



<http://bit.ly/COETechTool>



Digital Tools for Visual Literacy



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@DrHope4Tech

YOU ARE

BY VISUAL.ly

WHAT YOU TWEET

TWITTER DATA-GENERATED INFOGRAPHIC



Who's Here?



Built Rite United States Map Puzzle *INLAID*

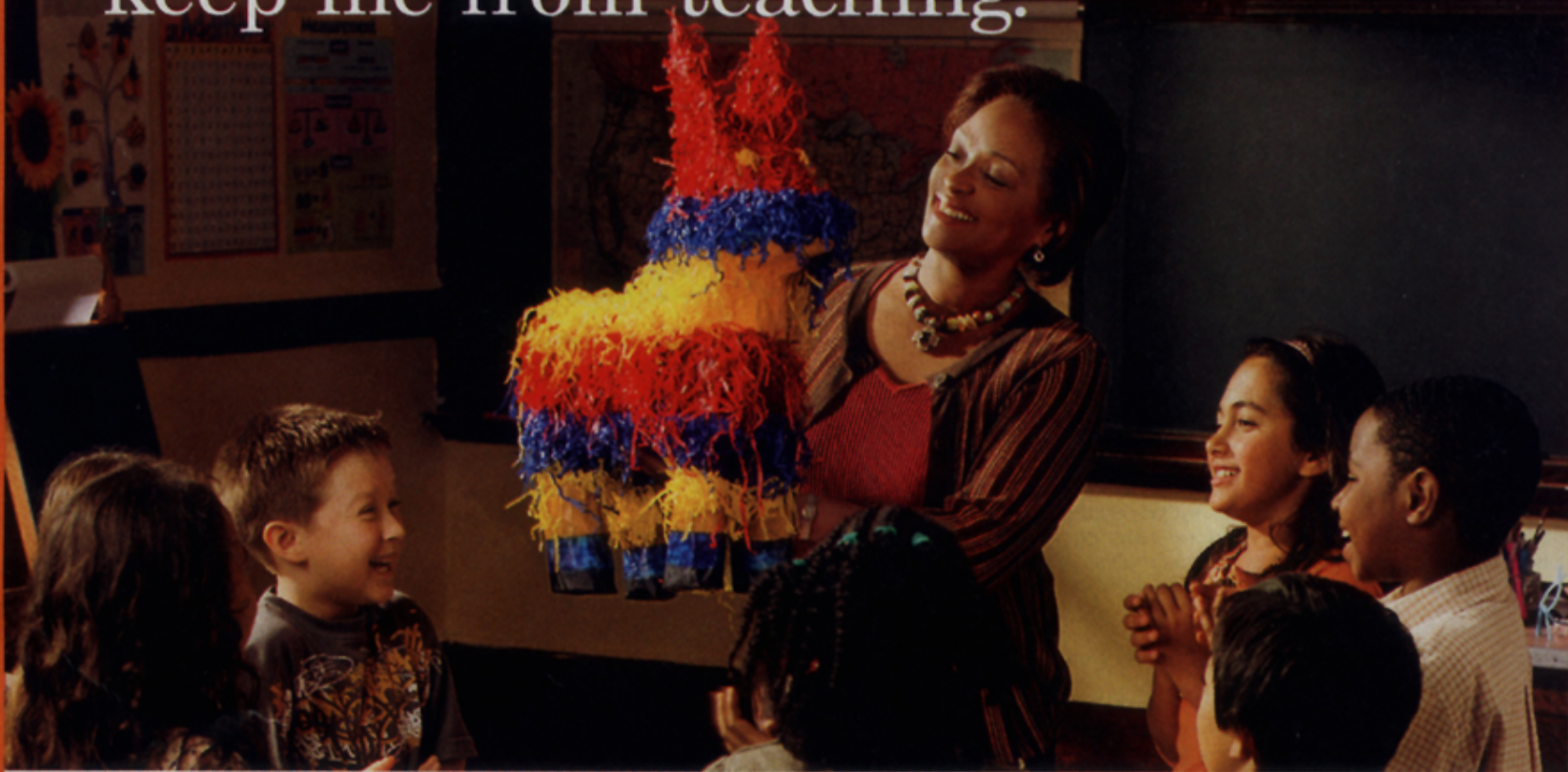


Learning Targets





“I won't let arthritis pain
keep me from teaching.”



VIOXX PROVIDES 24-HOUR RELIEF OF ARTHRITIS PAIN AND STIFFNESS

▼ FIND OUT IF **VIOXX** CAN MAKE A
DIFFERENCE IN YOUR LIFE

The less pain you feel, the more everyday victories you can achieve. And VIOXX may help. VIOXX is a prescription medicine for the relief of arthritis pain, stiffness, and inflammation.

