Pre-test Example

True or False

1. There are 6 planets
2. The earth revolves around the sun.
3. Neptune is the planet with all of the rings.
4. Earth is one of the biggest planets.



Values Conflict Example 1

Agree or Disagree

1. Ministers should be held to a higher standard of morality than others.
2. In some cases, adultery is acceptable.
3. People in a community should know when someone has committed adultery.

Values Conflict Example 2

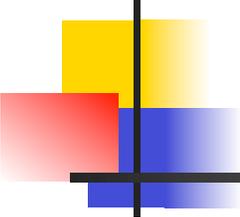
Strongly Agree

Agree

Disagree

Strongly
Disagree

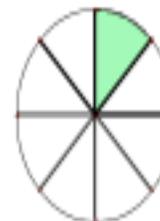
1. War is justified in certain circumstances.
2. A country should have a draft.
3. All citizens of a country should have to serve the government for 2 years.
4. The citizens of a country have limited power regarding starting and ending a war.

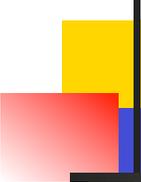


Content Pre-test -- Math Metrics (Likely--Unlikely)

1. The basketball player is 3 meters tall.
2. The bicycle was traveling 20 kilometers per hour.
3. He drank a liter of pop in one gulp.
4. The temperature dropped to 25 degrees Celcius and it started to snow.
5. The pencil had a mass of 100 grams.
6. The area of a postage stamp is 20 square centimeters

Before		Statement	After	
Agree	Disagree		Agree	Disagree
		1. If you are allowed to cut along the marked radii of this circle, you can create nets for 8 different cones.		
		2. Each cone formed using part of this circle will have the same volume.		
		3. The angle in the shaded sector is 45° .		

