



Life Skills

TED-ED for KIDS

Rock, Paper, Scissors, Statistics



Questions:

1- What two important findings did scientists come up with about how people try to beat each other at rock, paper, scissors?

2- According to the video, if you lose your first hand to someone who played rock, what should you play in your second hand?

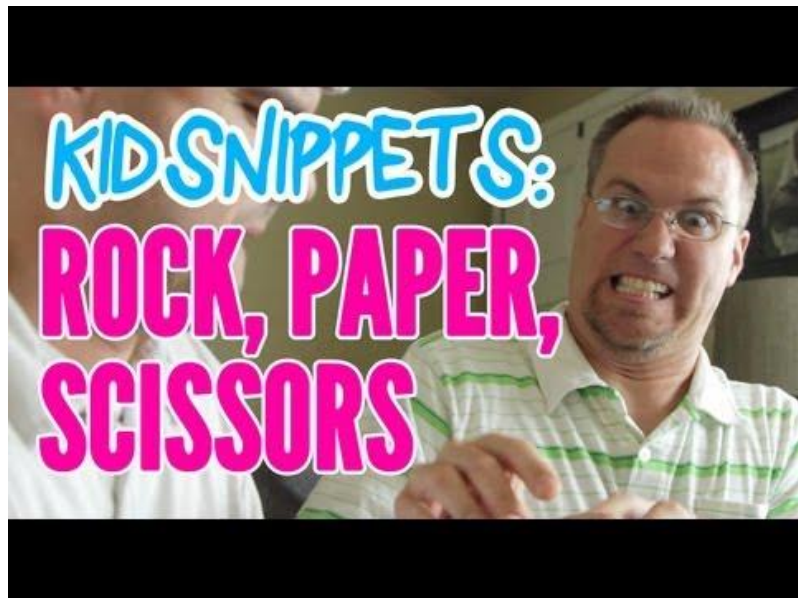
3- According to this strategy, if you win your first hand using rock, what should you play in your second hand?

4- Why does the strategy of moving backwards through your choices work?

5- What should you do if you tie the first hand?

6- Is this strategy based on mathematics or psychology?

https://ed.ted.com/featured/kK5wpbjf/review_open#question-4



Why don't ants get stuck in traffic?



Questions:

- 1- Why are wider roads less efficient for ants?
- 2- Name at least two examples from the video of things that make waiting in traffic seem like it's taking longer.
- 3- When one lane of traffic shuts down, which of the two following options moves traffic along at a faster rate?
- 4- The biggest difference between human drivers and ant "drivers" is that, ants prioritize the good of the colony and human drivers are more concerned with...

<https://ed.ted.com/featured/VR7dKcVX#review>



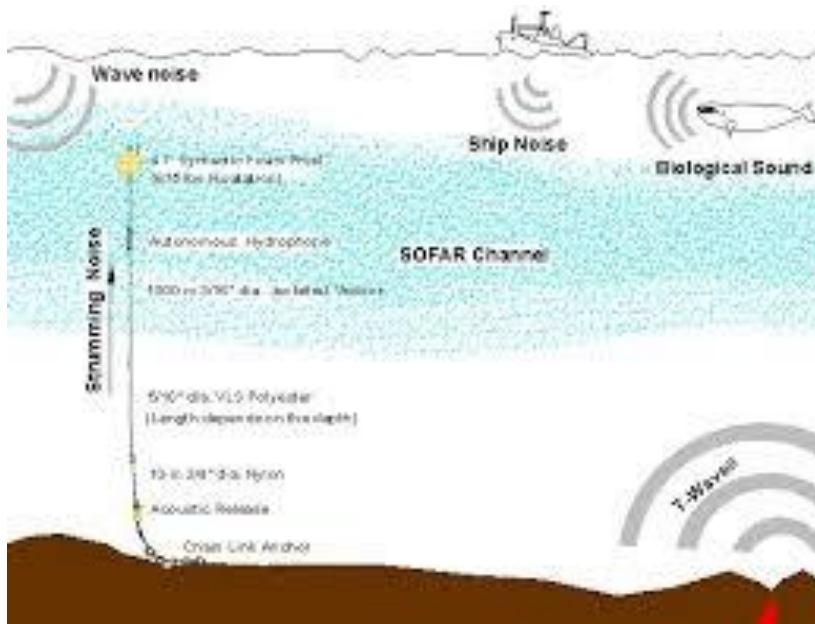
Why do whales sing?