ONCE DAILY
VIOXX[®]
(rofecoxib)

What are the possible side effects of VIOXX?

Serious but rare side effects that have been reported in patients taking VIOXX and/or related medicines have included:

- Serious stomach problems, such as stomach and intestinal bleeding, can occur with or without warning symptoms. These problems, if severe, could lead to hospitalization or death. Although this happens rarely, you should watch for signs that you may have this serious side effect and tell your doctor right away.
- Heart attacks and similar serious events have been reported in patients taking VIOXX.
- Serious allergic reactions including swelling of the face, lips, tongue, and/or throat which may cause difficulty breathing or swallowing and wheezing occur rarely but may require treatment right away. Severe skin reactions have also been reported.
- Serious kidney problems occur rarely, including acute kidney failure and worsening of chronic kidney failure.
- Severe liver problems, including hepatitis, jaundice and liver failure, occur rarely in patients taking NSAIDs, including VIOXX. Tell your doctor if you develop symptoms of liver problems. These include nausea, tiredness, itching, tenderness in the right upper abdomen, and flu-like symptoms.

In addition, the following side effects have been reported: anxiety, blurred vision, colitis, confusion, constipation, decreased levels of sodium in the blood, depression, fluid in the lungs, hair loss, hallucinations, increased levels of potassium in the blood, insomnia, low blood cell counts, menstrual disorder, palpitations, pancreatitis, ringing in the ears, severe increase in blood pressure, tingling sensation, unusual headache with stiff neck (aseptic meningitis), vertigo, worsening of epilepsy.

What?