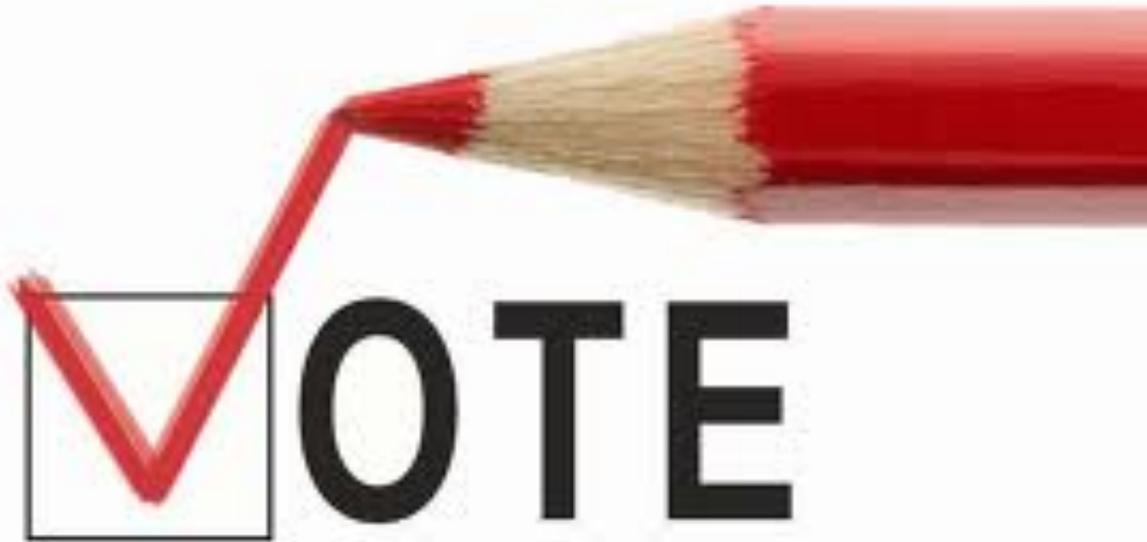


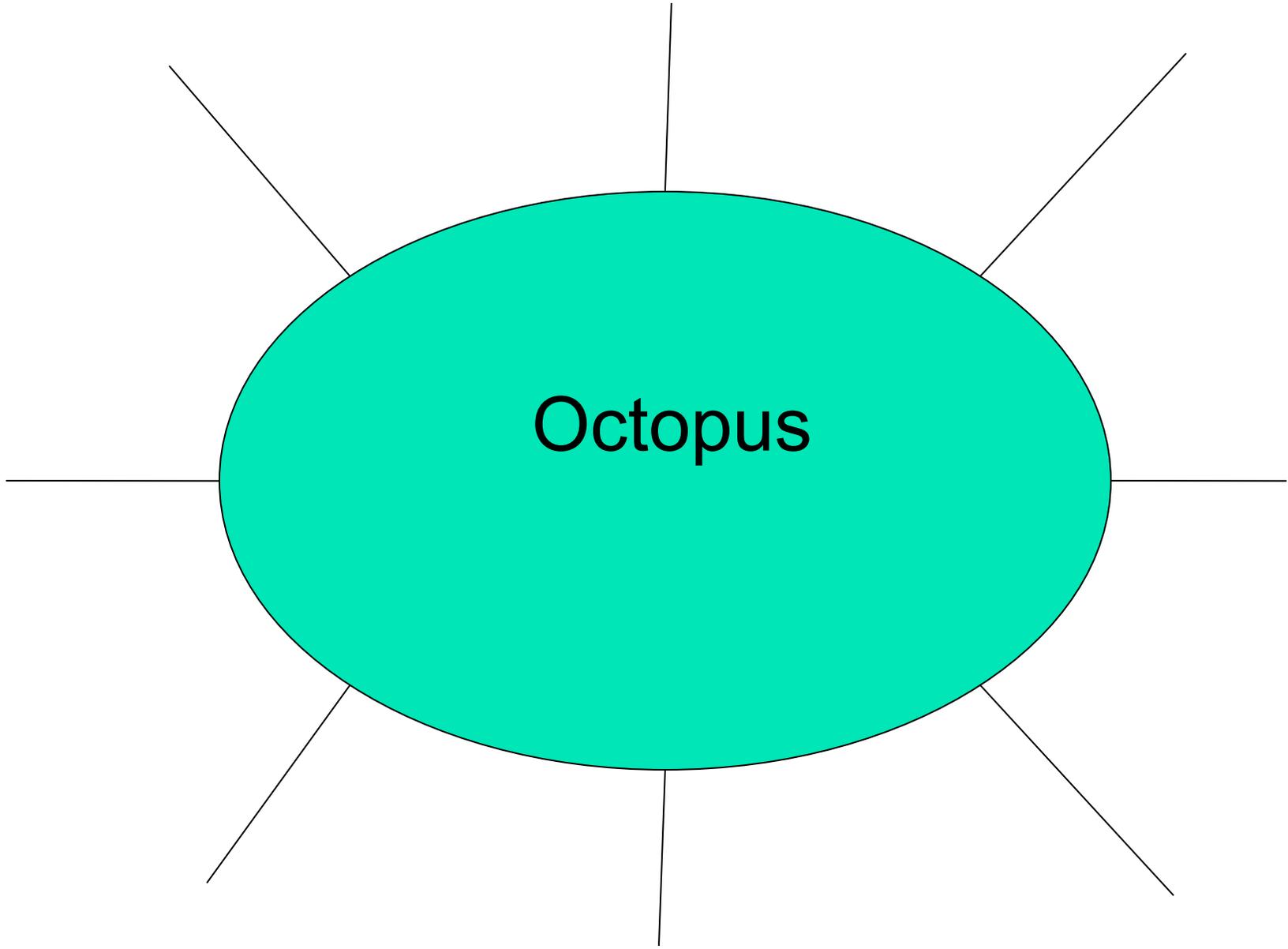


Getting Attention, Activating Background Information, and Previous Learning, and Providing a Motivation to Learn

<ul style="list-style-type: none">• Advanced organizer• Skim• Create and ask questions	<ul style="list-style-type: none">• Role play• View a movie• Listen to a song• Envision a scenario	<ul style="list-style-type: none">• Draw• Take a pre-test• Connect to values• Debate/Create Controversy
<ul style="list-style-type: none">• Predict• KWL (know, want to know, learned)• Act out• Vote• Tell a relevant story	<ul style="list-style-type: none">• Brainstorm• Debate• Visualize• Journal/free write• Interview	

Let's





Octopus

Can an octopus get out of this box?



How is math used to build this building?

