April 6th through 17th
Middle School Continuous Learning Menu Projects

Directions: Each day read for 30 minutes and then pick one activity below to complete that is age appropriate. Working with a sibling is acceptable and encouraged. When you've completed an activity, check it off the list and then you can return the cover page to one of our feeding school sites in drop off boxes on Fridays or fill the cover page out digitally and email it to your teacher. Any pictures you take can be shared with your teacher. By sending these to your teacher, you are also giving the district permission to share on district social media.

Suggested times for length of activities:
3 hours per day for grades 6-12

Middle School ELA Continuous Learning Projects

Directions: Each day read for 30 minutes and then pick an activity below to complete.Try to complete 3-4 a week. Check with your teacher on how they would like you to share it with them.

1) Watch a movie and summarize the plot in 1-2 paragraphs. Then, write a plot outline for a sequel to the movie. What would you like to see happen next? Which characters would return, and how would the story continue?
2) Read a short story online or picture book out loud to yourself or a sibling. Summarize the story you read using the SWBST format using complete sentences.
   S- Somebody - Who is the main character?
   W- Wanted - What does the character want or what is the character's goal?
   B- But - What is the problem in the story or what is keeping the character from his/her goal?
   S- So - What is the solution to the problem or how does the character reach his/her goal?
   T- Then - How does the story end?
3) Write a mock-up of an online dating profile for a character from literature. What characteristics would Dr. Frankenstein look for in a date? How would Robinson Crusoe describe himself and his interests? What might Hermione look for in a potential suitor?
4) Make a list of the emotions humans experience and exhibit. Write or create a Powerpoint (Slides, Prezi, etc). After each, write an anecdote from your life about a decision you made or an experience you had that was driven by that specific emotion.
5) Choose an author of a book you've read before. Create a Biography Presentation (Slides, PowerPoint, Prezi, etc) about the author you've chosen.
6) Select a book that has been made into a movie (Harry Potter Series, The Hunger Games, The Maze Runner, Ender's Game and many more!). Compare and contrast

the book and the movie. Persuade others to agree with your opinion that either the book or the movie was better.

7) Write a realistic fiction short story about the current pandemic, or try a dystopian style and predict the outcome of this "new normal".
8) Research the word ***Social.*** Which Greek or Latin root does it have and what does it mean? Find 3 to 5 more words related to its root. Include a noun, verb, and adjective in your selection. Record a "podcast" with your findings or another creative way.
9) If you could choose to be stuck in quarinite with 3 people (past, present, famous, family, etc.), who would you choose and why?

10 Look on the internet, pinterest, etc. and find a lesson that you think would be fun for one of your classes (must be on grade level, any subject). How would you go about introducing this lesson and what activities or assignments would you give to try to see if your students mastered this concept?

11) Read or watch *The Diary of Anne Frank* on Amazon Prime. Use a Venn Diagram to compare and contrast the similarities and differences in her diary to life right now. For example:

- How is your quarantine like hers? Different?
- What was one of her biggest complaints during this time? What's yours?
- What was something that Anne missed the most? What do you miss?
- Food was something Anne talked about a lot. Why? What are your limits?
- Are you usually a "stay to yourself" person, or a "get out and socialize" person? Why? Does this help you or hurt you in this situation.

12) Create a "Top 5 Memes" list. Start with the least thrilling meme as #5 and end with the best one as #1. Give a few sentences explaining the relevance to you and your life as you go. **Challenge:** Make your own meme using your own picture and caption. Make your creation look like a blog post worthy for *BuzzFeed* or *Reddit*.

13 Read or listen to a novel and record your connections, responses, and predictions as you read. Sources to find free eBooks and audiobooks: Metropolitan Library, https://www.metrolibrary.org/find/download-and-stream#emedia; Abdo Digital, https://abdodigital.com/?tk=840BC558E6676AB1F4C9FA29D8EC6D69; Project Guteberg, https://www.gutenberg.org; Bluford Series Audiobooks, http://www.bluford.org/audiobooks/. Audible

14) Create an audiobook. Watch authors reading excerpts from their books for examples of fluent, engaging reading. Use a picture book or a novel from the public domain and record yourself reading it aloud. Examples: Laurie Halse Anderson, *Fever, 1793*, Chapter 1, https://www.youtube.com/watch?v=I0H2ocvX73c. Various other YA authors, https://www.youtube.com/watch?v=pKpupNR-iqk&list=PLz4f0hreTdHia8FMcPpi75g4kffeDD5zF. Resource for public domain books: https://www.gutenberg.org/

15) April is National Poetry Month and this year's theme is "Shelter in Poems". Share a poem that helps to find courage, solace, and actionable energy, and a few words about how or why it does so. Write your own poem(s) about your experiences. Resources:

https://poets.org/shelter-poems; https://www.poetryfoundation.org

16) Write a book review of a fiction or nonfiction book you have read. Include a short summary of the book, your personal reaction to the book and recommendation to others, but don't give away any surprises or twists in the story. For examples, see TeenReads, http://www.teenreads.com/reviews/index.asp Create a new book cover!

17) Focus on the differences between a book and a movie. Then, evaluate why the director/producer/screenwriter/actors, etc. made the changes they did. Explain some logical guesses as to why the changes were made.

18) Write a letter addressed to the school or write an email to your principal suggesting one change you would make to school when we return to our school buildings. Be kind and provide logical reasoning to support your suggestion. **Proofread** your letter before you send it in the mail or digitally.

19) Poetry/Symbolism Project: Find a school appropriate poem by any author and attach a photograph taken by the student that represents some aspect of the poem. Then students will create their own original poem and photograph.

20) Imagine that you have been hired by a company to design/create a NEW package, box or bag for any of the items listed below because the item just isn't selling very well. What can you do to make it better? Remember that a lot of thought goes into package design. Colors and designs are chosen to attract people and catch their eye. Just imagine the colors in a cereal aisle or the chip aisle at the grocery store. The colors jump out at you to get your attention! Choose three items listed below, or maybe there are three things in your home that you could use and redesign the package or box it comes in and draw it!. Add color if you can. Also, write a couple of sentences that explain why you chose the items and what improvements you made to the packaging. Have fun!

Candy: Skittles Hershey Bar Reese's Sour Patch Kids Sour Straws Kit Kat	Crackers/Snacks: Goldfish Cheezits Popcorn Animal Crackers Graham Crackers Pretzels
Chips: Doritos Takis Cheetors Funyuns Flaming Hot Cheetos	Cereal: Fruit Loops Lucky Charms Cheerios Fruity Pebbles Frosted Flakes

Middle School Science Continuous Learning Projects

Directions: Select 6 tasks, 3 per week, to complete over the next two weeks. Be prepared to discuss your work with your instructor. ***MAKE SURE TO ADHERE TO ALL SOCIAL DISTANCING PROTOCOLS!***

Technology Key:
No tech - Requires no technology
Medium tech - Requires at least a cell phone w/ data plan
High tech - Requires an in-home devices such as a laptop/computer w/ wi-fi
*PDF found in Packet

Science Learning Activities April 6th-April 17			
Scientific Inquiry	**Data Analysis*** **Description:** 1.Check out the graph labeled **Graph of the Week November 2019** on **iPhone Sales** and answer the questions.* 2.Check out the graph labeled Graph of the Week February 2020 **Graph of the Week February 2020** about **Homeless Populations in a few Major US Cities** and answer the questions. **Tech Required: None**	**Data Analysis TOO*** **Description:** **3.**Check out the graph labeled **Graph of the Week August 2019** on **Teen Views on Social Media** and answer the questions.* 4.Check out the graph labeled **Graph of the Week February 2020** on **Female Nasa Astronauts** and answer the questions.* **Tech Required: None**	
Life Science	**Signs of Life at Home*** **Description:** 5.Find the form labeled **Science Scavenger Hunt** in your home and yards and learn about the life around you. Record all responses. **Tech Required:**	**Traits in the Family** **Description:** **6.**Grab 10 or more family photos with different members of your family and see which traits are common and which traits seem rare. Based on what you've observed, can you determine which traits are	**My Heart's Racing... Or Not** **Description:** 7.Watch this short video on how to take/calculate heart rate by hand. Once you've learned to take your own resting heart rate, record your

	None	dominant or recessive? Record your observations and discuss them with a family member. **Tech Required: None**	measurement to establish your resting heart rate. Now test what happens to your heart rate after taking a 5 minute walk (outside or around the house) and checking your pulse again. What differences did you observe? What other activities may affect your heart rate? What conclusions can you draw from your data? **Tech Required: Medium**
Physical Science	**Bringing Balance to the Force** **Description:** 8.Test your knowledge of mass, weight distribution, and balancing! Use this balancing simulation to show how much you know about how each of these affect things. **Tech Required: High**	**CAN You feel the Pressure?*** **Description:** 9. Find the form labeled **The Can Crusher** and follow the directions to explore how differences in pressure affect an object. What are some real world examples of the phenomenon? **Tech Required: None**	**Balloon Racing*** **Description:** 10. Find the article about making a **Experiment: How to Build a Balloon Powered Car** and use common household items to make your own. Adding up to 3 extra household items, develop an idea to make the car move faster. Use Claim-Evidence-Reasoning to describe your idea. **Tech Required: None**

Earth and Space Science	**Stranded on the Moon*** **Description:** 11. They didn't go over this at space camp! Find the form labeled Nasa Exercise: Surviving on the Moon to explore what may or may not be useful while being stranded on the moon. Answers Included! No peeking but compare your responses with theirs after you've finished. **Tech Required: None**	**Why Not a Purple Space Suit?** **Description:** 12. Watch this video on why Astronauts wear white Space Suits. Can you think of any other aspects of space travel that may be affected by color? **Tech Required: Medium**	

Graph of the Week

August _____, 2019

Analyze the graph below and write a reflection on what you think the graph is communicating to you. To guide you with your response, start with some observations.

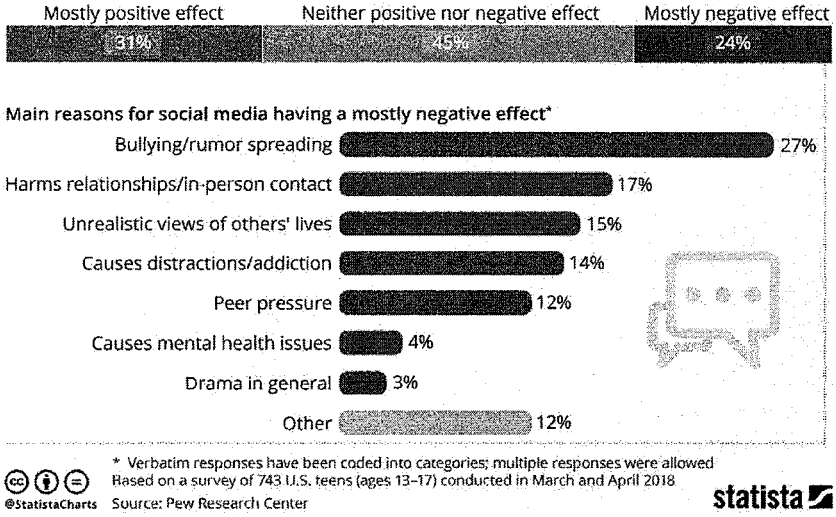
- What is the topic of the graphs?
- What does the x-axis represent? What does the y-axis represent?
- What are some observations that you can make based on the graphs?
- What do you foresee happening in the next 10 years?

Questions to ask when reading graphs:

- Is there an upward or downward trend?
- Are there any sudden spikes in the graph?
- What is being compared in the graph?
- What prediction can I make for the future?
- What inferences can I make about the graph?