Questions:

- 1- Which whales are most famous for singing?
- 2- Which organs are most likely involved in whale song production?
- 3- How long can whales sing for?
- 4- What is a hydrophone?
- 5- Scientists can track whales by detecting and following their songs. How is this a helpful tool for whale conservation, especially across international borders and in the high seas?

<http://ed.ted.com/lessons/how-do-whales-sing-stephanie-sardelis#review>



Noise Pollution [continue.....]

- Marine mammals, such as whales, dolphins, and porpoises, are much more dependent on sound for communication and sensation.
- Sight is less effective for marine mammals because of the way particulates in the ocean scatter light.
- Smell is also limited, as molecules diffuse more slowly in water than in air, which makes smelling less effective.
- However, the speed of sound is roughly four times greater in water than in the atmosphere at sea level.



<http://oceanservice.noaa.gov/podcast/dec16/mw138-ocean-noise.html>

Why doesn't stick to teflon?

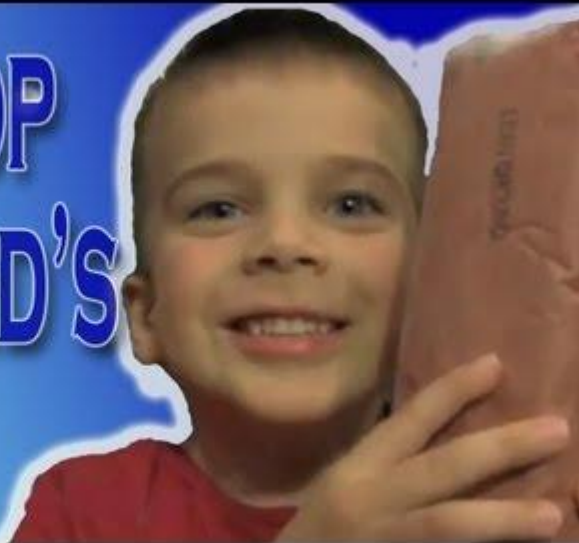
Questions:

- 1- What makes PTFE aka Teflon non-stick?
- 2- Why is it so hard for PTFE to form chemical bonds with outside molecules?
- 3- Take some time and list the various uses that Teflon had had. Is its production worth its impact on the environment? What should be done?

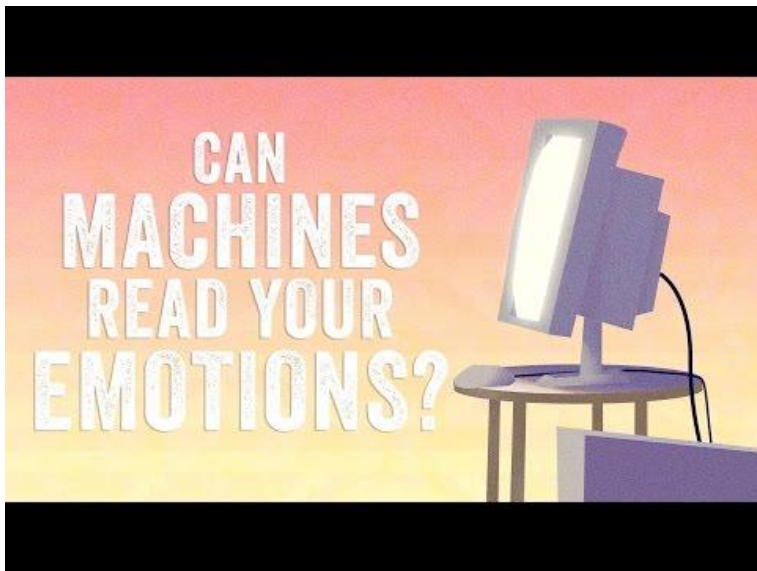


<http://ed.ted.com/lessons/why-doesn-t-anything-stick-to-teflon-ashwini-bharathula#review>

STOVE TOP SHEPHERD'S PIE



Can machines read your emotions?



Questions:

1- What was the main point of Paul Ekman's theory of universal emotions?