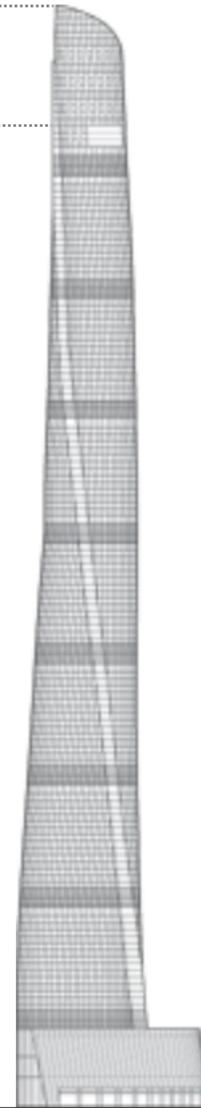


How is math used to build this building?

Height: To Tip
632 m / 2,073 ft

Height: Architectural
632 m / 2,073 ft

Height: Occupied
561.3 m / 1,841 ft



Height: Observatory
561.3 m / 1,841 ft

Floors Above Ground
128

Floors Below Ground
5

of Elevators
106

Top Elevator Speed
18 m/s

Tower GFA
420,000 m² / 4,520,842 ft²

Development GFA
521,000 m² / 5,607,997 ft²

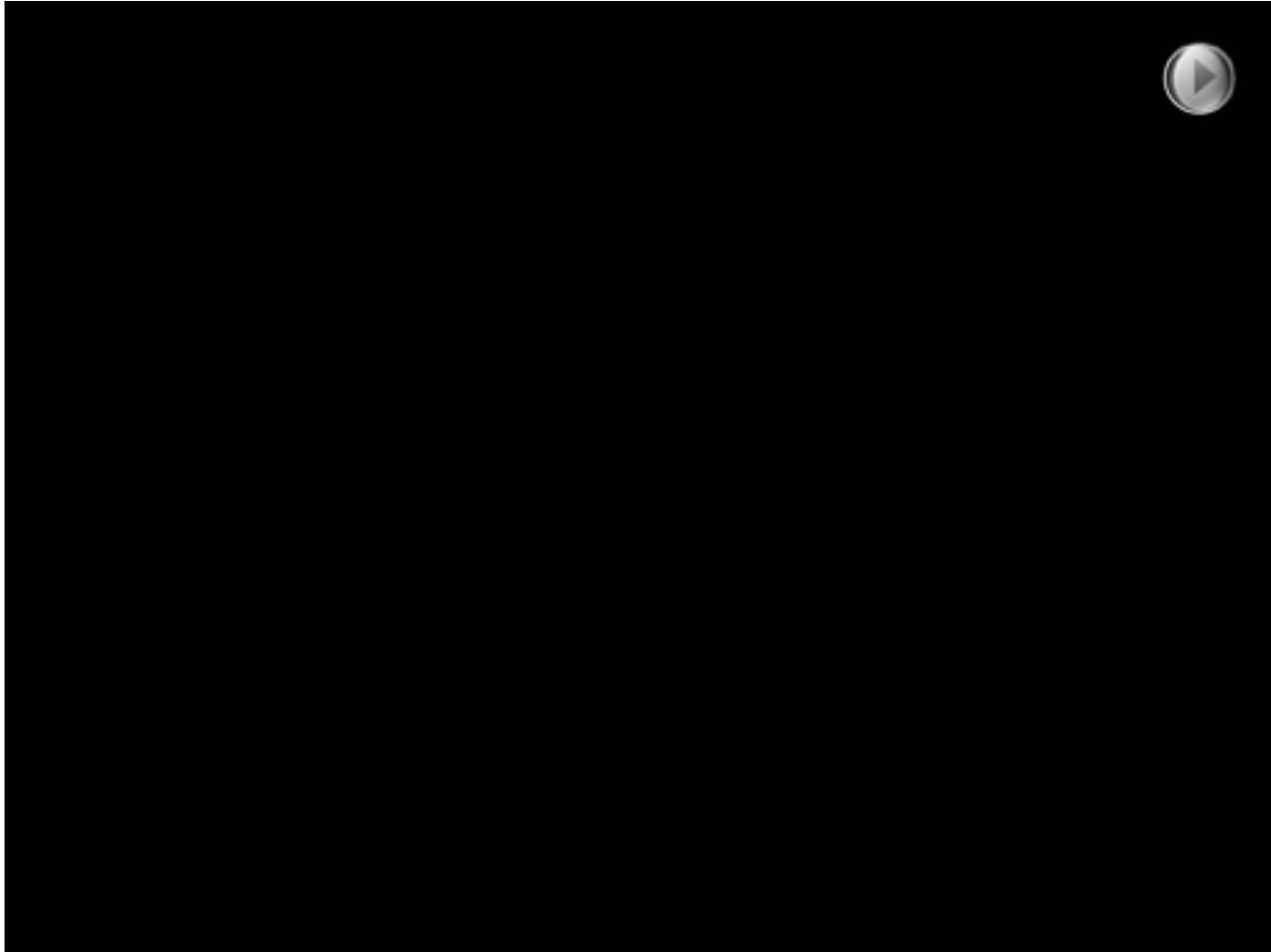
of Hotel Rooms
258

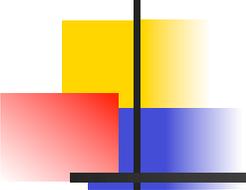
of Parking Spaces
1,794

What does it take to develop physical endurance?



Create Curiosity

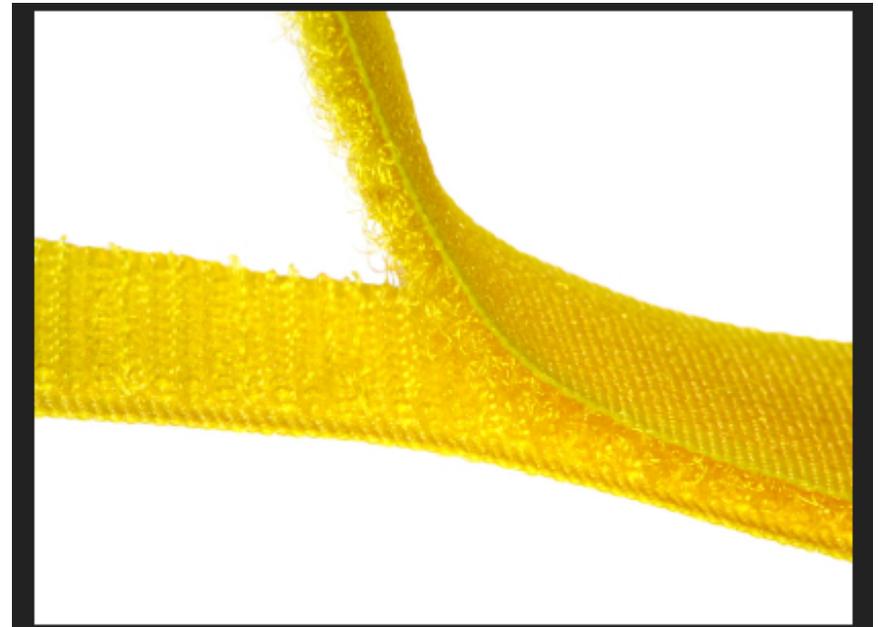