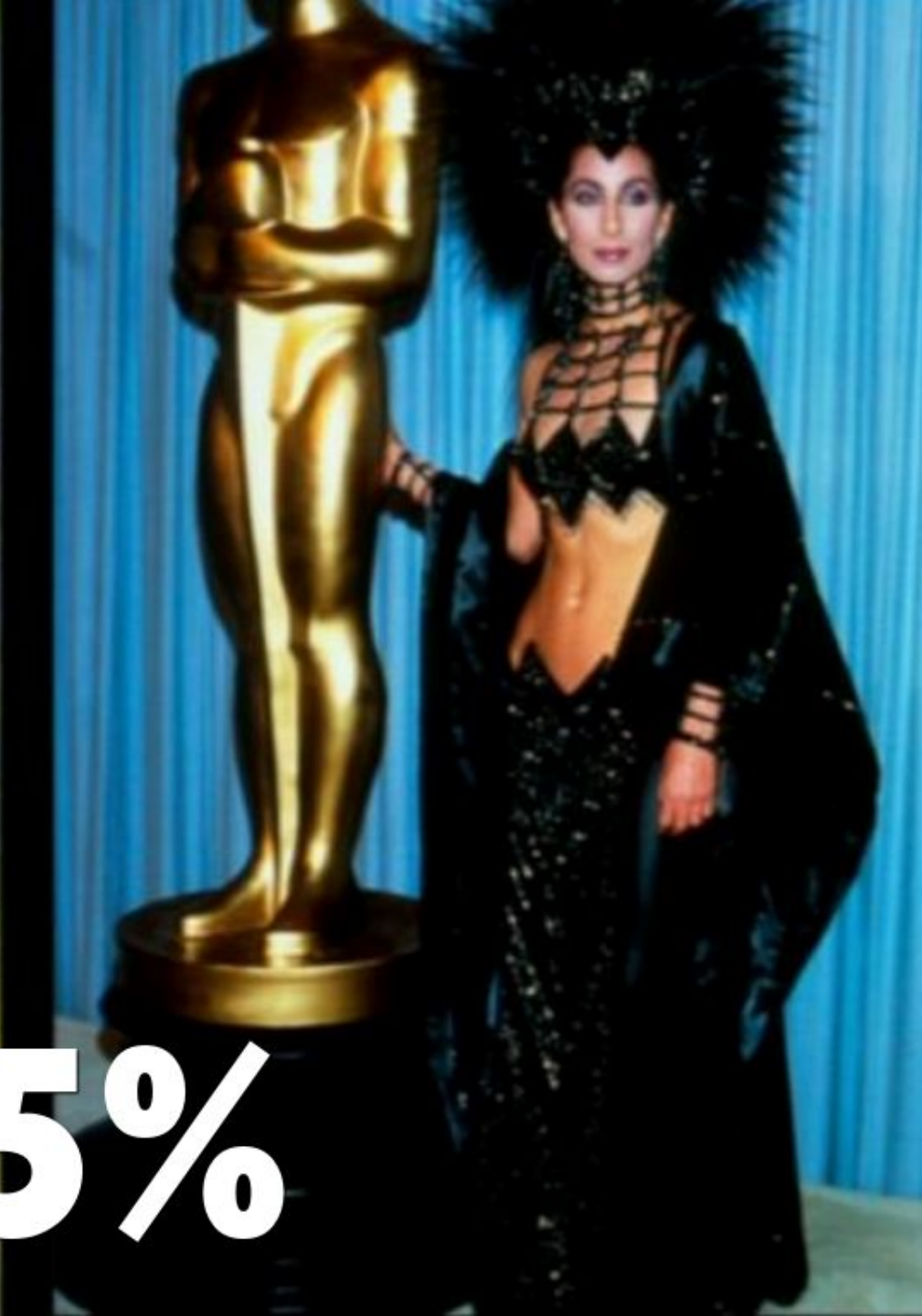


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Multimedia Learning-Mayer





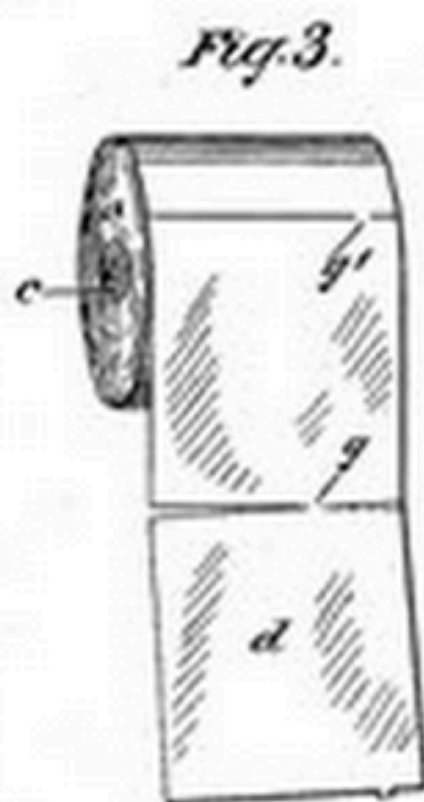
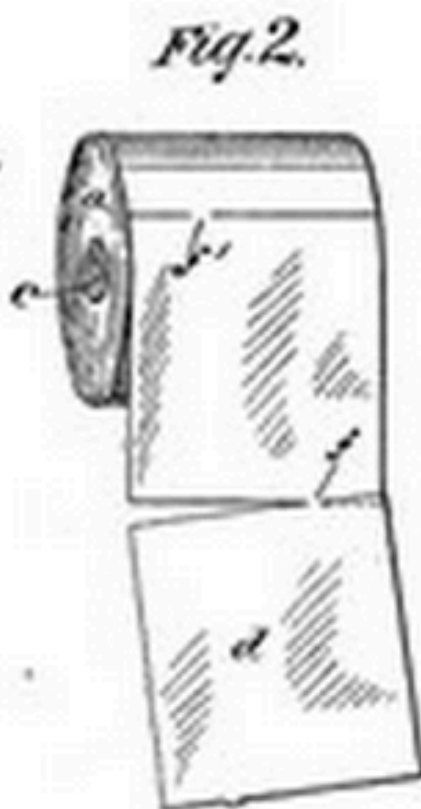
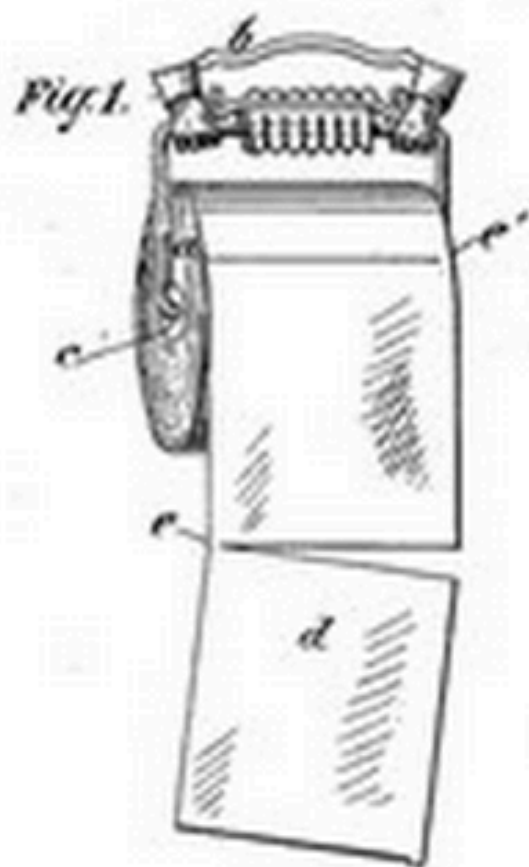
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S. WHEELER.
WRAPPING OR TOILET PAPER ROLL.