U.S. Teens Have Mixed Feelings About Social Media

% of U.S. teens saying social media has a mostly positive/negative effect on people their age



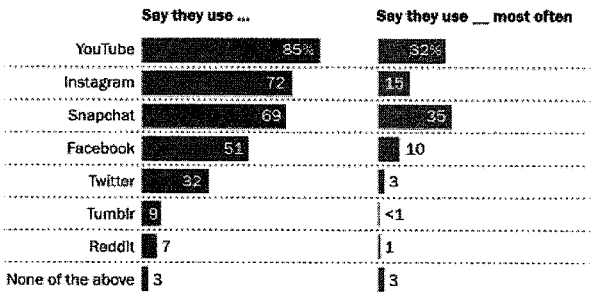
* Verbatim responses have been coded into categories; multiple responses were allowed
Based on a survey of 743 U.S. teens (ages 13-17) conducted in March and April 2018
Source: Pew Research Center

@StatistaCharts

statista

YouTube, Instagram and Snapchat are the most popular online platforms among teens

% of U.S. teens who ...



Note: Figures in first column add to more than 100% because multiple responses were allowed. Question about most-used site was asked only of respondents who use multiple sites; results have been recalculated to include those who use only one site. Respondents who did not give an answer are not shown.
Source: Survey conducted March 7-April 10, 2018.
"Teens, Social Media & Technology 2018"

PEW RESEARCH CENTER

NASA Exercise: Survival on the Moon

Scenario:

You are a member of a space crew originally scheduled to rendezvous with a mother ship on the lighted surface of the moon. However, due to mechanical difficulties, your ship was forced to land at a spot some 200 miles from the rendezvous point. During reentry and landing, much of the equipment aboard was damaged and, since survival depends on reaching the mother ship, the most critical items available must be chosen for the 200-mile trip. Below are listed the 15 items left intact and undamaged after landing. Your task is to rank order them in terms of their importance for your crew in allowing them to reach the rendezvous point. Place the number **1** by the most important item, the number **2** by the second most important, and so on through number **15** for the least important.

Your Ranking **NASA Ranking**

_____ Box of matches _____

_____ Food concentrate _____

_____ 50 feet of nylon rope _____

_____ Parachute silk _____

_____ Portable heating unit _____

_____ Two .45 caliber pistols _____

_____ One case of dehydrated milk _____

_____ Two 100 lb. tanks of oxygen _____

_____ Stellar map _____

_____ Self-inflating life raft _____

_____ Magnetic compass _____

_____ 20 liters of water _____

_____ Signal flares _____

_____ First aid kit, including injection needle _____

_____ Solar-powered FM receiver-transmitter _____

Graph of the Week **Name**_____

November _____, 2019

Analyze the graphs below and write a reflection on what you think the graphs are communicating to you. To guide you with your response, start with some observations.

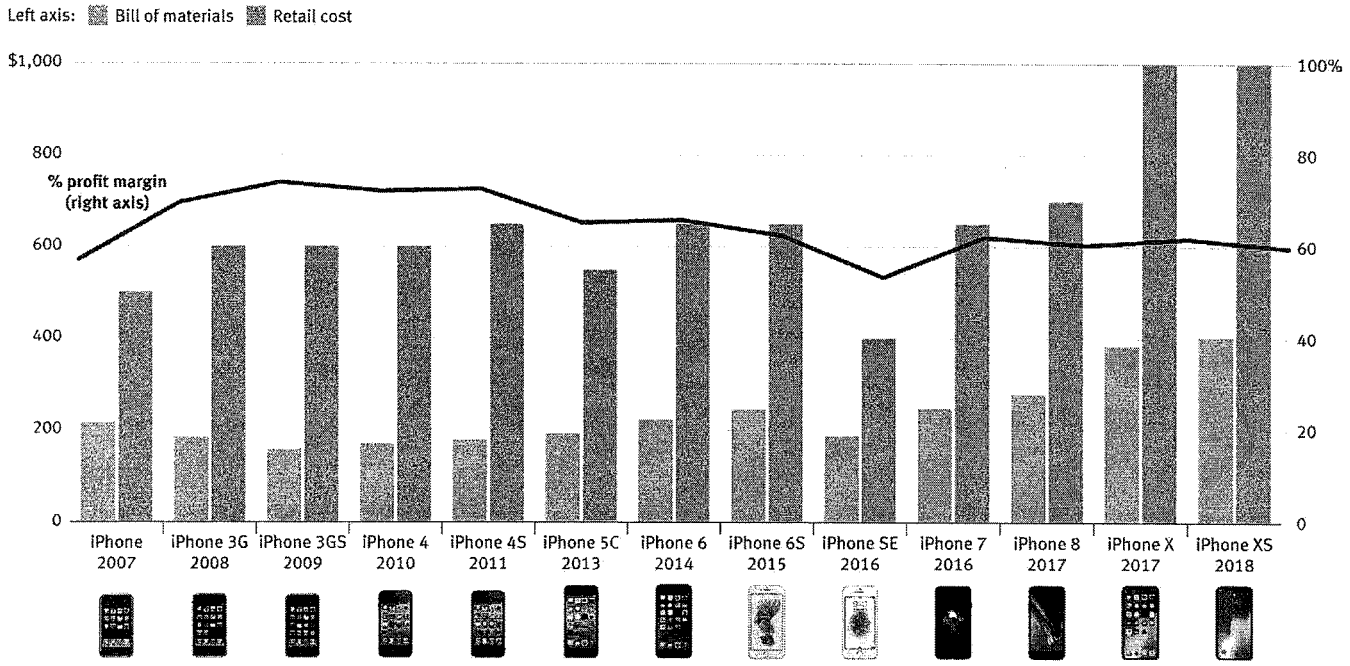
- What are the topics of the graphs?
- What quantities are being compared? (If there are x- and y- axes, what do they represent?)
- What are some observations that you can make based on the graphs?
- What do you foresee happening in the next 10 years?

Questions to ask when reading graphs:

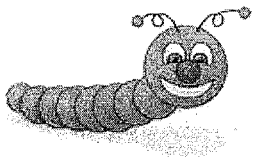
- Is there an upward or downward trend?
- Are there any sudden spikes in the graph?
- What is being compared in the graph?
- What prediction can I make for the future?
- What inferences can I make about the graph?

The Cost of iPhones

While the prices of iPhones have soared, Apple's profit margins from the devices haven't followed.



Sources: Bill of Materials from TechInsights; Apple product announcements



SCIENCE SCAVENGER HUNT

Navasota ISD (Email musickl@navasotaisd.org with questions)

Earn 1 point for every item you find at home or in your yard! Write down what you found and share a picture of your finished data sheet to your campus Facebook page! Happy Hunting!

OUTSIDE:

A living organism _____
A non-living component of the environment _____
A non-living component interacting with a living component _____
A producer _____
A consumer _____
A decomposer _____
A habitat _____
Evidence of runoff or accumulation _____
Something that has been weathered _____
Evidence of deposition _____

INSIDE:

Something that reflects _____
Something that refracts _____
Something that involves friction _____
Evidence of force _____
Something that uses an electrical circuit _____
A conductor _____
An insulator _____
3 things that produce mechanical energy _____ _____ _____
3 things that produce light energy _____ _____ _____
3 things that use electrical energy _____ _____ _____
3 things that produce sound energy _____ _____ _____
3 things that produce thermal energy _____ _____ _____
An example of matter _____
A solid, a liquid, and a gas _____ _____ _____
Something that is soluble _____
Something that is more dense than water _____
Something magnetic _____
A mixture or solution _____

BONUS: Observe a food chain in your backyard. Remember: the arrows show the flow of energy.

_____ → _____ → _____ → _____

Graph of the Week **Name**_____

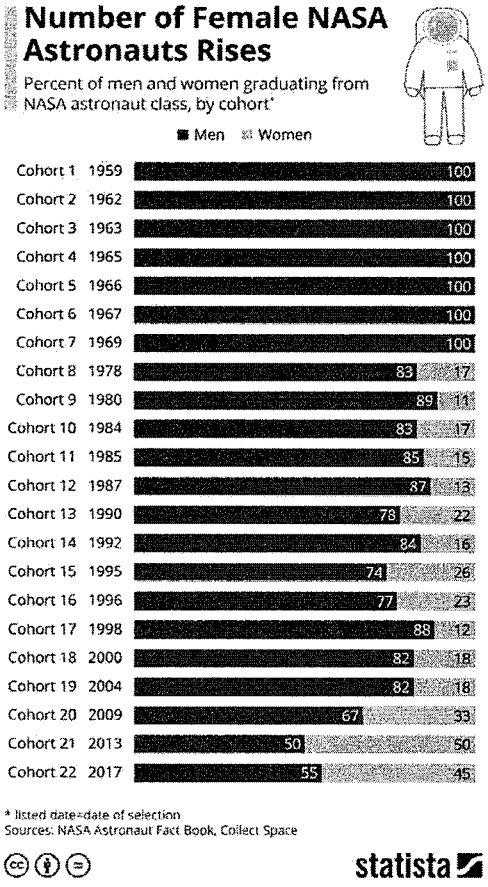
February _____, 2020

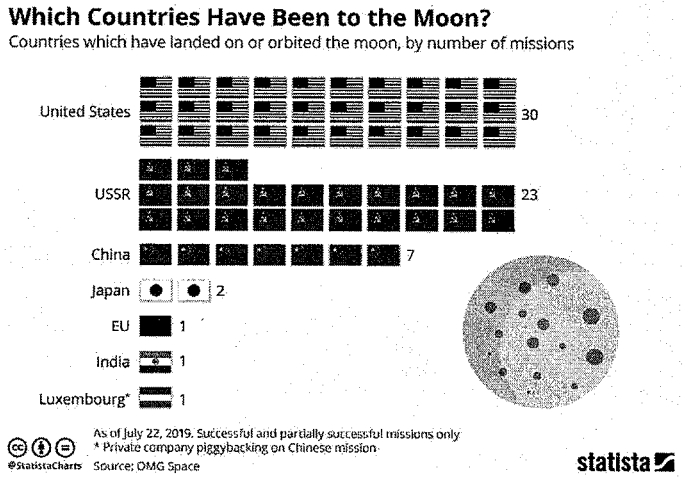
Analyze the graphs below and write a reflection on what you think the graphs are communicating to you. To guide you with your response, start with some observations.

- What are the topics of the graphs?
- What quantities are being compared? (If there are x- and y- axes, what do they represent?)
- What are some observations that you can make based on the graphs?
- What do you foresee happening in the next 10 years?

Questions to ask when reading graphs:

- Is there an upward or downward trend?
- Are there any sudden spikes in the graph?
- What is being compared in the graph?
- What prediction can I make for the future?
- What inferences can I make about the graph?





Graph of the Week **Name**_____

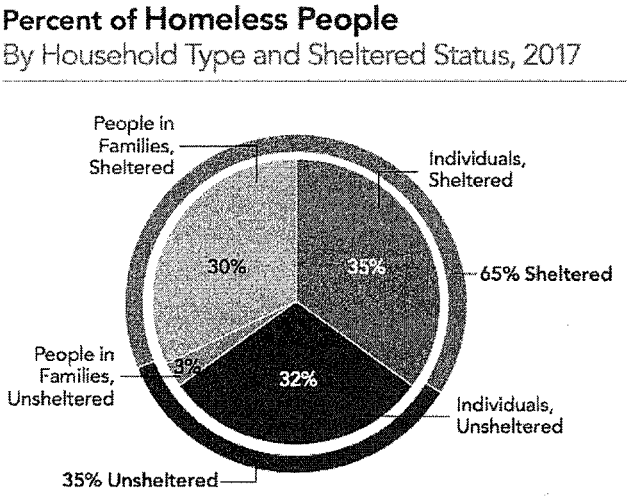
February _____, 2020

Analyze the graphs below and write a reflection on what you think the graphs are communicating to you. To guide you with your response, start with some observations.