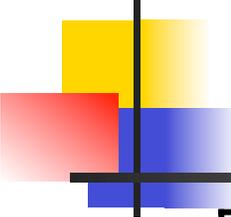


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Learning is like connecting VELCRO

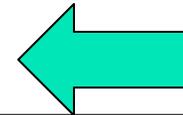




Stages of Learning

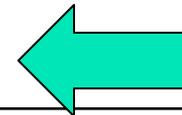
Accessing/Acquiring Information

Input



Creating Meaning/Processing Information

Process



Producing/Presenting/Communicating
Information

Output

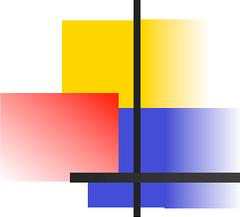
Monitoring Progress and Making Adjustments

Reflect and Improve

ATTENTION SPANS



must be paid
attention to



Direct Teaching

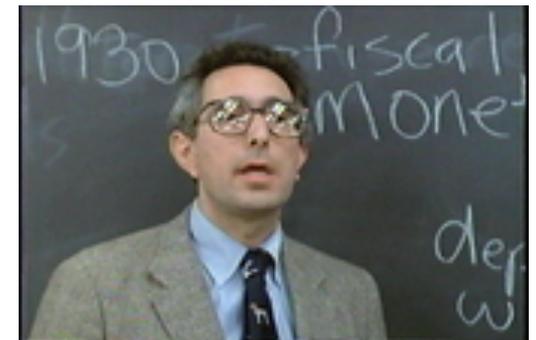
- Mini-Interactive Lectures
- Demonstrations
- Slide Shows
- Computer-based Learning