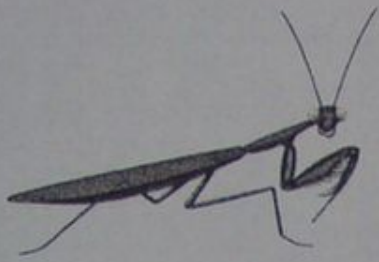
No. 459,616.

Patented Sept. 15, 1891.



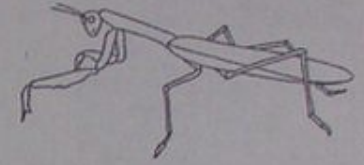
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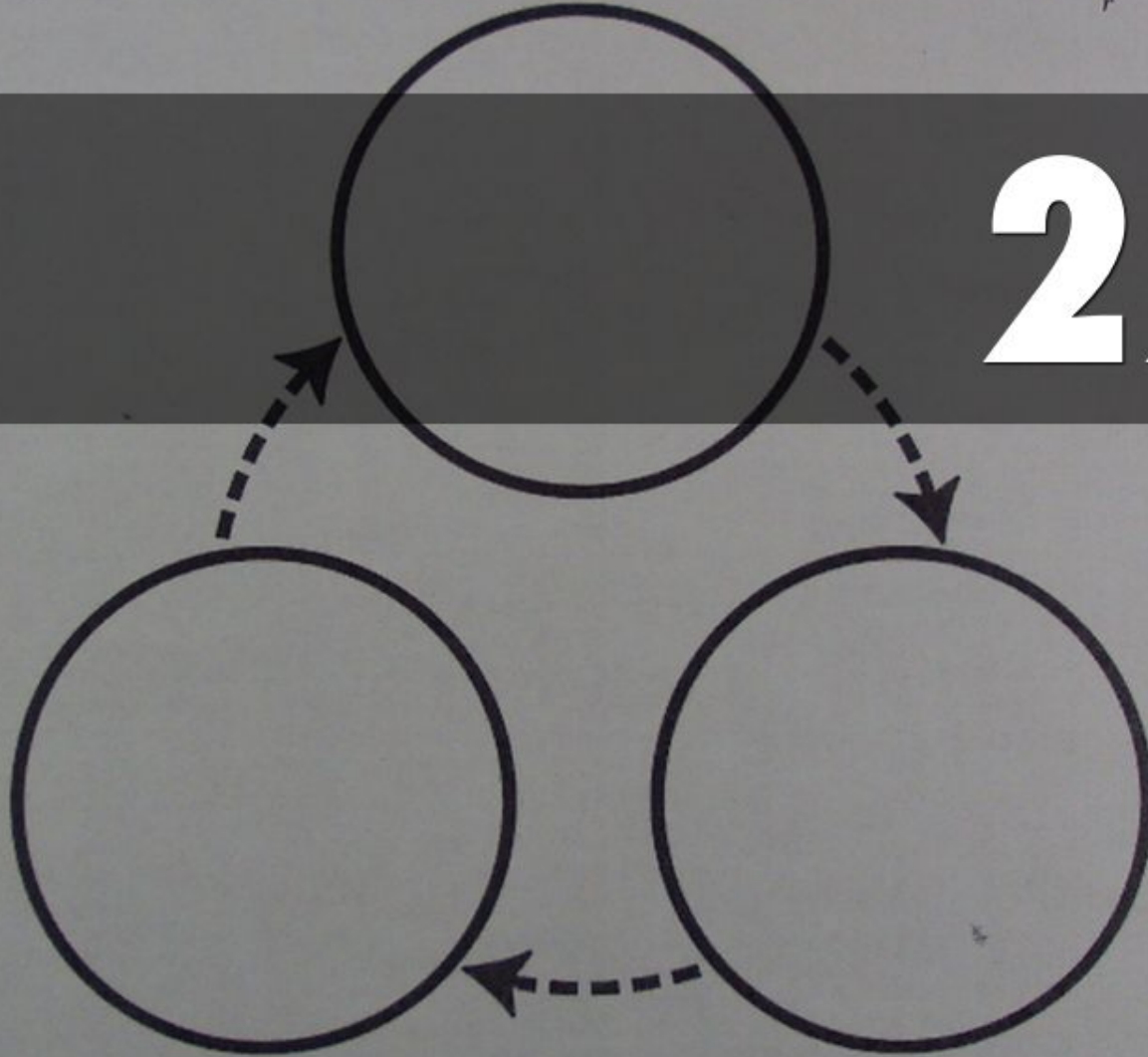