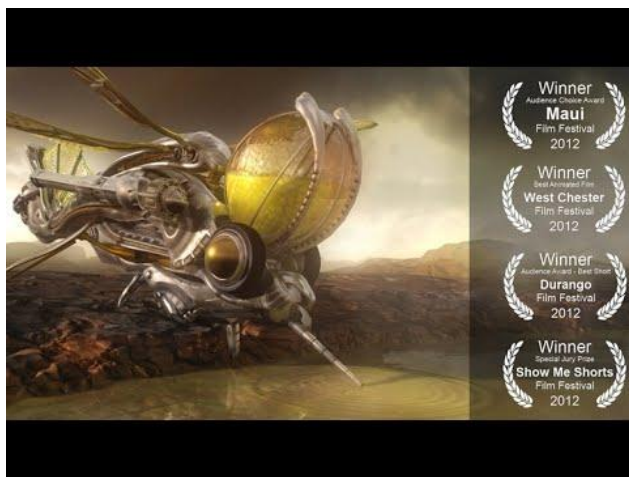
2- Why is emotional understanding now easier for machines to detect?

3- In order to be trained successfully, neural networks require _____.

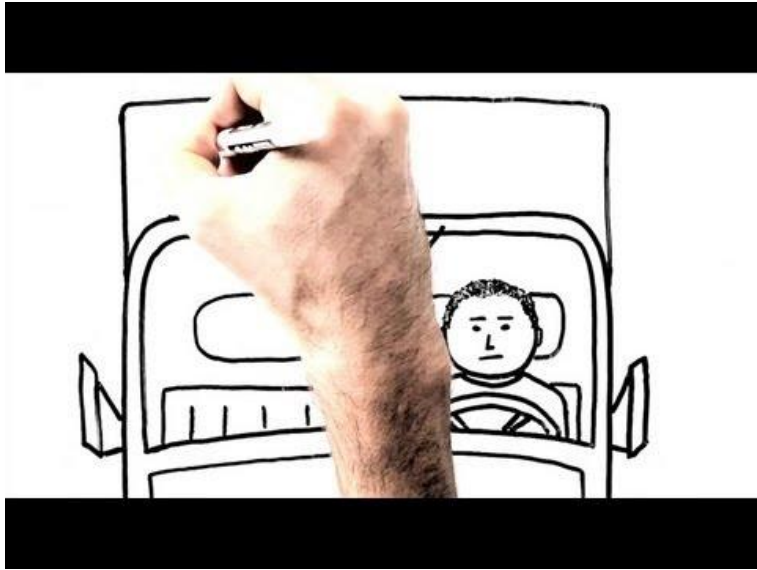
4- What are major problems of self driving cars?

5- Machines identifying emotions could be dangerous. How?

<https://ed.ted.com/lessons/can-machines-read-your-emotions-kostas-karpouzis#review>



How Containerization Shaped the World.



Questions:

- 1- Who was Malcolm McLean?
- 2- What did Malcolm McLean want to ship overseas?
- 3- What is containerization?
- 4- McLean's shipping container accelerated globalization. Before that, what inventions enabled a greater exchange of goods, ideas and people within countries?

<http://ed.ted.com/lessons/how-containerization-shaped-the-modern-world#review>

Why do dogs smell each other's butts?



Questions:

1- An average dog's nose is anywhere from ____ to ____ times more sensitive than a human's nose.

2- What chemical information is held in a dog's anal sac?

3- What is the name of the second olfactory system at play in a dog's nose? What does it do?

<http://ed.ted.com/featured/2ATEndgp#review>

You can recognize a lot of different smells. How many? Try this and see.

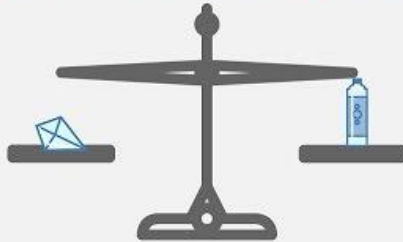


- A grown-up to help
 - A friend or two
 - A blindfold
 - Small, lidded containers that you can't see through
 - Smelly stuff, such as lemons, bananas, orange peel, pine needles, a cotton ball soaked in perfume, chocolate, coffee, dirt, vanilla, garlic, onion, mint, vinegar, rose petals, pencil shavings, or ginger
1. Have a grown-up poke small holes in the container lids.
 2. Put one "smelly" object in each container.
 3. Write a number on the side of each container.
 4. Tape a label to the bottom of each container to say what's inside.
 5. Blindfold your friend and have him or her smell each container.
 6. Write down the number of the container and your friend's guess about what's inside. Are the answers right? Which are good smells? Which are gross?

The paradox of value-

Akshita Agarwal

COULD A WATER BOTTLE
BE MORE VALUABLE THAN A DIAMOND?