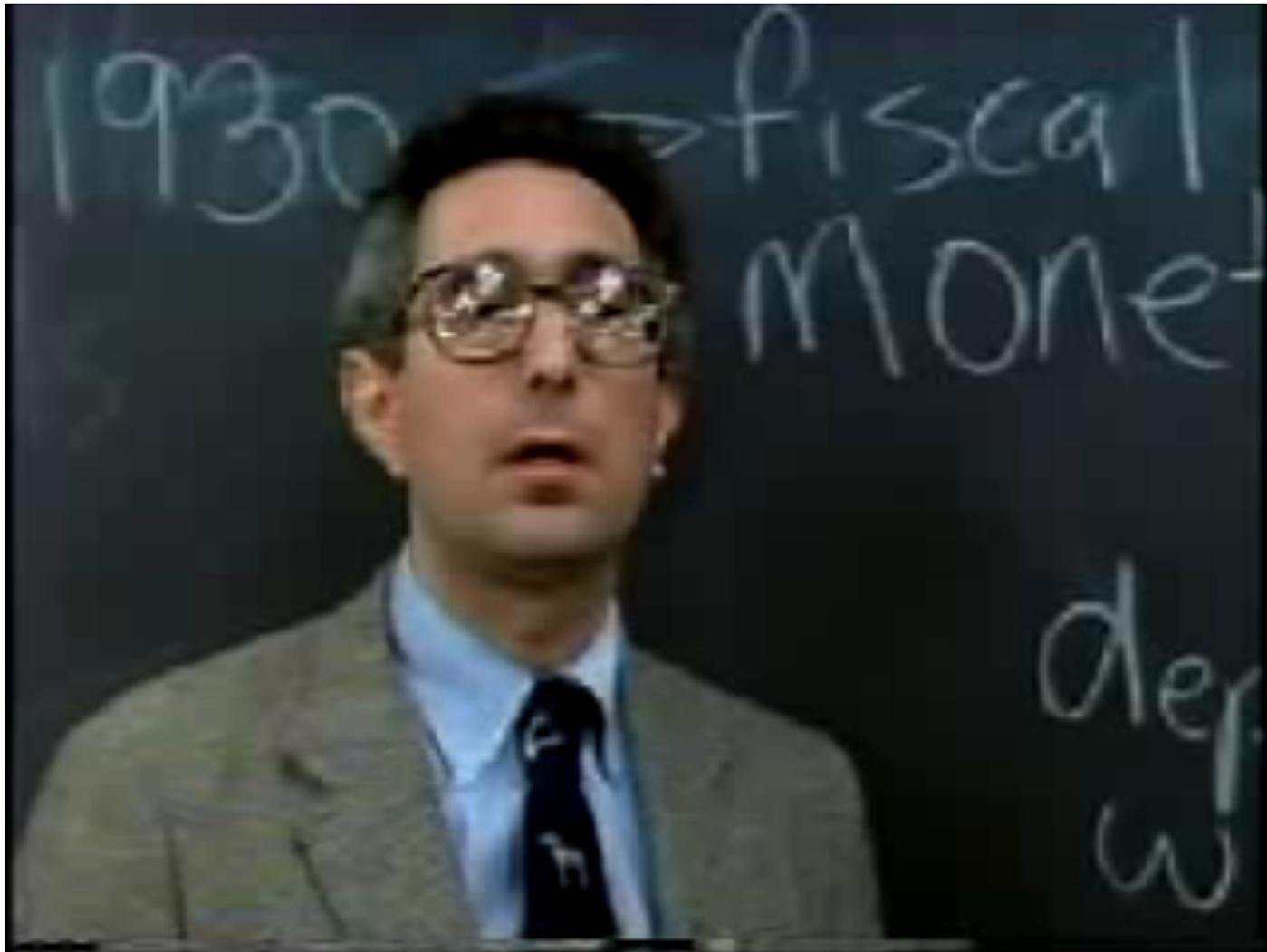
- Simulation
- Structure Overview
- Explicit Teaching

- Guided and Shared Reading
- Debate
- Role Playing
- Discussion

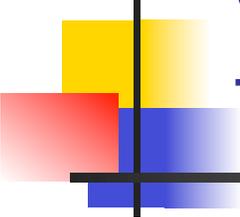
- Think-Pair Share
- Cooperative Learning
- Panels

What are the characteristics of a poor lecture?