Name _____

Praying Mantis Life Cycle



22%



Impact over Time





Everyone
has a story
to tell. ☺



Digital Age Literacies



Connections

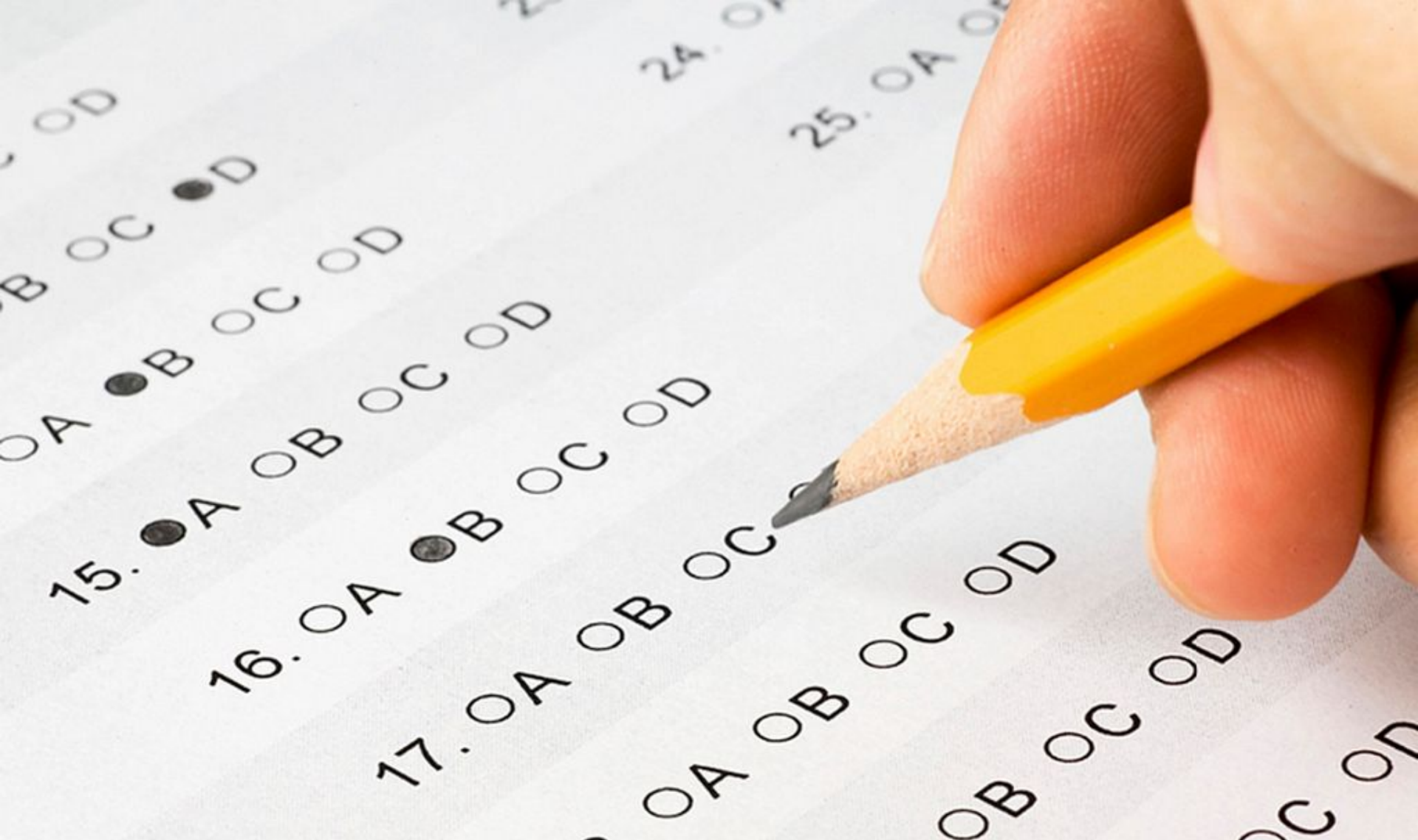
to Standards



Learning Objectives



Standard 2



Assessment & Measurement

Standard 3

Instructional Materials

Standard 4





Learner Interaction & Engagement Standard 5



Course Technology

Standard 6



Digital Tools

A workshop scene with a red toolbox in the background and various tools like a wrench, hammer, and tape measure on a workbench in the foreground.