Questions:

1- Why do you think diamonds are priced higher than water? Can there ever be a situation where diamonds are priced equal to or maybe even lesser than water?

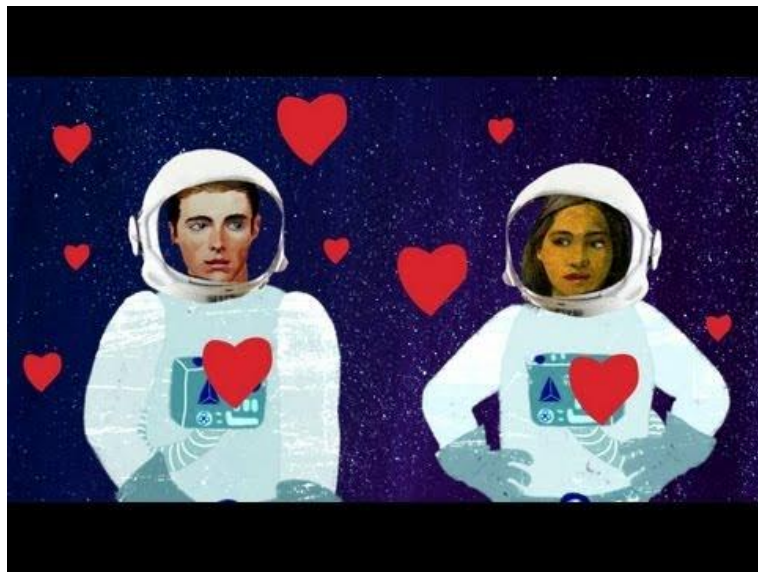
2- When it comes to most things, the more of it you acquire, the less useful or enjoyable every additional bit becomes. Can you think of a few examples that support this statement?

3- Is there any situation where the law of diminishing marginal utility may not hold true? Discuss.

<http://ed.ted.com/lessons/the-paradox-of-value-akshita-agarwal#review>

How to think about gravity.

-Jon Burgerman



Questions:

- 1- What happens when you drop a rock from a cliff?
- 2- Why is gravity a benefit? Why are gravity and weight related?
- 3- In what ways are magnetism and gravity the same? In what ways are they different?
- 4- What is gravity?
- 5- How does the force of gravity change in respect to distance?
- 6- Why do astronauts weigh less in space than on earth?
- 7- What causes gravity?

<https://ed.ted.com/lessons/jon-bergmann-how-to-think-about-gravity#review>

The survival of the sea turtle

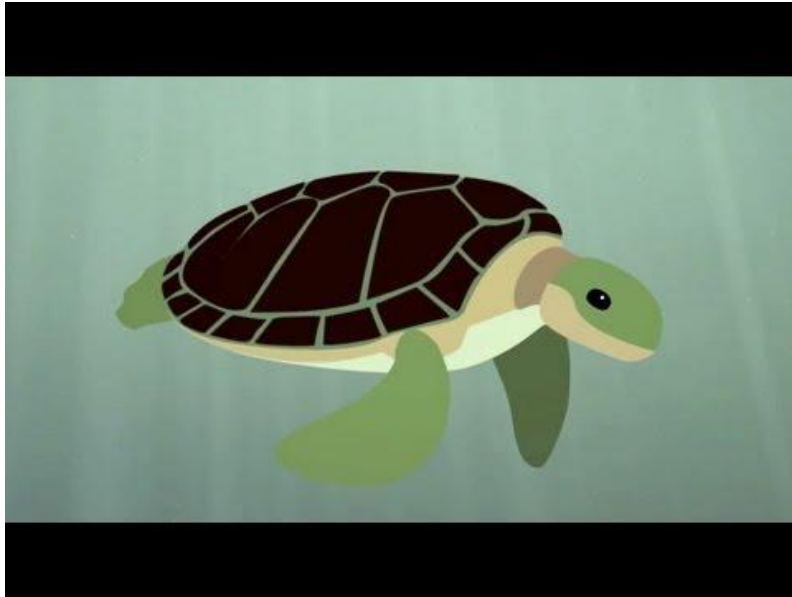
Questions:

1- How long have sea turtles been around?

2- Some species have active parents and other species don't. Discuss how this may effect the survival of an individual.

3- Discuss the considerable array of threats sea turtles face in their lifetimes.

4- How would you focus on creating a species recover program for sea turtles? What are the most important factors for survival?