- What is the topic of the graph?
- What quantities are being compared? (If there are x- and y- axes, what do they represent?)
- What are some observations that you can make based on the graphs?
- What do you foresee happening in this data 10 years from now?

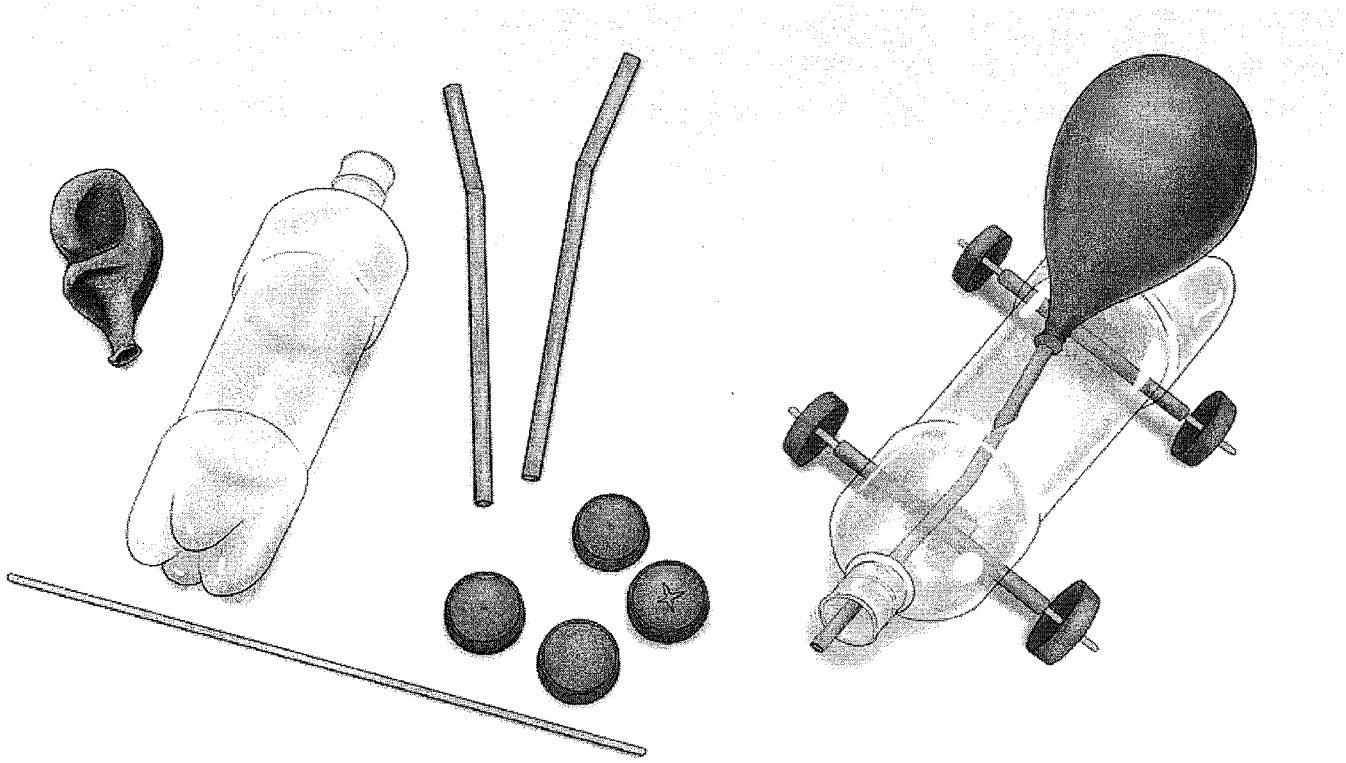
Questions to ask when reading graphs:

- Is there an upward or downward trend?
- Are there any sudden spikes in the graph?
- What is being compared in the graph?
- What prediction can I make for the future?
- What inferences can I make about the graph?



Experiment: How to build a balloon-powered car

By Ben Finio, Scientific American on 03.31.20
Word Count **692**
Level **MAX**



Use these items to build a small car that is powered by the kinetic energy of a balloon. Newsela staff

Turn a pile of trash into a toy car — and watch it go! In this activity you will learn some physics concepts and use recycled materials to build a toy car that is propelled by a balloon. You can even find a friend, build two cars and race them against each other. Whose car will go the fastest?

Materials

Plastic bottle

Four plastic bottle caps

Wooden skewer

Two straws

Balloon

Tape

Scissors or sharp knife (Have an adult use or supervise your use of this tool.)

An adult helper

Preparation

1. Cut one of the straws in half.

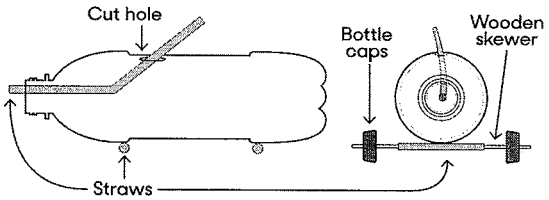
2. Tape both pieces of the straw to one side of the water bottle.

3. Cut the wooden skewer in half and push each piece through one of the straws. These will form your axles. (Have an adult help.)

4. Have an adult help use the scissors to poke a "+"-shaped hole directly in the center of each plastic bottle cap.

5. Press each bottle cap onto the ends of the wooden skewers. These will form your wheels.

Procedure



1. Put your car down on a flat surface and give it a good push. Make sure the car rolls easily and coasts for a bit before stopping. If your car gets stuck or does not roll smoothly make sure: your axles are parallel to each other; the hole in each bottle cap is centered; and the straws are securely taped to the water bottle and do not wobble. You can add some glue if tape is not sufficient.

2. Tape the neck of the balloon around one end of the other straw. Wrap the tape very tightly so the connection is airtight.

3. Cut a small hole in the top of the water bottle, just big enough to push the straw through.

4. Push the free end of the straw through the hole and out the mouth of the bottle.

5. Use tape to secure the straw to the bottle.

6. Blow through the straw to inflate the balloon, then put your finger over the tip of the straw to trap the air. What do you think will happen when you put the car down and release your finger?

7. Put the car down on a flat surface and release your finger. What happens?

See what adjustments you can do to make the car go farther. What happens if you inflate the balloon more? What happens if you adjust the direction the straw is aimed? Does it work best if the straw is aimed straight back?

Extra: There are many different ways to build a balloon car. Turn this into an engineering design project and try building your car with different materials. For example: What happens if you use a cardboard box instead of a plastic bottle for the body? What happens if you use different diameter straws? What about different materials for the wheels and axles? Get some friends and try building different cars and racing them against one another. What materials work the best?

Observations And Results

When you inflate a balloon and let it go, it zips randomly around the room. When you tape the balloon to a straw and attach it to the body of your car, however, you can control the direction of the escaping air. When the end of the straw is aimed backward, the air pushes your car forward, as described by Newton's third law of motion. Your design will be most efficient if the straw is pointed straight back and not downward or to the side. The more you inflate the balloon the more potential energy it stores, which in turn is converted to more kinetic energy, according to the law of conservation of energy — so the car will go faster.

The Can Crusher

The can crusher experiment demonstrates Charles's Law, the basic principle that gases expand when heated and contract when cooled.

Charles Law – the volume of a gas is directly proportional to its temperature

You will need a

small soda can

skillet pan

stove top

tongs

bowl with ice and water

1. fill the can with about half an ounce of water.
2. Boil the can in a pan of water for about a minute, and you will notice vapor steaming from the opening of the soda can.
3. Using tongs, grab the can and place it upside down (open end) in a bowl of cold water.

Analyze

1. How did the temperature inside the can change when you heated the can? How did it change when you put in into the cold water?
2. What happened to the PRESSURE INSIDE the can when the can was put into cold water?
3. Did the air pressure OUTSIDE the can change during the experiment?
4. Why did the can crush seemingly on its own?

Test Your Eyes!
Blind Spots

How do you test for blind spots?

Close your left eye and stare at the cross mark on the other side of this page with your right eye. Off to the right you should be able to see the spot. Don't look directly at it; just notice that it is there, off to the right. If it's not, move farther away. You should be able to to see the dot if you are a couple of feet away.

Now slowly move toward the piece of paper while still looking at the cross mark. When you're approximately a foot away from the paper, the spot will disappear. As you move closer, it will reappear.

Why does this happen?

The point where your optic nerves converge to exit the eye and into the brain is known as the optic disc. This area of the eye has no light-sensitive cells to detect light rays. This results in a break in the visual field known as your "blind spot."

When the cross mark disappears, you instead "see" a continuous white field. This is not actually the case. Here, you see something the brain is actually making up, sincethe eye isn't actually sending any information back via the optic nerve.

Why does this matter?

Vision scientists study our blind spots and what effects they have on vision. Their research reveals the brain's actions. Eye and vision scientists aim to understand whether the brain is actually filling in missing information or simply ignoring things about which is has no information?

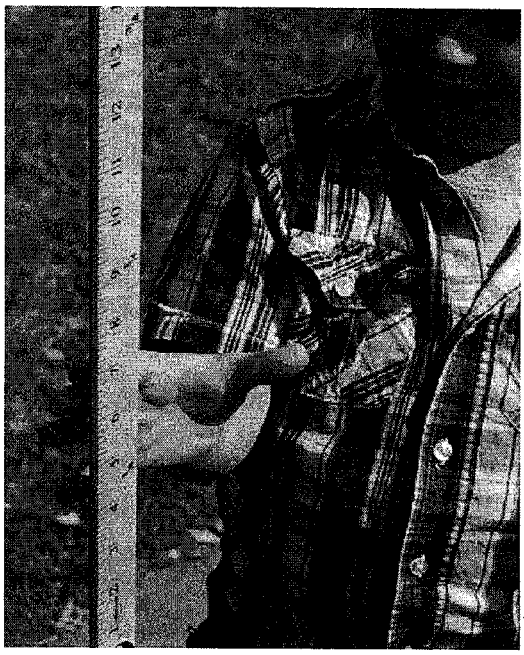
Find out more at ARVO.org/ILLUSIONS

Text and images adapted from: https://serendipstudio.org/bb/blindspot1.html

ARVO
The Association for Research in Vision and Ophthalmology

Find your blind spots!

Reaction Time Science: How Fast Are You?



Does your child think he has good reflexes? Now's his chance to prove it! Here's a quick and simple experiment that gauges your child's reaction time. All you need is a yardstick, a friend, and some paper. Not only will your child be making some personal revelations about the way his body works, but he'll also be using math and the scientific method while he's at it!

What You Need:

- Yardstick
- At least two willing participants
- Paper and pen for recording results
- Markers and graph paper (optional)

What You Do:

1. Before you start, be sure your child knows the purpose of this experiment is to measure how long it takes his brain to process and act on a verbal command.
2. Start by holding the yardstick upright a few feet off the ground.
3. Have your child place his fingers and thumb around the sides of the yardstick. Ask him to close his eyes so that he relies purely by command and not by visual cues.
4. Say 'Go!' as you drop the yard stick. Your child should react by closing his fingers on the yardstick at the same time to catch it. To get an accurate measurement, make sure his fingers always start at the bottom of the yardstick.
5. After he catches the yard stick, encourage him to measure how many inches it fell before he caught it. Use the conversion chart below to get his reaction time. Remember to record the results.
6. To ensure the accuracy of your scientific trial, be sure to perform this test more than once. Afterward, look at the results and discuss with your child why his reaction times might vary from trial to trial.