Icebreaker









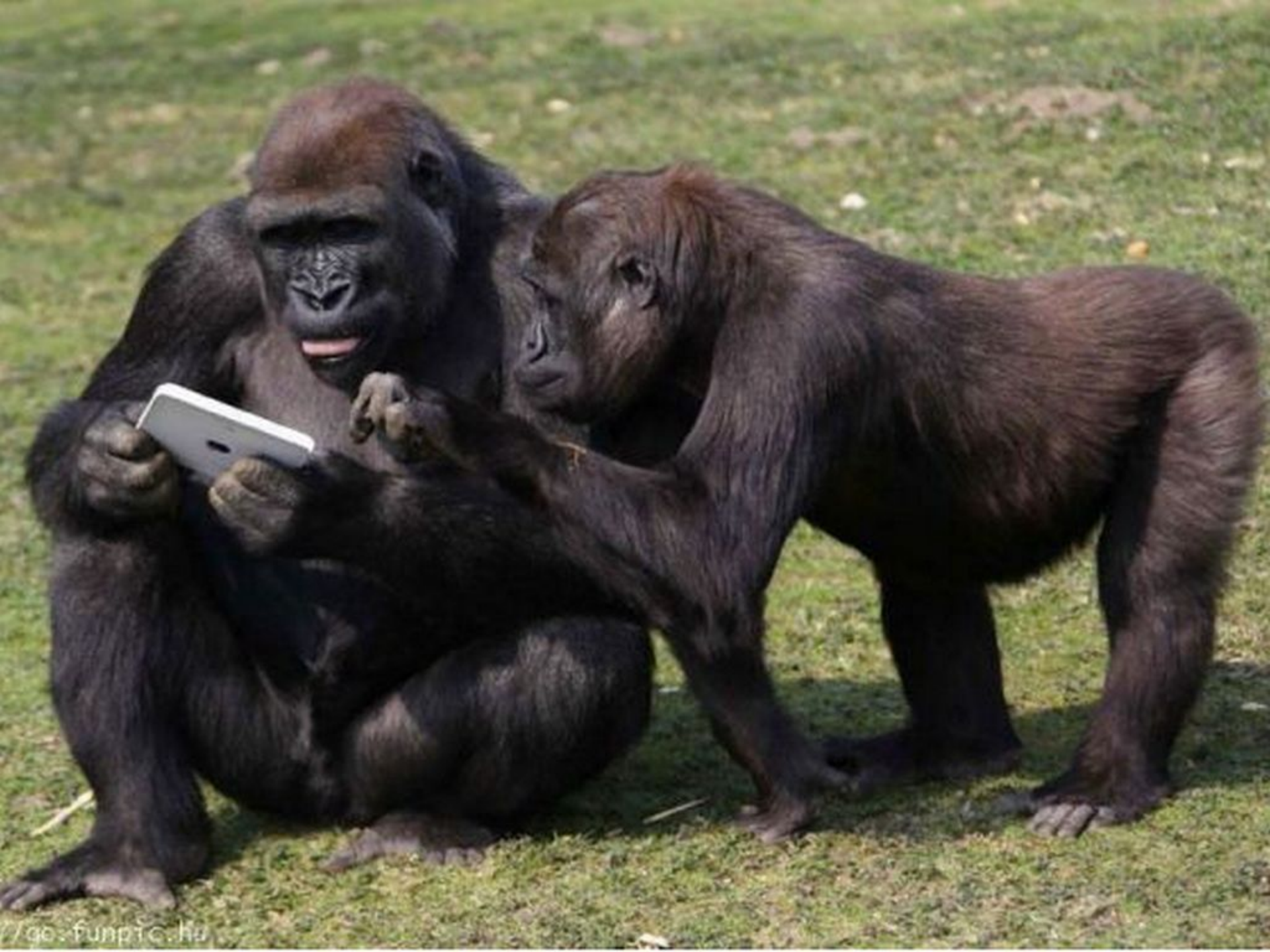














Digital Images





Earl of Sandwich

- John Montagu was a British statesman living in the United Kingdom
- Loved playing cards
- Loved eating while playing cards especially strips of beef
- To prevent cards from getting greasy, decided to put the beef between two pieces of bread
- John Montagu was the Fourth Earl of Sandwich



PAWTUCKET PATRIOT BREWERY PRESENTS
★★★★★ MAIN EVENT ★★★★★

REMATCH



EXTRA HEAVYWEIGHT
NO HOLDS BARRED

VS



**PETER
GRIFFIN**

**GIANT
CHICKEN**

★ **QUAHOG CHAMPIONSHIP TITLE** ★

★★★★★ FREAKIN' SWEET! ★★★★★

Haiku Deck



Visual Thinking Tools

5 steps of an active virus

5 Steps of an active virus
Through this padlet, you will learn and understand the 5 steps of an active virus.

1st Step
The virus attaches to a specific host cell and destroys the host cell.

2nd step
The virus's hereditary material enters the host cell.

3rd Step
The virus's hereditary material causes the cell to make viral hereditary material and proteins.

4th step
New viruses form inside of the host cell.

5th step
New viruses are released as the host cell bursts open and is destroyed.

DOUBLE CLICK OR DRAG A FILE ANYWHERE TO POST SOMETHING.