<https://ed.ted.com/lessons/the-survival-of-the-sea-turtle#review>



Sea Turtle Craft Ideas

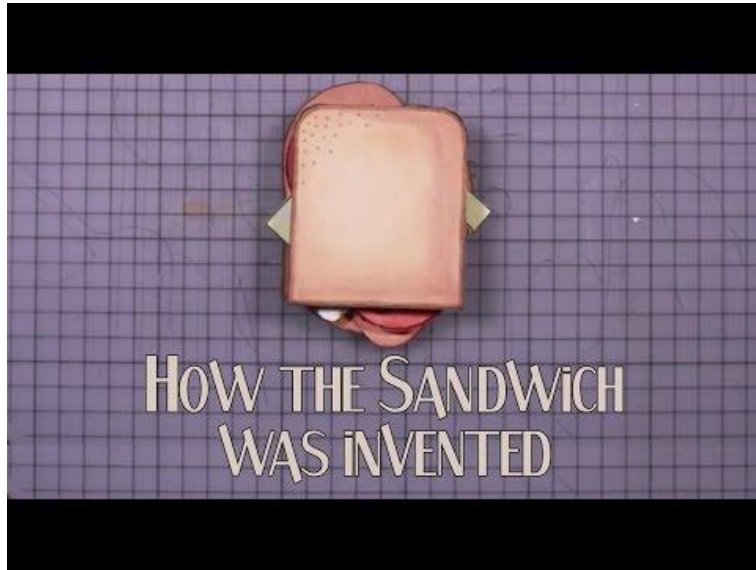


How the sandwich was invented.

Questions:

1- What are some different cultural variations on sandwiches?

2- Can you think of ways that people have customized their own sandwiches?



<https://ed.ted.com/lessons/how-the-sandwich-was-invented-moments-of-vision-5-jessica-oreck>



Why is Vermeer's "Girl With the Pearl Earring" considered a masterpiece?

Questions:

1- What is a tronie?

2- How does the "Girl with the Pearl Earring" differ from much of Vermeer's other work?

3- Describe Vermeer's typical composition.

4- What does chiaroscuro refer to?

5- What economic innovation helped replace traditional patrons in Vermeer's home town?

6- How does Vermeer's work memorialize the merchant class?

7- How does the "Girl with the Pearl Earring" serve as an artifact and representation of its time period?



<https://ed.ted.com/lessons/why-is-vermeer-s-girl-with-the-pearl-earring-considered-a-masterpiece-james-earle#review>



Are you a good listener?

BEING A GOOD LISTENER



Questions:

- 1- What does the narrator mean when he describes certain friendships as merely a form of “socialized egoism”?
- 2- What does it mean to listen with a “productive, friendly suspicion”?
- 3- What are some tools good listeners use when engaging in a conversation?

<https://ed.ted.com/featured/foptnjVE#review>



How to get rid of acne.



Questions:

- 1- Is your skin an organ?
- 2- What percentage of humans are affected by acne at some point in their lives?
- 3- What two functions does sebum--the oil on your skin--serve?
- 4- Skin products that are 'non-comedogenic' claim to not do what?

<https://ed.ted.com/featured/7Qn0PaKa#review>



Hygiene for Teens

Everyday personal hygiene is basically about washing your hands, covering your mouth when you cough and keeping clean. But there's also a social side to dealing with personal things like body odour, smelly feet and bad breath.

<http://raisingchildren.net.au/articles/hygiene.html>

5 DIY Everyday Personal Care Products to Make at Home

Many people are moving over to natural, plant-based, organic personal care products and for good reason! There are many reasons to start making your own products, here are a few:

<http://www.collective-evolution.com/2014/06/25/top-5-everyday-personal-care-products-you-can-make-yourself-with-these-simple-ingredients/>

Why do we hiccup?



Questions:

- 1- What is the principle of the diaphragm?
- 2- When are hiccups more common?
- 3- What are some possible functions for hiccups in mammals?

<http://ed.ted.com/lessons/why-do-we-hiccup-john-cameron#review>



Don't eat the marshmallow!