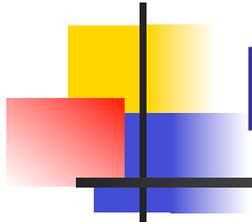






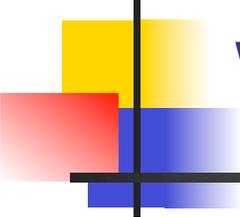
Imagine giving a lecture/ demonstration that is based upon three principles of memory

1. We remember best when we **relate new to old.**
2. We remember best when we **organize/group information.**
3. We remember best when we **practice and elaborate.**

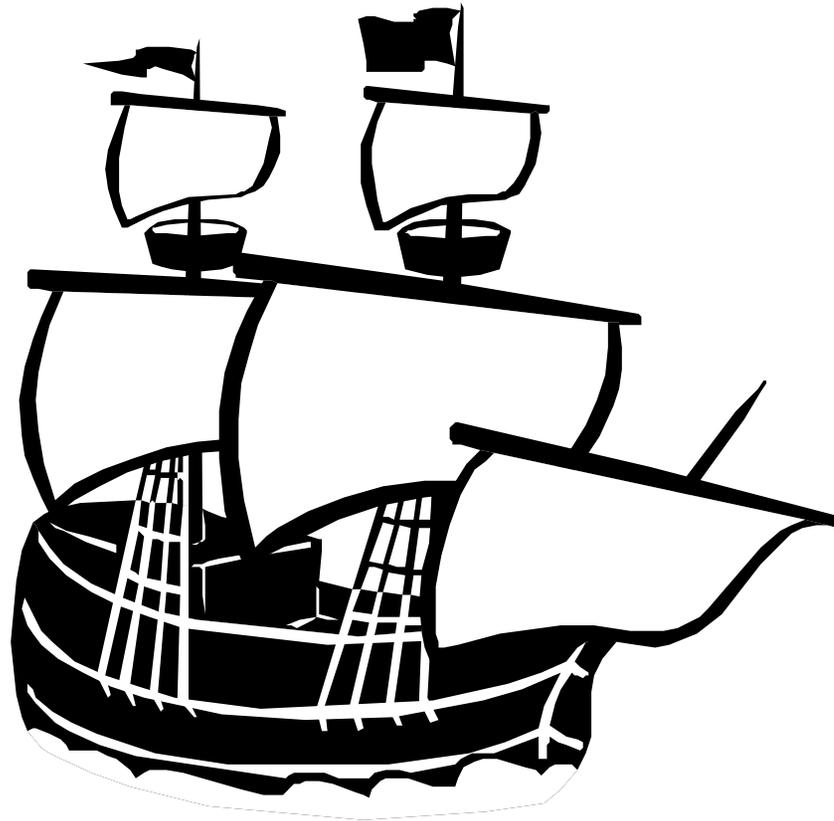


Learning Goals

- Compare three groups of explorers.
- Know how to actively take notes and respond to questions.
- Know how to determine main ideas and details.

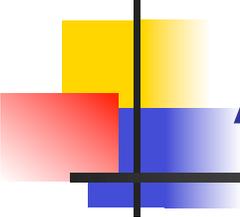


Who discovered America?



What risks do people take in life?

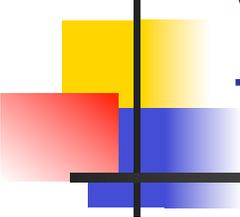




Who really did discover America?