Inspiration Maps, Padlet, Pic Collage

Interphase

The cell grows to its full size and copies its DNA. The centrioles are also formed. The cell is ready for mitosis.



Prophase

The nucleus begins to break down and the chromosomes condense. Spindle fibers begin to appear on opposite sides of the cell



The chromosomes lose their rodlike shape and the nuclear envelope begins to reform.



Metaphase

Nuclear envelope is now gone and the chromosomes line up in the middle of the cell with a centromere attaching to them in the middle.



Two daughter cells are now born. They have half of the amount of organelles as the parent. Reproduction begins once again.

Anaphase

The centromere splits pulling the chromatids apart. They are pulled to opposite sides of the cell by the spindle fibers.



KEY

Button= Nucleus and nuclear envelope

String= Cell Membrane

Pipe Cleaners= Chromosomes and Centrioles

Brown Beads= Centromeres

Color Beads= Spindle Fibers

Infographics

90% of information transmitted to the brain is visual



36,000

The number of visual messages our brain can process in

ONE

hour



1/10th of a second: The amount of time it takes the brain to get the sense of a visual scene

Wavelength- distance from trough to trough, the longer the distance- the slower the energy is (red has the longest & violet has the shortest)

Photosynthesis- converting sunlight to energy

Chloroplasts- specialized green organelles, contain chlorophyll, where photosynthesis occurs



Light intensity- helps determine how fast photosynthesis occurs; strength of light

Both are key for rate of photosynthesis & the light reactions!



Chlorophyll- a green pigment that absorbs sunlight; most important pigment

Carbon fixation- taking 2 inorganic molecules (H₂O & CO₂) making them into 1 organic molecule (dark reaction)

Autotroph - makes their own food (producer)



Photosynthesis Vocab

Transpiration- evaporation of H₂O in plants



Heterotroph - can't make their own food (consumer)



Stomata- pores found on the leaves of plants used for gas exchange

Guard cells- found in pairs by stomata, helps regulate transpiration by opening & closing the stomata

NADP+ - a coenzyme that moves hydrogen atoms from the light reaction to the dark reaction



Thylakoids- (stacks of pigments) where light reactions occur



Grana- stacks of thylakoids; tons of surface area

Mesophyll- tissue in the leaf where the thylakoids are

Stroma- jell like area in the chloroplasts; where the dark reactions occur



Light reaction- requires light and splits water; occur in thylakoids

Dark reaction (Calvin cycle)- carbon dioxide is converted to sugar using ATP & NADPH



Photosystems- a mechanism in plants by which chlorophyll absorbs light energy, the 2nd one comes before the 1st

Photosynthesis occurs in the chloroplasts

Photosynthesis:

The process where the plant gets its energy.

Photosystems- absorbs sunlight energy for photosynthesis.

Light reaction- occurs in the first reaction of photosynthesis . Sunlight is required.

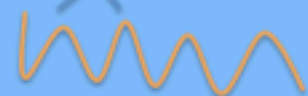
Occurs in

Occurs in

Light intensity

Occurs in

Wave length



NADP+ is a carrier

Carbon fixation- the plants turn carbon dioxide into glucose.

Dark reaction

RDP

Calvin Cycle

NADP+ is a product

Next phase in photosynthesis

Parts of a leaf

Chlorophyll- green is being absorbed, all the other colors are being reflected.

Mesophyll- the inner tissue of a cell

Stomata- little pores at the bottom of the leaf that let certain things in and out.

Thylakoids- flattened sacs, if they pile up they are called a grana.

Guard cells- surround the stomata, becomes larger and small.

Transpiration- passage of air through small tubes.

Heterotroph eats the autotroph

Autotroph- makes its own food

Heterotroph- realizes on others for food.



HABITAT LOSS

The Leading Cause of Endangered Species



WHY IS HABITAT LOSS AN ISSUE?

Habitat Destruction is a threat to 80% of federally listed species. Human activities that disrupt an ecosystem contribute to habitat degradation.

There are fewer homes present for wildlife each and every day.

DID YOU KNOW?



Habitat Loss occurs when a natural habitat is no longer capable of supporting its species.

Destruction of habitats can lead to extinction.

* 1/4 of mammals & 1/3 of amphibians are in danger of becoming extinct.

The U.S. contains less than 5% of the world's population, yet it consumes 30% of the world's paper.

Half of the world's tropical forests have been cleared or degraded.

Beavers are an example of an invasive species.



Over 85% of forest habitats in the U.S. have been permanently destroyed.

The Bengal Tiger is an endangered species because of habitat loss & destruction.



ACTIVITIES THAT CONTRIBUTE TO HABITAT LOSS.

Causes

Urbanization & Mining



Invasive Species

Hawaii & Florida are the leading states in the U.S. of exotic (invasive) species.