Questions:

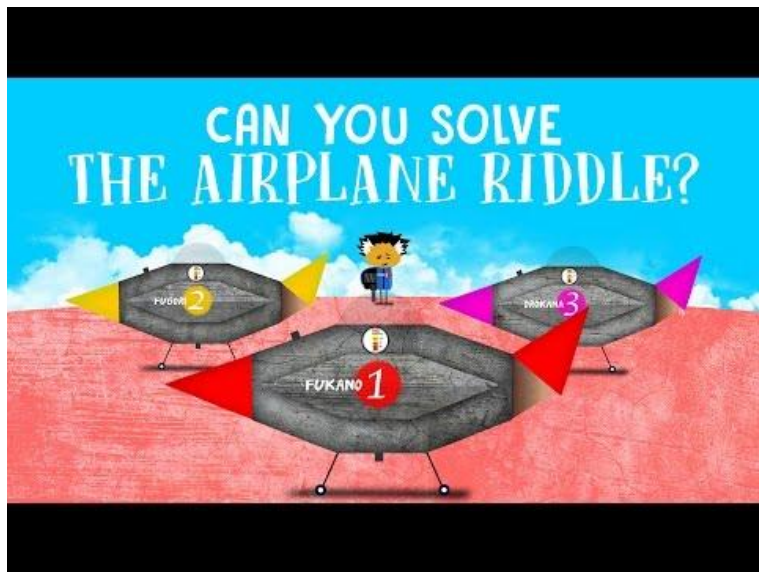
1- What does Joachim de Posada believe is the most important principle for success?

2- Why do you think mastering delayed self-gratification as a child allows for more success later in life?



<http://ed.ted.com/featured/nvJHP79R#review>

Can you solve the airplane puzzle?

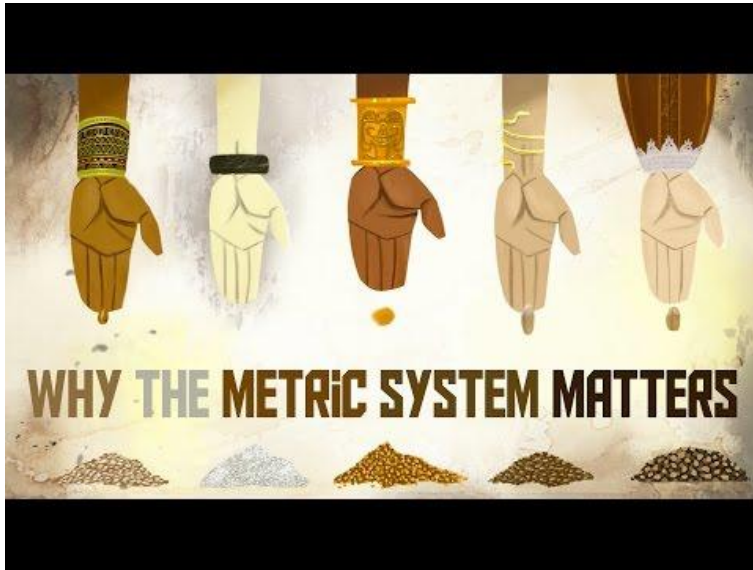


Questions:

- 1- How many degrees of longitude is the entire Earth divided into?
- 2- How much total fuel (in kiloliters) is contained within all three airplanes when combined at the beginning of this trip?
- 3- What is the key to completing the mission of flying around the world in one airplane?
- 4- What makes this riddle easier to solve?
- 5- Why was time such a critical factor in solving this riddle?

<http://ed.ted.com/lessons/can-you-solve-the-airplane-riddle-judd-a-schorr#review>

Why the metric system matters.



Questions:

1- Who was the earliest advocate for a uniform measuring system?

2- What historical event was pivotal in the adoption of a unified measurement system?

3- The word meter derives from a Greek word that means _____?

4- What might common French citizens have liked about the metric system when it was adopted? What might they have disliked? Why?

5- What circumstances during the French Revolution permitted the metric system to gain a foothold?

<http://ed.ted.com/lessons/why-the-metric-system-matters-matt-anticole#review>

How high can you count on your fingers?



Questions:

- 1- In the English language, what does the word digit refer to?
- 2- The third number within a third group of twelve is 27. What is the fifth number within a fifth group of twelve?