	Early Man and Company	Leif Erickson/ Vikings	Christopher Columbus
The People			
Their Technology			
The Effects			

<p style="text-align: center;">Remembering (Memory)</p> <p>Means . .</p> <ul style="list-style-type: none"> •observing •memorizing •sequencing •categorizing <p>Cues: Who? What? Where? When? How?</p>	<p style="text-align: center;">Relating</p> <p>Means . .</p> <ul style="list-style-type: none"> •describing feelings •empathizing •preferring and valuing •deciding <p>Cues: How do you feel, believe, think? How would you decide?</p>
<p style="text-align: center;">Reasoning (Understanding)</p> <p>Means . .</p> <ul style="list-style-type: none"> •comparing/contrasting •classifying/analyzing •summarizing •verifying <p>Cues: Why? How do you know that? What evidence do you have? What is similar? Different?</p>	<p style="text-align: center;">Reorganizing (Synthesis)</p> <p>Means . .</p> <ul style="list-style-type: none"> •generating •hypothesizing •imagining •elaborating •using metaphors <p>Cues: What if? In how many ways? Create . . .</p>

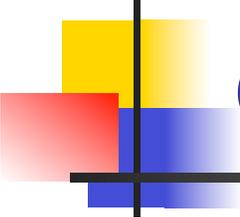


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the illusion of
SPEED



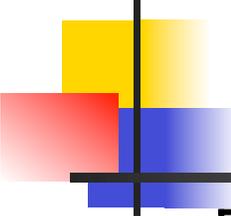


Struggling Learners have difficulty . . .

- Reading rigorous text independently
- Communicating orally and in written form
- Thinking critically

Teachers in high school are having difficulty getting students to think.





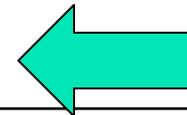
Stages of Learning

Accessing/Acquiring Information

Input

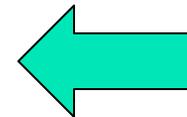
Creating Meaning/Processing Information

Process



Producing/Presenting/Communicating
Information

Output



Monitoring Progress and Making Adjustments

Reflect and Improve

I am sure that you would like
to . . .

- increase achievement



- reduce achievement gaps



Remember as many words as you
can.

You have 20 seconds.

black

brown

cinnamon

gloves

canary

parrot

sweater

shirt

dove

green

garlic

pepper

How did you do?

black

brown

cinnamon

gloves

canary

parrot

sweater

shirt

dove

green

garlic

pepper

Remember as many words as you can.
You have 20 seconds.

vanilla

chocolate

strawberry

horse

camel

elephant

yellow

red

green

desk

table

chair

Three important Questions

1. Did it seem like the time I gave you to study was longer for the second list?
2. Did you have more confidence in your performance on the second list?
3. Did you think the second list was easier when you first saw it?

How did you do now?

vanilla

chocolate

strawberry

horse

camel

elephant

yellow

red

green

desk

table

chair

Grouping and Patterning

- Lesson:
 - Students can increase their comprehension and recall when they group information and identify patterns.

Most people remember the right side better than the left side in a timed test.

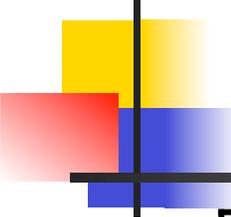
black	brown
cinnamon	gloves
canary	parrot
sweater	shirt
dove	green
garlic	pepper

vanilla	horse
chocolate	camel
strawberry	elephant
yellow	desk
red	table
green	chair

The Brain and Successful Learning

Neurotransmitter	Purpose and Result
Noradrenalin	Arousal Energy Drive Excitement
Serotonin	Calming neurotransmitter important to the maintenance of good mood
Acetylcholine	Focus Memory Feelings of pleasure
Dopamine	Pleasure Reward Good Feelings towards others

Students . . .	What does this mean?
1. have short attention spans and hate to be bored.	•Use optimal learning time (7-12) minutes and then apply what they learn.
2. are visually preferred.	•Use graphic organizers and pictures.
3. want immediate gratification.	•Use short-cycle challenge and feedback.
4. choose to be interactive and hands-on.	•Create challenges that use multiple neuropathways. •Use cooperative learning.
5. love challenge and are curious.	•Be explicit about objectives and cause curiosity.
6. want to win using strategies, practice, and do-overs.	•Explicitly teach learning-to-learn strategies that work. •Use re-takes and re-dos.



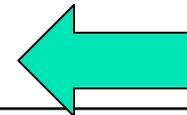
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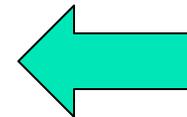
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