You can extend this activity by changing different variables. For instance: is your child's reaction time better when his eyes are open? Why or why not? You can also use graph paper and markers to record the reaction times of other family members and friends. Make it a contest and compare who has the best reflexes!

Inches to Seconds Conversion Table

INCHES	SECONDS
6	0.18
9	0.22
12	0.25
15	0.28
18	0.31
21	0.33
24	0.35

Answers

Item	Ranking	NASA's Reasoning
Box of matches	**15**	Virtually worthless -- there's no oxygen on the moon to sustain combustion
Food concentrate	**4**	Efficient means of supplying energy requirements
50 feet of nylon rope	**6**	Useful in scaling cliffs and tying injured together
Parachute silk	**8**	Protection from the sun's rays
Portable heating unit	**13**	Not needed unless on the dark side
Two .45 calibre pistols	**11**	Possible means of self-propulsion
One case of dehydrated milk	**12**	Bulkier duplication of food concentrate
Two 100 lb. tanks of oxygen	**1**	Most pressing survival need (weight is not a factor since gravity is one-sixth of the Earth's -- each tank would weigh only about 17 lbs. on the moon)
Stellar map	**3**	Primary means of navigation - star patterns appear essentially identical on the moon as on Earth
Self-inflating life raft	**9**	CO_2 bottle in military raft may be used for propulsion
Magnetic compass	**14**	The magnetic field on the moon is not polarized, so it's worthless for navigation
20 litres of water	**2**	Needed for replacement of tremendous liquid loss on the light side
Signal flares	**10**	Use as distress signal when the mother ship is sighted
First aid kit, including injection needle	**7**	Needles connected to vials of vitamins, medicines, etc. will fit special aperture in NASA space suit
Solar-powered FM receiver-transmitter	**5**	For communication with mother ship (but FM requires line-of-sight transmission and can only be used over short ranges)

Scoring:

For each item, mark the number of points that your score differs from the NASA ranking, then add up all the points. Disregard plus or minus differences. The lower the total, the better your score.

0 - 25 excellent

26 - 32 good

33 - 45 average

46 - 55 fair

56 - 70 poor -- suggests use of Earth-bound logic

71 - 112 very poor – you're one of the casualties of the space program!

... published in the July 1999 issue of the NightTimes

6th grade Math Continuous Learning Projects

1. Plot Your Name
    a. A. Take a piece of graph paper and draw a coordinate plane.
    b. B. Plot at least 5 coordinates in each quadrant.
    c. C. Connect the points to spell out your name.
    d. D. Record the coordinates used for each quadrant.
    e. E. Q1: (,) (,) (,) (,) (,) Q2: (,) (,) etc...
    f. Decorate as desired.

1.

2. Ratio scavenger Hunt
    a. Answers must be in simplest form.
    b. Challenge a family member to see who can finish first.
    c. Collect ratios for: people to chairs, tvs to sinks, beds to spoons, chairs to doorknobs, toilet paper rolls to toilets

3. Order of Operations Social Media Challenge
    a. Create 5 Order of Operation problems (feel free to include exponents, fractions and parentheses)
    b. Don't make them too easy...try to challenge your friends
    c. Post on your social media and see if your friends can get the correct answer
    d. Make sure you work the problems before you post

4. Create an Instagram Story
    a. Pick a topic from your Geometry Lessons (lines, angles, 3-D shapes, etc...)
    b. Create an "Instagram Story" by walking around your house and sharing your findings
    c. Include humor if possible...maybe your brother's eyebrows look like a straight angle because of his unibrow
    d. Share with your followers

5. Create a cupcake shop
    a. Find a cupcake recipe.
    b. Decide how much you will sell each cupcake for
    c. What will be your profit be for: 24 cupcakes, 50 cupcakes, 100 cupcakes
    d. How much of each ingredient would you need for 24 cupcakes, 50 cupcakes, 100 cupcakes?

6. Million Dollar Project
    a. You just won $1,000,000. Now you get to decide what to spend it on. The only rule is you must save 75,000 for your future learning.
    b. Write down everything you would but and create a running total of all that you would purchase. Every dollar must be accounted for.

7. Create a survey for your family or friends on social media
    a. Record the results and then convert the answers into fractions, decimals and percents
        i. Can gather data from social media or by who is home/phone calls.
    b. Create a graph to show your data
8. Favorite number order of operations:
    a. Your favorite number is going to be the answer to your problem
    b. Create a 6-8 step order of operations problem so your favorite number is your answer.
    c. You must use all four operations (+, -, x, ÷), parenthesis and exponents in your problem. Operations can be repeated, but there must be at least one of each type.
    d. You may NOT use multiplication by one or add zero to a number. Be creative!

7th Grade Math Continuing Learning

1. A Day in the life of YOU:
    a. Record what you do for a full 24 hour time period.
    b. Create a fraction, decimal and percent for each thing you did.
    c. Put them in order from least to greatest
    d. Reflect: are you happy with how you are spending your time? Why or why not?
2. Food Labels:
    a. Using the food labels on boxes of cereal or other food items, determine the number of calories in multiple servings of that item. How many calories in half a serving, ¼ of a serving, etc.? What if you were feeding your family? 20 people? 35 people?
3. Favorite number order of operations:
    a. Your favorite number is going to be the answer to your problem
    b. Create a 6-8 step order of operations problem so your favorite number is your answer.
    c. You must use all four operations (+, -, x, ÷), parenthesis and exponents in your problem. Operations can be repeated, but there must be at least one of each type.
    d. You may NOT use multiplication by one or add zero to a number. Be creative!
4. Integer Examples
    a. Give 10 real life examples of positive integers
    b. Give 10 real life examples of negative integers
    c. Create a story problem for someone else to solve.
5. How many outfits
    a. Count how many different shirts, bottoms, and shoes you have
    b. Figure out how many different outfits you could wear
    c. Create a tree diagram of all your options
6. Dream House

a. Sketch your dream out like a blueprint. Make sure to include measurements
b. Find the area of each room and then the total area of the house
c. Make sure to include a yard.

7. Gas price increase/decrease
    a. Oklahoma gas is currently $0.98. At the beginning of the year it was $2.25.
        i. What is the percent price decrease from January to April?
            1. Step 1: Calculate the change (subtract old value from the new value)
            2. Step 2: Divide that change by the old value (you will get a decimal number)
            3. Step 3: Convert that to a percentage (by multiplying by 100 and adding a "%" sign)
        ii. If the current price of $0.98 continues to decrease at the same rate what will the price of gas be in July?
8. Social Media Ratios
    a. Pick your favorite social media platform
        i. Scroll for 10 minutes and tally the different types of content (funny posts, family posts, music posts, a certain tik tok dance, ect..)
        ii. Create ratios for all all the different types of videos.

8th Grade Math Continuing Learning

1. Research 4 Mathematician's Poster
    a. Using Printer Paper, Draw a portrait of the mathematician
    b. 3 major accomplishments in COMPLETE sentences
    c. 2 fun facts about the mathematician in COMPLETE sentences
    d. Must be colored
2. Math Game Board
    a. Create a math game with previously learned skills.
        i. Create 20 math problems with an answer key
            1. Topics Covered: Order of Operations (PEMDAS), Integers, Exponents, Scientific Notation, Function Tables (input/ output), Writing an Equation of a Line (y=mx+b), Central Tendency (Mean, Median, Mode, & Range), Pythagorean Theorem ($a^2 + b^2 = c^2$), Surface Area and Volume of Prisms/ Cylinders
        ii. The game will need to have AT LEAST 4 rules and game pieces (ex: what if the person solves the problem wrong? Do they move back or solve a new problem?)
3. On a blank sheet of paper, draw an outline of your house much like a blueprint
    a. For each wall, measure its length and height (You will need measuring tape)
    b. Answer the below Questions
        i. How much paint would you need to cover ALL the walls in your home? Be sure to include the correct unit
        ii. How did you determine which formula/ unit of measurement to use?

iii. If you could choose the color of each room, what would they be
iv. What is the total surface area of your home? (Hint: Add up all the OUTSIDE walls of your home) Be sure to include the unit of measurement

4. Sleep vs ???
    a. Create a ScatterPlot with two events. For example: Hours of sleep vs Hours spent on TikTok
    b. Log for 7 days
    c. Can you draw a line of best fit? Are there any outliers?
    d. Find the Mean, Median, Mode, and Range of your data
5. Prisms and Cylinders: Be sure to put answers in correct units
    a. Find 4 prisms in your house (Hint: Boxes)
        i. Record your information on a sheet of paper for length, width, and height
        ii. Find the Surface Area using 2lw+2lh+2wh of each prism
        iii. Find the Volume using lwh of each prism
    b. FInd 4 cylinders in your house (Hint: Cups)
        i. Record your information on a sheet of paper for radius (½ way across the circle) and height. Remember π=3.14.
        ii. Find the Surface Area using $2\pi r^2 + 2\pi rh$ of each cylinder
        iii. Find the volume using $\pi r^2 h$ for each cylinder
        iv. Questions: Of each object, which one has the biggest Volume and Surface Area for cylinders/prisms? Why do you think there is a difference between the object that has the biggest volume versus the object with the biggest surface area for the cylinders/ prisms?
6. Probability:
    a. What is the probability of flipping a coin and landing on "heads?" Flip a coin 30 times and record whether it lands on "heads" or "tails" each time. Does your experimental probability (the number of times you landed on "heads" compared to the total number of flips) match the theoretical probability (what "should" happen)? Why do you think the results ended up the way they did?
7. Cars v Day of the week:
    a. Pick one 15 minute time of the day that can be the same for the week (like 9:00-9:15) and record each day during that time how many cars go by.
    b. At the end of the week graph the day of the week(x) vs cars that drive by (y).
    c. What do you notice about your graph? What is the Trend? Which day had the most traffic?
    d. Can be done with people walking by or birds in the yard.
8. A Day in the life of YOU:
    a. Record what you do for a full 24 hour time period.
    b. Create a fraction, decimal and percent for each thing you did.
    c. Put them in order from least to greatest
    d. Reflect: are you happy with how you are spending your time? Why or why not?

Middle School Social Studies Continuing Learning Projects

1. Create a historic record of your experience with the pandemic. Choose one of the following formats:
    - Write a letter to a student your age living 100 years in the future, explaining what life was like during the Coronavirus pandemic.
    - Keep a journal documenting your experiences with sheltering in place, social distancing, etc.
    - Interview someone else (being careful to follow social distancing protocol) about their experiences with the pandemic.
2. Using the following articles as a resource, create a flowchart by choosing a pandemic and tracking how the pandemic spread. As an extension activity, you could create two flowcharts, one for a historic pandemic (the Black Death, the 1918 flu) and one for a modern pandemic (H1N1, Coronavirus). Compare the two flow charts. Did the pandemics spread in the same way? Did the countries respond in similar ways?
3. **Letter to a European Ruler**: Read the articles that deal with treatments and vaccines, as well as any other current events and articles of your choice. Then, read the primary source on the Black Death. Finally, write a letter to a ruler of Europe during the time of the Black Death. Keeping in mind the scientific and technological limitations of the time, use what you've learned in the current events articles to advise the ruler on how to respond to the pandemic.
4. Read the articles about the pyramids in Ancient Egypt here. Create a pyramid using materials you find in your home or outside.
5. Create a map, graph, or chart showing the spread of the coronavirus. Include information about where it spread and when, dates, number of infections, and number of deaths.
6. Create a timeline of the Coronavirus pandemic. Include at least 10 major events so far.
7. Write your autobiography. Include a timeline of major events in your life so far.
8. Create a travel brochure persuading someone to visit a country you have learned about this year. Include details about the climate, resources, culture, etc.
9. Create a plan for a zombie attack. Explain where the best place would be to hide out during the attack. What areas provide the best shelter/ defense, have natural resources, would be able to meet basic needs (food, water, etc.)
10. Watch CNN10 to keep up with current events.
11. Use Google Earth to visit landmarks around the world.