212 Invasive Species can be found in the San Francisco Bay Delta... That is 80% of species that inhabit the Bay Delta!

Deforestation

4,500 acres of forest are lost every hour due to deforestation



Agriculture & Pollution

Healthy vs Unhealthy Eating Eating



2 million Americans live 20 miles or more from a supermarket



2.7 million+ people die per year due to not getting enough fresh fruits and vegetables



40% increased inflation price of fresh produce in recent decades



27 minutes the average time an American spends cooking daily

Effects



Healthy Body

healthy food provides a substantial amount of essential nutrients



Happier Life

amino acids and vitamin B, found in fruits and vegetables trigger the serotonin which is the body's "feel good" neurotransmitter



5 fast food restaurants for every supermarket



2.6 million deaths per year due to obesity-related illnesses



40% of cancers are due, in part, to an unhealthy diet



Polydimethylsiloxane

an anti-foaming agent found in McDonald's Chicken McNuggets that is also found in Silly Putty

Effects



Diabetes

25.8 million Americans suffer from diabetes



Depression

consuming trans-fats, saturated fats, and processed foods increases the chances of depression by 58%



ThingLink



TOUCH



SHARE



CREATE



REMIX

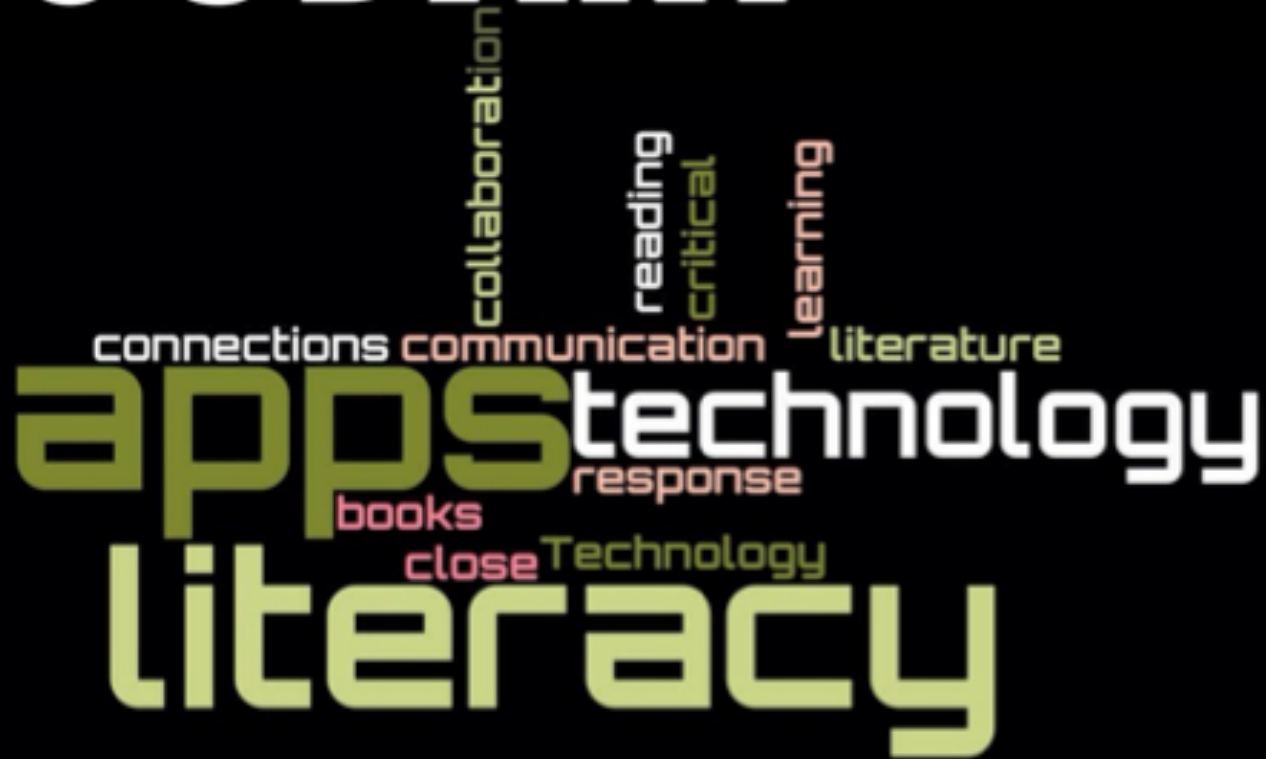
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Video Storytelling



Animoto, PowToon, Sock Puppets, Tellagami

Word Clouds



Social Media



A Thousand Words:

Using Digital Tools to Enhance Visual Literacy



<http://digitaltools4visualliteracy.weebly.com/>

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Digital Tools for Visual Literacy



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