<http://ed.ted.com/lessons/how-high-can-you-count-on-your-fingers-spoiler-much-higher-than-10-james-tanton#review>

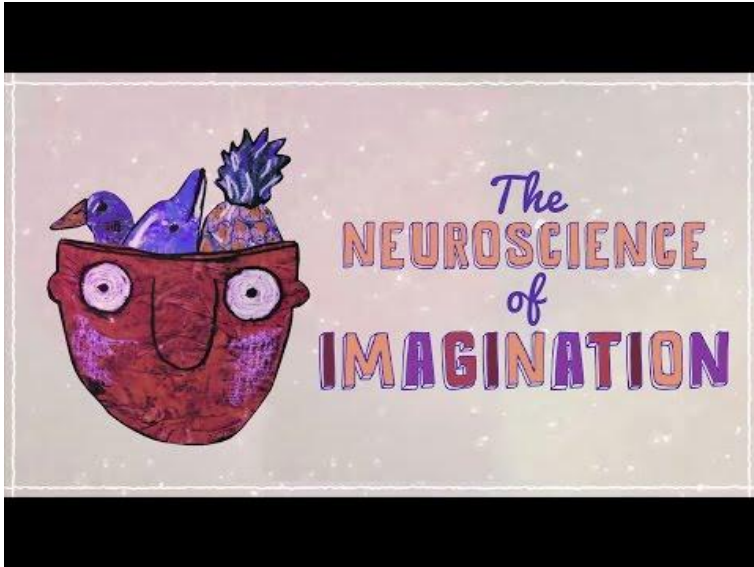
The Neuroscience of Imagination

Questions:

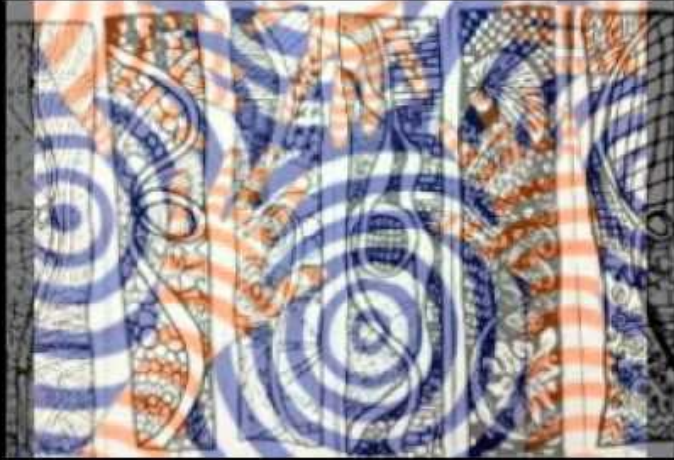
1- The Hebbian principle is based on the principle that: "Neurons that fire together, _____."

2- What is the role of myelin in the brain?

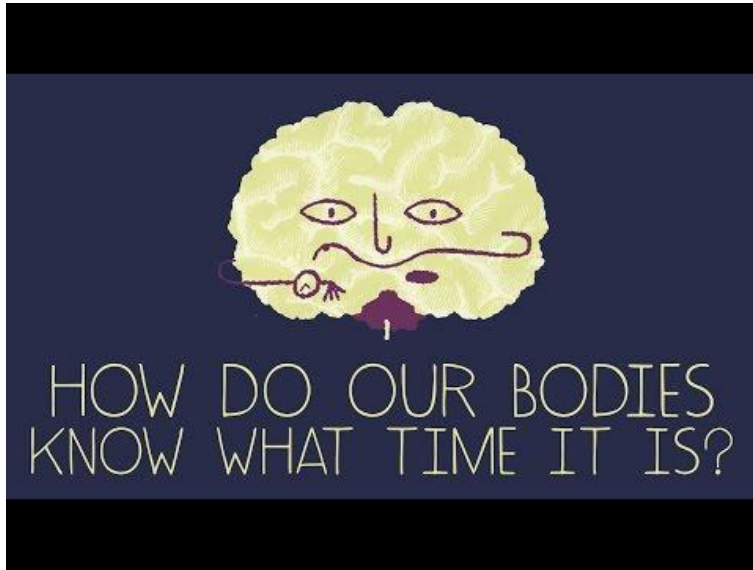
3- What is a neuronal ensemble?



<https://ed.ted.com/lessons/the-neuroscience-of-imagination-andrey-vyshedskiy#review>



How does your body know what time it is?



<https://ed.ted.com/lessons/how-does-your-body-know-what-time-it-is-marco-a-sotomayor#review>

Questions:

- 1- Where in our brains is our most primitive clock?
- 2- To increase precision, our brain takes cues from the outside world such as what?
- 3- How can light perception at night affect our neurotransmitters?
- 4- Do you think light perception at night can alter other parts of our bodies besides the brain? Which ones? Why?

Resources:

<https://ed.ted.com/lessons>