Note: All articles are available on Newsela. Once you click the link, follow the on-screen directions to create a free account.

Archaeologists discover clues about how pyramids were built

By The Guardian, adapted by Newsela staff on 04.27.19
Word Count **552**
Level **830L**

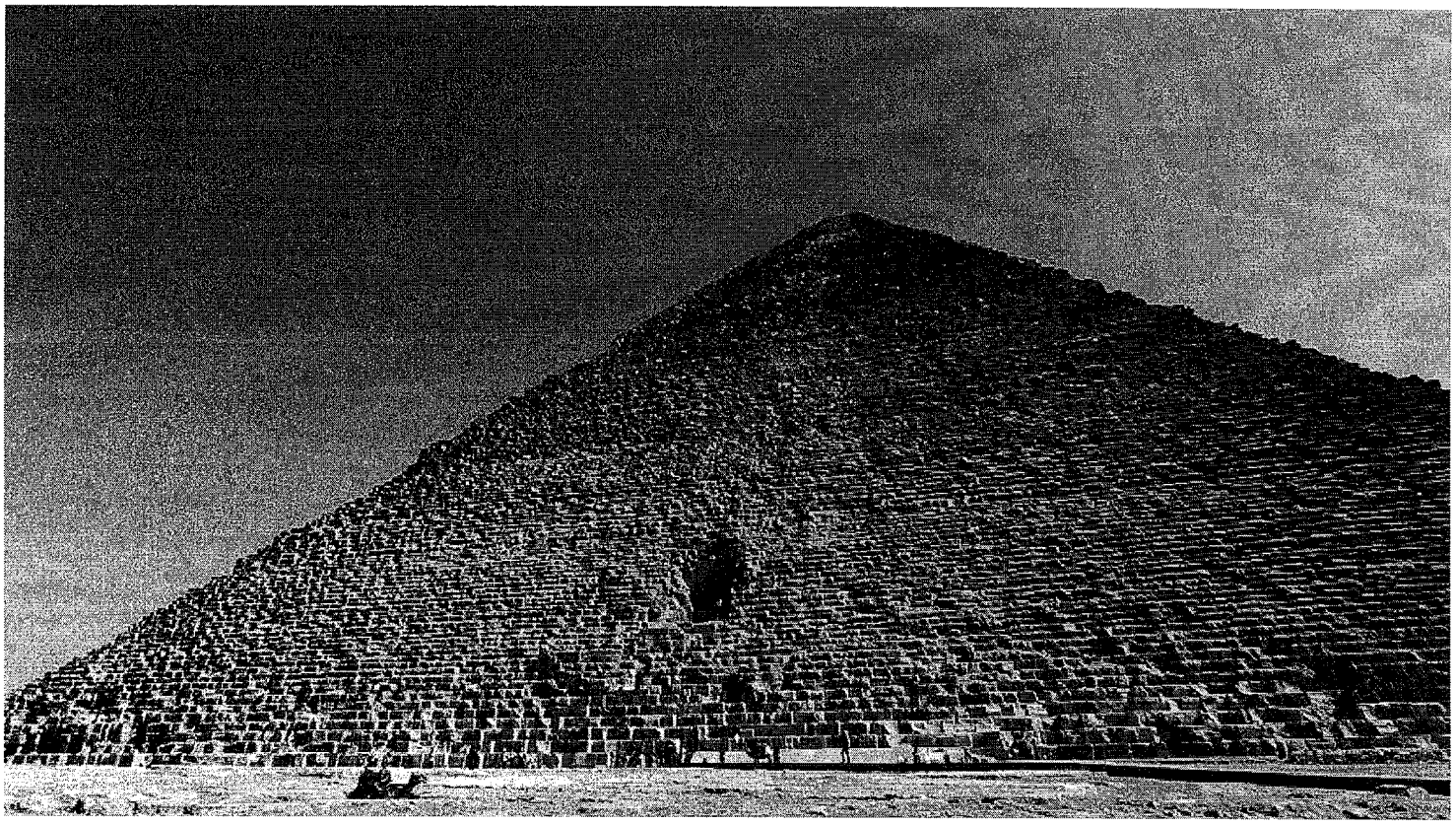


Image 1. A camel rests in front of the Pyramid of Giza. The recently discovered ramp system appears to date from about the same time that this pyramid was built. Photo: Marwan Naamani/AFP/GettyImages

The construction of the pyramids in ancient Egypt has long been a mystery. No one knows for sure how these giant structures were built. Now, a chance discovery by a team of archaeologists may provide a clue. Their finding offers a new explanation of the pyramids' construction.

Archaeologists study human history. They excavate, or dig up, ancient sites to learn about the people who lived there long ago. The archaeologists in Egypt were studying ancient inscriptions at a quarry in the Eastern Desert. A quarry is a deep pit in the ground from which workers remove stone. This particular quarry, called Hatnub, is thousands of years old.

The scientists found a ramp leading down into the quarry. The ramp had stairs on both sides and what appeared to be postholes next to it. A posthole is a spot in the ground. Experts can see that posts were once used there to hold up and support a structure. The ramp discovery shed light on how workers may have hauled the huge blocks of stone used to build the pyramids. The work may have been completed more quickly than the experts once thought.

Ramp Is Steeper Than Expected

The theory that ancient Egyptians used ramps to move large stones is not new. However, the ramp in the quarry is much steeper than expected. It would have been very difficult for workers to drag a heavy stone up it. Instead, the archaeologists have an alternative explanation. They think laborers may have used the wooden posts alongside the ramp to make a pulley system. First, they slid a huge block of stone onto a sled at the bottom of the quarry. Then they attached the sled to the posts with rope. Some workers stood below the sled on the stairs. They pulled the rope around the posts to lift the load. At the same time, workers above the sled pulled too.

The system suggests that ancient Egyptians could have lifted and moved heavy stones more quickly than we previously thought was possible. The construction still would have involved heavy labor. Perhaps, though, the pyramids could have been built more quickly than we once imagined.

More people using force at the same time would have moved the blocks more quickly, said Dr. Roland Enmarch. He led the archaeology team that discovered the ramp. Enmarch is a professor of Egyptology, the study of ancient Egypt. He teaches at the University of Liverpool in England.

An Accidental Discovery

Enmarch and his team made their surprise discovery in late September. They had come to the quarry to study the ancient inscriptions inside. The quarry and its inscriptions are well-known to people who study ancient Egypt. They were found by an archaeologist named Howard Carter. He also discovered the tomb of Tutankhamun, the ancient Egyptian pharaoh or king.

The researchers used the inscriptions to determine the age of the ramp. They date it to the reign of Pharaoh Khufu. He built the Great Pyramid of Giza about 4,500 years ago.

There is no proof that a ramp like the one in the quarry was used to construct the pyramids. However, Enmarch said it is possible if the ramp system was used in Egypt at the time. He and his team will publish their findings in an academic journal soon.

The flu sneaks up on us; scientists are trying to stop that

By Associated Press, adapted by Newsela staff on 01.23.18
Word Count **686**
Level **810L**

In this October 1918 photo, St. Louis Red Cross Motor Corps personnel wear masks as they hold stretchers next to ambulances in preparation for victims of the influenza epidemic. A century after one of history's most catastrophic disease outbreaks, scientists are rethinking how to guard against another super-flu. Photo from Library of Congress via AP

WASHINGTON, D.C. — The descriptions are haunting. Some victims felt fine in the morning and then were dead by night. Patients coughed up blood and their faces turned blue. There were more dead bodies than coffins.

That was the scene in 1918 when a deadly flu killed tens of millions of people as it swept the globe. One-hundred years later, scientists are rethinking how to guard against another super-flu.

There is no way to predict what type of the shape-shifting flu could start another worldwide outbreak. There also is no way to tell how bad it would be, even with modern medical tools.

Still, scientists hope they are close to making stronger flu shots. They want to make shots that protect against the ordinary winter flu. They want the same shot to also guard against future outbreaks.

On The Hunt For A Super-Shot

Dr. Anthony Fauci works for the National Institutes of Health (NIH) in Maryland. The NIH studies health and medicine. Fauci says we need one vaccine that can protect against most or all types of the flu.

Labs around the country are hunting for a super-shot so people would not have to get a flu shot every year. They want a shot people could get every five or 10 years. Or maybe, someday, a shot for children that could last for life.

It will not be easy. Even with 100 years of science, the flu often beats our best cures because it is always changing.

The Flu Is Always Changing

The immune system protects the body. It keeps us healthy by fighting off anything that might harm us. To get around our immune system, the flu changes itself every year. Scientists have a new plan, though. They are learning how the flu disguises itself. They are trying to see what part of the flu stays the same every year.

The 1918 flu outbreak shows why this is so important.

Back then, there was no flu vaccine. It would not arrive for years. Today, vaccination is the best protection. But at best, it only reduces the chance of getting the flu by half.

If a never-before-seen flu breaks out, it takes months to make a new vaccine. Today's top concern is a deadly bird flu. It jumped from birds to more than 1,500 people in China since 2013.

The 1918 Flu Could Give Us Clues

The NIH's Dr. Jeffery Taubenberger calls the 1918 flu the mother of all worldwide outbreaks.

He worked as a scientist studying diseases for the military. He led the team that identified and reconstructed the 1918 flu, which does not exist anymore. His team used traces from World War I soldiers and from a victim whose frozen body was buried in Alaska.

Historians think it started in Kansas in early 1918. By winter 1919, the flu had infected one-third of the world population and killed at least 50 million people.

Antibodies Hold The Key

A turning point toward better vaccines came in 2009. Scientists discovered that, sometimes, people's bodies make a small number of antibodies that can stop the flu. Antibodies are proteins in the blood that fight against a disease.

Scientists are trying different tricks to get people's bodies to make more of those antibodies. Some mysteries still remain, though.

Scientists now think people respond differently to a vaccination. It depends on their flu history. The idea is that your immune system learns to recognize the first flu it sees. It may not respond as well to more than one vaccine. For this reason, a flu vaccine that works for all types of flu would probably work best when you give it to a child, Fauci said.

Preparing For What Comes Next

Still, no one knows for sure how that terrifying 1918 flu started.

The Chinese bird flu that spread in 2013 worries Taubenberger. He asked, How does a bird disease adapt to people? That is the mystery.

While scientists hunt for those answers, Fauci says it is silly to predict what a next outbreak might bring. "We just need to be prepared," he said.

Why everything is closing for coronavirus: It's called "flattening the curve"

By Forbes, adapted by Newsela staff on 03.17.20
Word Count **765**
Level **830L**

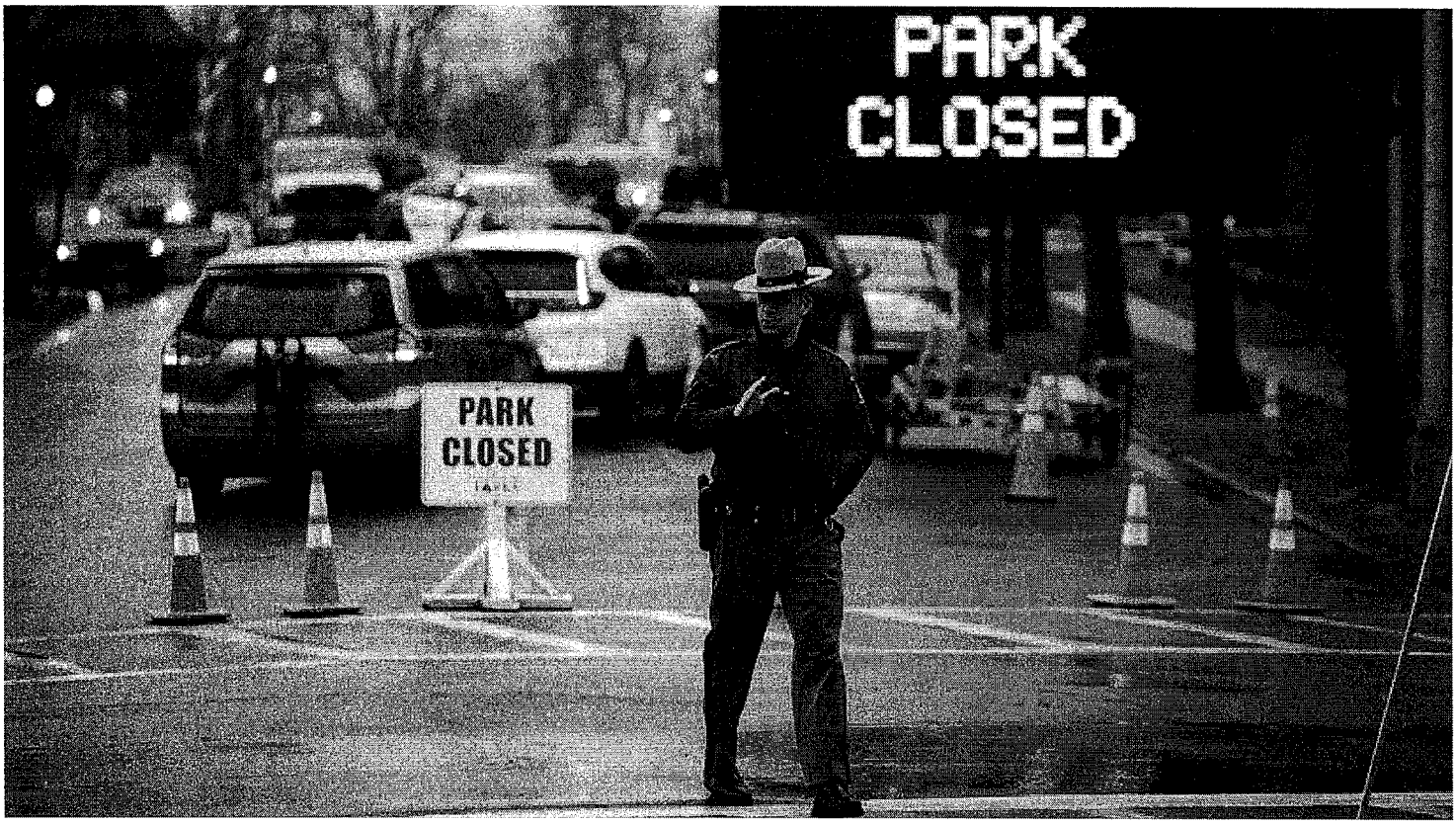


Image 1. Authorities control a line of motorists waiting to be tested for coronavirus at Glen Island Park in New Rochelle, New York, March 13, 2020. Closing areas such as parks is an essential part of the social distancing needed to slow the COVID-19 outbreak. Photo: John Minchillo/AP Photo

Schools have recently been shutting down all over the country, moving instruction online. Sporting events are being canceled and postponed. The future of the 2020 Summer Olympics in Japan is in doubt. Festivals and conferences are also being delayed or postponed.

The cause for all these closures is a flu-like illness called COVID-19. COVID-19 is short for coronavirus disease 2019. It began in China. It has been spreading across the globe since December 2019.

There have been around 1,660 cases of COVID-19 diagnosed in the United States. There have been fewer than 50 deaths because of it.

Health officials are telling people to not gather in groups. This helps prevent the spread of the virus.

Many people talk about the flu. Every year the flu makes millions of people sick. It kills tens of thousands of people. The flu is expected to make 50 million people in the United States sick this year. It is expected to kill as many as 52,000.

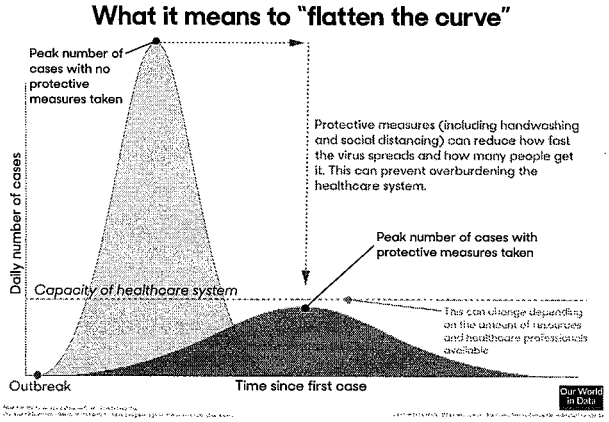
So why is everyone making such a big deal about the coronavirus? Why are events being canceled? Why are classes being moved online? Especially when there are so few cases right now.

Prevent Overburdening Health Care System

There's a good reason to "cancel everything." The goal is to slow down the spread of the virus. This will also help prevent overburdening the health care system. If someone gets the coronavirus, they have to go to the hospital. If a lot of people get sick at the same time, the hospital will get full quickly. If too many people get sick at the same time there will not be enough space for everyone who is sick to be taken care of. That is what is happening in Italy.

It's called "flattening the curve." And that's exactly what it looks like when you see it drawn out.

Epidemiologists study diseases and how they spread. They try to predict how diseases spread. They look at how the disease behaves. If everyone acted like normal and did not limit social interaction the number of cases would increase. The number of people infected would grow quickly. They would overwhelm hospitals. This will result in more people dying. This is happening in Italy. There are not enough hospital beds or medicine for everyone who is sick. There aren't even enough healthy doctors and nurses to take care of everyone at once.



However, if that same number of cases gets stretched out over months it changes things. Then people can get the care they need. More health care providers can avoid illness and burnout, and fewer people are likely to die — as South Korea has shown.

But are we really headed for that many cases?

Yes.

Beyond Containment

Scott Gottlieb used to work for the Food and Drug Administration. He explained in a recent interview, the novel coronavirus — just declared a pandemic by the World Health Organization — is beyond containment. A pandemic is when a disease has spread all over a country or the world. If it's not already in your community, it's coming soon. The only reason total U.S. cases aren't already skyrocketing is that coronavirus testing has been such a mess that too few people — just 77 by the CDC in the whole week of March 8— are being tested. The CDC is short for the Centers for Disease Control and Prevention. It is the U.S. health care agency. You can't count cases you haven't found yet.

So what do we do to avert disaster? We have to flatten the curve. Fortunately, people are listening. And the idea has caught on so well among armchair epidemiologists that the #flatteningthecurve

and #FlattenTheCurve hashtags have trended several times on Twitter in recent days.

Clearly, public officials and businesses are listening to the warnings of public health officials, as evidenced by all the closings and cancellations. But to be effective, ordinary people need to do their part by avoiding as much as possible any crowds and places where large numbers of people congregate, such as movie theaters, malls and events that haven't been canceled.

Primary Sources: The Black Death, 1348

By Henry Knighton, adapted by Newsela staff on 03.30.17
Word Count **777**
Level **800L**

A miniature from a 14th century Belgium manuscript showing people burying the dead from the Black Death in Tournai, Belgium.

A plague is a disease that spreads from person to person in one or many countries. The Black Death was one of the worst plagues in history. As many as 200 million people in Asia and Europe may have died in the years between 1346 and 1353. The Black Death is thought to have come from rats. It started in Central Asia and moved west along the Silk Road and reached Eastern Europe by 1343. Cargo ships bringing riches from the east also brought rats. These rats had a germ in their blood. Fleas on the rats bit them and got the germ, too. The fleas then jumped onto humans and bit them. This germ started killing humans by attacking the lungs. A cough spread the germ to other humans. Touching the body of a sick person also spread the Black Death, which got its name because many victims were covered with black boils.

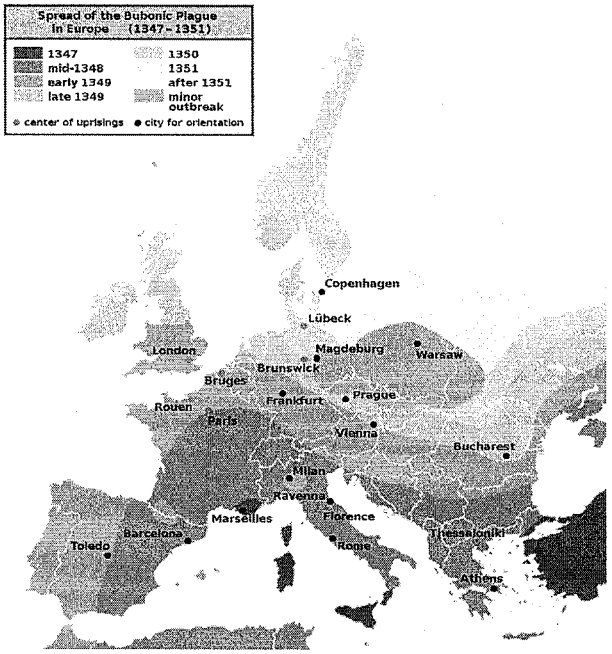
The Black Death came to Europe by sea. In October 1347, 12 trading ships docked in Sicily, Italy. Most of the sailors were dead and those that were still alive were very sick. The "death ships" were ordered out of the harbor, but it was too late, and thousands in Sicily died. The ships left, but brought the disease to other ports in Italy and France. Over the next five years, the Black Death would kill almost half of the population of Europe, or 25 million people.

_Henry Knighton was a historian and priest at St. Mary's of Leicester in England. He wrote about the Black Death. _

"Many Millions Of People Died Around The World"

In 1348 and 1349, many millions of people died around the world. It began first in India and moved west to Tarsus, Turkey. It killed Muslims first and then Christians and Jews. The office of the pope believed that 48 million people in Asia died suddenly in the first year. This did not include the death of Christians. The king of Tarsus was Muslim and feared that his people were being punished because they were not Christian. So he and his leaders decided to go to the pope, in France, who would baptize them and make them Christian. However, when he had completed 20 days of his journey, he heard that the plague had killed many Christians, too. So they turned back to return to Tarsus. But Christians, who had been following the king and his people, attacked and killed almost 2,000 of them.

Then this most terrible plague came to the coast of England. It went through Southampton and came to Bristol. The cruel death took just two days to spread through the whole town.



"They Felt God Was Punishing England"

In the same year, a deadly sickness started killing sheep. In one place, more than 5,000 sheep died in a single pasture. Their bodies were so rotted that no animal or bird would touch them. Sheep and cattle roamed through the fields eating the corn. People were afraid to go near them. No one stopped them.

The Scots heard that the plague was killing their enemy, the English. They felt God was punishing England. So they planned to invade England. But the awful plague soon sickened their soldiers. Almost 5,000 died. They retreated to Scotland, but the English attacked and killed many of them.

At that time, there were not enough priests in churches for masses, services, prayers for dying, or funerals. Cases in the courts of the king came to a stop. People feared the spread of the plague. It moved through Dorset seaport, on to Devon, Somerset and up to Bristol. So the people of Gloucester stopped people escaping from Bristol. They feared those people would spread the sickness. But in the end the Black Death attacked Gloucester, Oxford and London, too. Almost 90 percent of both men and women in England died. Churchyards were not large enough to bury the dead. So fields had to be used.

"Some Were Able To Live Through The Plague, But Not Many"

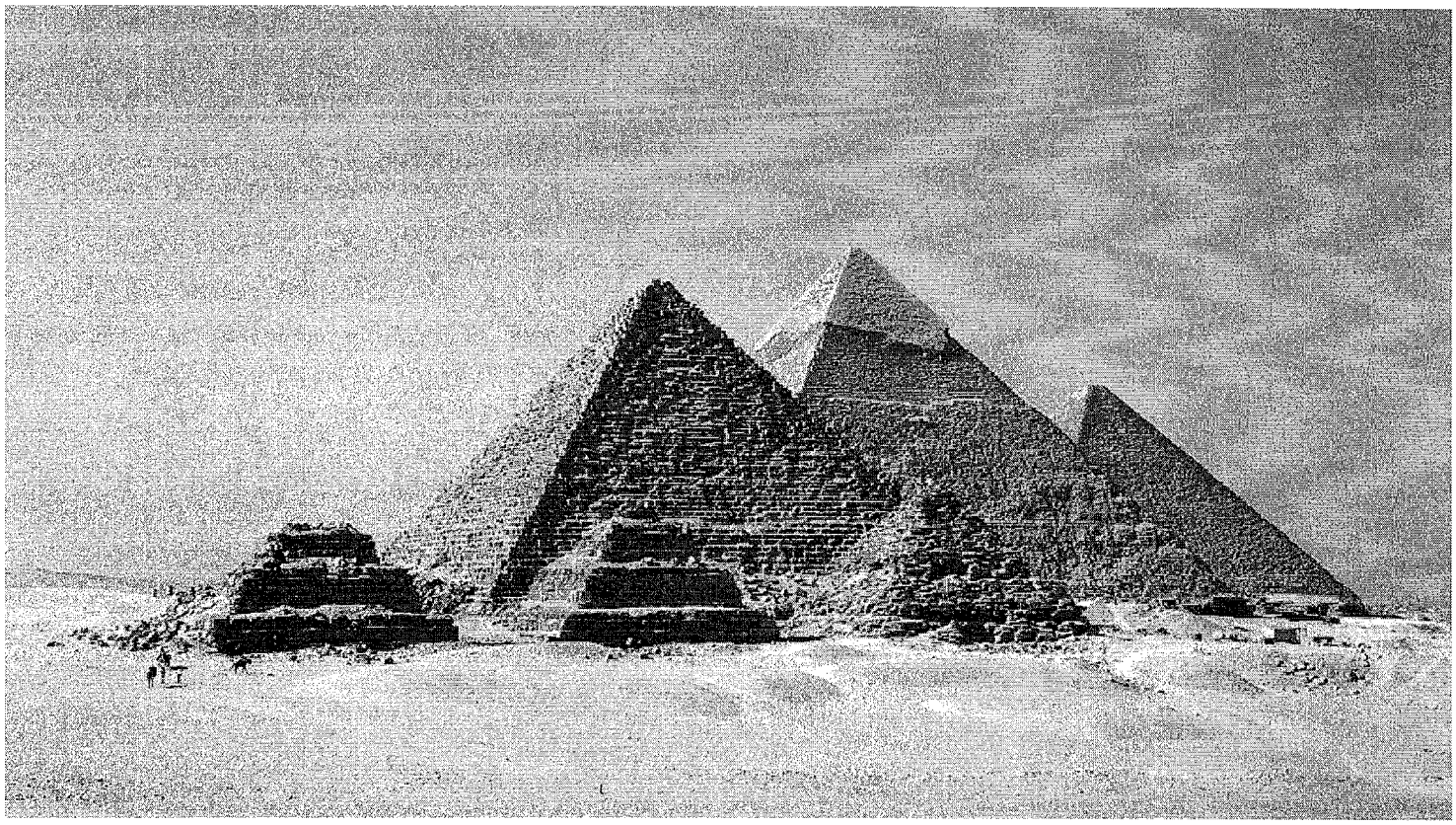
People stayed away from those that were sick. They were happy and healthy on one day, but the next day they would be sick and dying. Victims had little black boils all over their whole body. Some were able to live through the plague, but not many. There were villages that lost all their people.

In the following year, the sickness moved on to Wales and then to Ireland. The English living there were cut down in great numbers, but the native Irish, living in the mountains and uplands, did not get sick until 1357. Then they started dying, too.

Ancient Egypt: The pyramids of Giza

By USHistory.org, adapted by Newsela staff on 03.03.17

Word Count **673**
Level **840L**



The Pyramids of Giza. Photo from: Wikimedia Commons.

Ancient Egyptian civilization lasted for several thousand years. It spanned from 3,000 B.C. until 30 B.C, when Egypt was taken over by the Roman Empire. That was about 5,000 to about 2,000 years ago.

Many of the discoveries and objects of ancient Egypt survived in the Nile River Valley. They hold many clues about this mysterious and artistic ancient civilization.

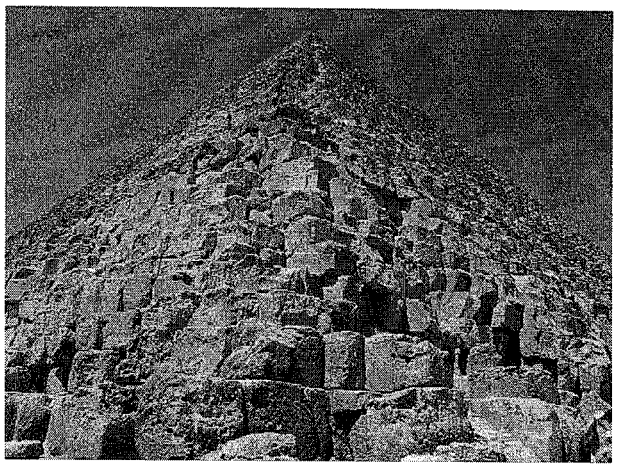
Tallest Structures On The Planet

For centuries, pyramids were the tallest structures on the planet. The pyramids of Giza were built more than 4,000 years ago and are still standing today.

The pyramids were one of the Seven Wonders of the World. Humans still don't fully understand their secrets. How could a civilization without bulldozers, forklifts and trucks build such huge structures? Why would anyone have spent the time and energy to build them? What treasures were placed inside these monuments?

Farmers Became Builders

Only a powerful pharaoh could organize the manpower needed to build giant pyramids. For six months each year, the Nile River flooded the land and nothing could be planted. During that time, farmers became builders. They constructed the pyramids from huge stone blocks weighing more than 2,000 pounds.

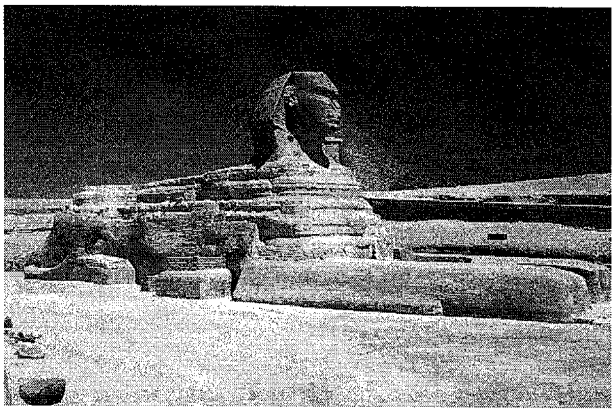


Egyptologists study ancient Egypt. They think that the workers used either rollers or slippery clay to drag the blocks from the quarries to the pyramid site. Construction of the larger pyramids took many years.

Grand Tombs For Powerful Pharaohs

Pyramids were built for religious purposes. The Egyptians were one of the first civilizations to believe in an afterlife. They believed that the ka lived within every human being. When the physical body died, the ka lived on eternally. Osiris was the ancient Egyptian god of the dead. Egyptians believed that after a person died, Osiris decided who would get eternal life and who would die forever. Ancient Egyptians wanted to be comfortable in the afterlife. The Great Pyramids were simply grand tombs of powerful pharaohs.

Three pyramids were built at Giza. It is outside Cairo, the capital of modern Egypt. Many smaller pyramids were constructed around the Nile Valley. The tallest of the Great Pyramids reaches nearly 500 feet into the sky and covers an area greater than 13 acres, or about 16 football fields. The Great Sphinx is a huge sculpture nearby, which was made to guard the pyramids. The human head on the body of a lion stands 65 feet tall.



Many believe that the Sphinx was a portrait of King Chefren, whose body was buried in the middle pyramid. The lion symbolized immortality.

Gold, Silver And Bronze Objects In The Tombs

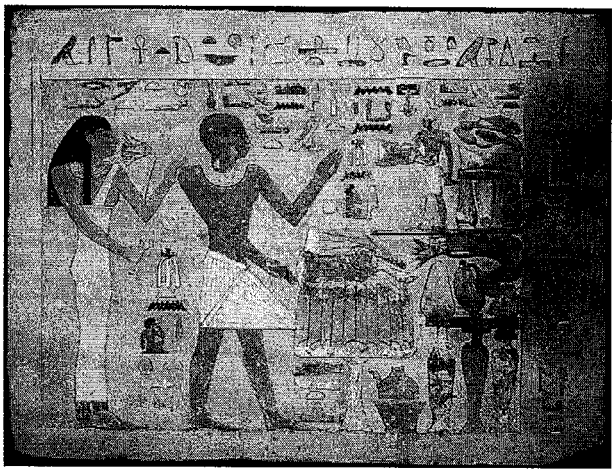
Important Egyptians often wanted to take their favorite possessions with them in death. They thought their ka could enjoy these things in its next life. Gold, silver and bronze objects were loaded inside the great tombs. Fine linens and artwork adorned the secret chambers.

In the early days, dead nobles were often buried with their living slaves and animals. But this custom got too expensive so artists painted scenes of human life on the inside walls. Some pyramids were even equipped with a bathroom for the pharaoh.

Grave Robbers Cursed Forever

The ancient Egyptians were careful to protect the tombs from robbers. Egyptians believed anyone who stole from a tomb would be cursed forever. The entrance to the inner chambers was carefully hidden. The pharaoh's mummy was placed in a huge coffin called a sarcophagus, which was made of hard stone blocks. Still, tombs were raided over the years by grave robbers.

Pyramids Have Stood The Test Of Time



The pyramids, however, have stood the test of time. Their outer layers have long since been removed or crumbled to dust, but the pyramids still stand. About 80 remain in modern Egypt. They are time capsules from a once-great civilization.

The Pyramids of Ancient Egypt

By History.com, adapted by Newsela staff on 08.01.17
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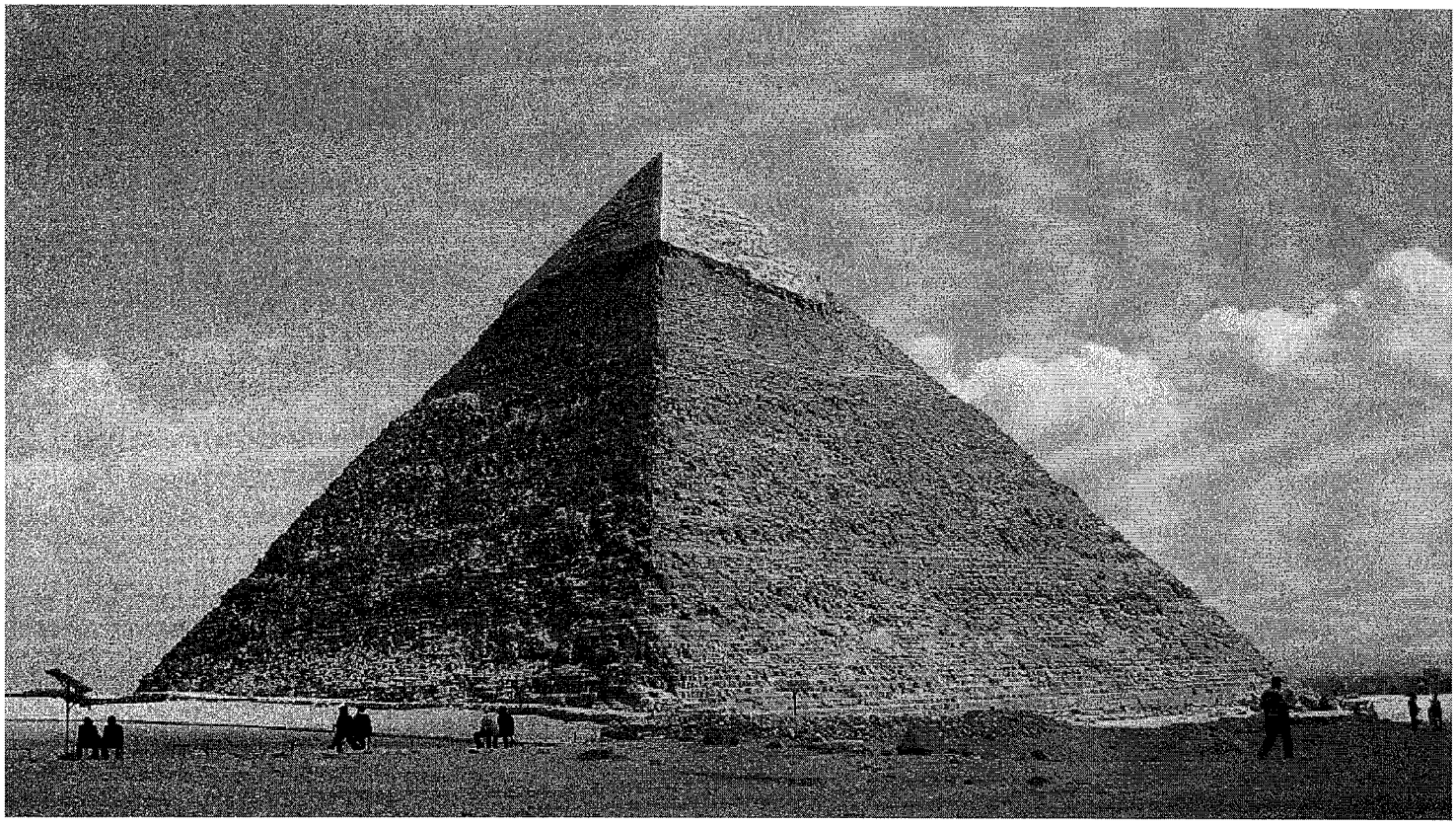


The Great Pyramid of Giza, also called the Pyramid of Khufu or Cheops, is the oldest and largest of the three pyramids in the Giza Necropolis bordering what is now Cairo, Egypt. The Great Pyramid was originally covered by casing stones that formed a smooth outer surface. Photo: Jerome Bon/Wikimedia Commons

The pyramids of Egypt are among history's greatest buildings. A pyramid is a building with four triangle-shaped sides and a square base. The peak of pyramid building began late in Egypt's third dynasty. It continued until about the sixth, around 2325 B.C. In ancient Egypt, a dynasty was a period where all of the rulers were from a single family.

The Egyptian pyramids are still a sight to see. They give us a peek into the country's rich and glorious past.

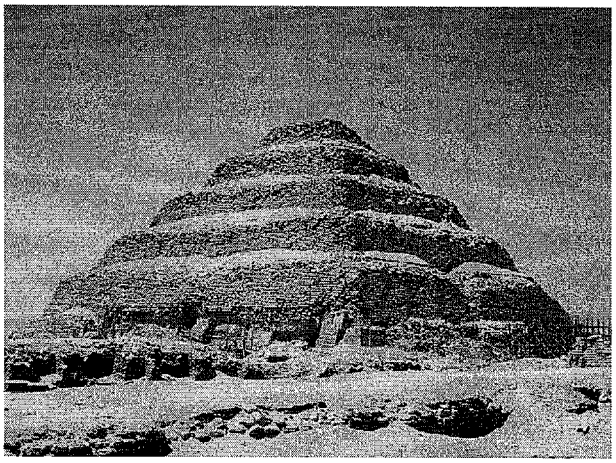
The Pharaoh in Egyptian Society

During the third and fourth dynasties, Egypt prospered greatly. Kings, or pharaohs, held a special position in Egyptian society. They were believed to have been chosen by the gods. Ancient Egyptians believed that when the pharaoh died, part of his spirit remained with his body.

To properly care for his spirit, his body was mummified. Everything the king would need in the afterlife was buried with him. This included gold bowls and cups, food, furniture and other

offerings. The Egyptians built pyramids as tombs for their pharaohs. A tomb is a place where a person is buried after they die.

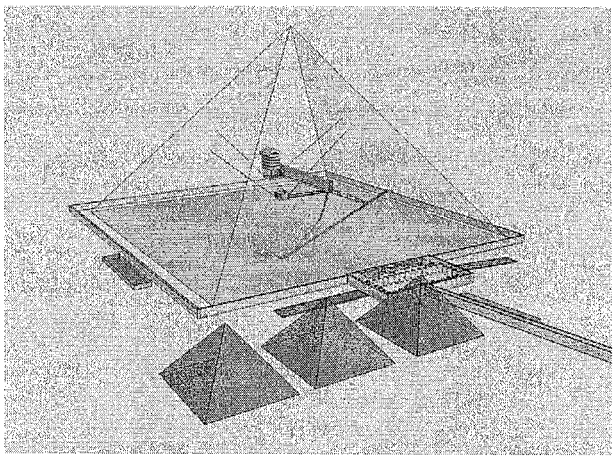
The Early Pyramids



Starting in about 2950 B.C., royal tombs were carved into rock. They were then covered with flat-roofed rectangular buildings known as "mastabas." The pyramids we know developed from these mastabas. The oldest known pyramid in Egypt was built around 2630 B.C. It was built for King Djoser at Saqqara and known as the Step Pyramid. The Step Pyramid was surrounded by courtyards and temples where Djoser would enjoy his afterlife.

The Red Pyramid was the earliest tomb to have smooth sides instead of stepped sides. This pyramid was built at Dahshur. It was built for the first king of the fourth dynasty, Sneferu, who ruled from 2613 B.C. to 2589 B.C. The stone blocks used to construct the pyramid's core were red, so that is why it is called the Red Pyramid.

The Great Pyramids of Giza



No pyramids are more famous than the Great Pyramids of Giza. These three pyramids are located on the west bank of the Nile River near Cairo. The oldest of these is called the Great Pyramid. It was built for Khufu, the second of the eight kings of the fourth dynasty. The sides of the pyramid's base average 755 feet, and its original height was just more than 481 feet. This makes it the largest pyramid in the world. Smaller tombs were built nearby for Khufu's queens and his mother.

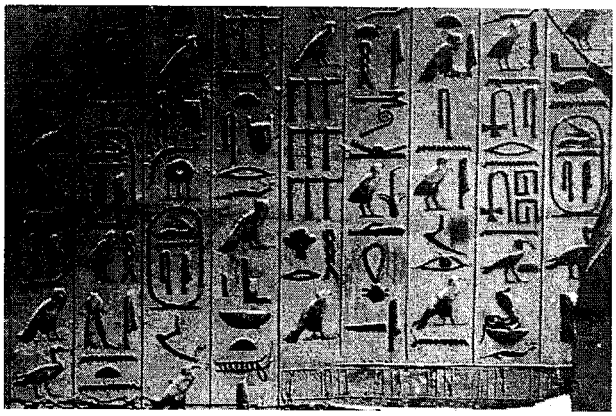
The middle pyramid at Giza was built for Khufu's son Khafre, who ruled from 2558 B.C. to 2532 B.C. Next to Khafre's pyramid is the Great Sphinx. This statue was carved in limestone. It had the head of a man and the body of a lion. The largest statue in the ancient world, it measured 240 feet long and 66 feet high. The third pyramid at Giza was built for Khafre's son Menkaure, who ruled from 2532 B.C. to 2503 B.C.

The Great Pyramid was built using 2.3 million blocks of stone. Each stone weighed about 2.5 tons. These stones had to be cut, transported and put together. The ancient Greek historian Herodotus wrote that it took 20 years and the labor of 100,000 men to build. But it was later learned that about 20,000 laborers worked on it.

The End of the Pyramid Era

Pyramids continued to be built in the fifth and sixth dynasties. Builders of later pyramids wrote stories about the pharaoh on the pyramids' inside walls. These writings are known as pyramid texts. They are some of the earliest writings known from ancient Egypt.

The last pharaoh to have a pyramid was Pepy II, who ruled from 2278 B.C. to 2184 B.C. With Pepy's death, the kingdom and strong central government crashed. Later kings would try to bring back pyramid building, but never on the same scale as the Great Pyramids.



The Pyramids Today

Tomb robbers in both ancient and modern times removed most of the bodies and funeral goods from Egypt's pyramids. They plundered the outsides of the pyramids as well, taking away most of their smooth white limestone coverings.

Yet millions of people are still drawn to the pyramids' greatness and appeal each year.

Every year, many people get sick from influenza. Most people get better, but some have to go to the hospital. The flu can cause other problems in the body, like ear and throat infections, or pneumonia, which is a disease of the lungs. Every year, some people die because of the flu.

A "pandemic" is what we call a disease spreading fast all across the world. A flu pandemic is what happened in 1918.

The flu strikes far and wide

In the spring of 1918, the first wave of the flu pandemic hit. It didn't seem serious. People who were infected felt the usual flu symptoms, which are chills, fever, and feeling tired. Those who got sick generally got better after several days. Not many died. However, a second, highly contagious wave of influenza appeared in the fall of that same year. Victims died within hours or days. Their skin turned blue and their lungs filled with liquid, making it very difficult to breathe.

No one knows where the 1918 flu virus came from. But it spread within months to almost every other part of the planet.

One unusual thing about the 1918 flu was that many healthy young men and women caught it and died. It happened right at the end of World War I, and many soldiers got sick. In fact, more American soldiers died from that flu than the war.

Historians think that worldwide at least 20 million people – and maybe as many as 50 million – died from the disease in 1918-1919. It could be twice that many. At that time, not all places in the world kept medical records.

Fighting the flu

When the 1918 flu hit, doctors didn't know what caused it or how to treat it. Unlike today, they had no effective drugs for fighting this virus.

America had fewer doctors and nurses because of the war. Many of them got sick themselves. In some parts of the U.S., hospitals were so crowded with flu patients that schools and private homes were used as a place to treat the sick.

Some towns forced the sick to stay at home. They ordered people to wear masks. They closed schools, churches, and theaters. People were told not to shake hands and to stay indoors.

The flu takes a heavy toll on society

The flu pandemic wiped out entire families.

Businesses had to close because so many workers were sick. Mail delivery and garbage collection were interrupted. In some places farms didn't have enough workers to harvest crops.

Flu pandemic finally ends

By the summer of 1919, the flu pandemic came to an end. Sick people had either gotten well or they had died. Almost 90 years later, in 2008, researchers announced they'd discovered why the 1918 flu was so deadly. That particular flu virus attacked the lungs and caused pneumonia. Pneumonia is an infection that inflames the lungs and air sacs, causing them to fill with fluid. Pneumonia can make you very sick.

Since 1918, there have been several other influenza pandemics, although none has been quite as deadly.