#### Hot Air Balloon Debate

You are in a hot air balloon which is losing height rapidly and will soon crash because it is overweight; therefore you have to get rid of <u>seven</u> of the passengers! Whom would you choose? You must present an argument defending your decision. Explain why and how you choose which people to save and whom to throw overboard. Consider how you might appeal to logos, pathos, and ethos in your argument.

Note: The argument must be sound. Saying things like, "We don't really need art!" or "Well, someone else probably would have figured it out" does not count as an argument.

Make your decisions wisely! Once you drop someone from the balloon, that person and all his or her accomplishments are *forever erased* from history.

#### The passengers are:

Mother Teresa
Winston Churchill
Mahatma Gandhi
Florence Nightingale
Vincent Van Gogh
Isaac Newton
Charles Darwin
William Shakespeare

Martin Luther King, Jr.
Albert Einstein
Leonardo da Vinci
Abraham Lincoln
Ludwig van Beethoven
Jane Austen
Marie Curie
Johann Gutenberg

Once you've made your decisions, click HERE to answer the question: What Have You Done!?

#### What Have You Done!?



#### To find out what you've done, click on the name.

Mother Teresa
Winston Churchill
Mahatma Gandhi
Florence Nightingale
Vincent Van Gogh

Saac Newton
Charles Darwin
William Shakespeare

Martin Luther King, Ir.

Albert Einstein

Leonardo da Vinci

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# What Have You Done!? Charles Darwin

- You've erased one of the most important figures in modern science—some believe Darwin's
  Theory of Evolution is the most significant contribution since humanity discovered the world
  was round!
- You've set modern biology—including medicine—back 200 years. Without an understanding of evolution, effective comparative biology is difficult, if not impossible.
- You can forget about your yearly flu shot! Darwin's theory of Survival of the Fittest enables scientists today to create vaccines for ever-changing viruses.



# What Have You Done!? William Shakespeare

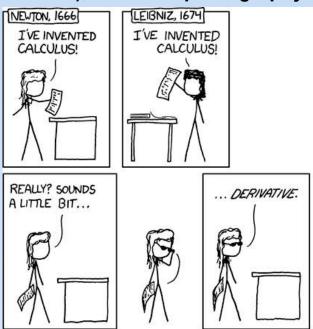
- You have forever altered the English language. Shakespeare contributed over 1700 words to English, some of which you use every day: blanket, compromise, elbow, frugal, and many more.
- Television and movies are completely different now. Visual entertainment owes a significant debt to Shakespeare, as he expanded what could be accomplished through character, plot, setting, and dialogue. This doesn't even begin to cover his influence on other writers! Even *Harry Potter* would be drastically different without Shakespeare.
- You've probably erased your favorite comedy. Comedic writing, as we know it today, was practically invented by Shakespeare.





# What Have You Done!? Saac Newton

- You've eliminated the founder of modern physics!
- Newton developed the three Laws of Physics, upon which much of modern science (everything from architecture to space travel) is based.
- You've deleted, or at least delayed, calculus. This might save you some trouble in high school, but without calculus, but calculus is invaluable to computer science, network visualization (goodbye, Facebook!), and even photography.





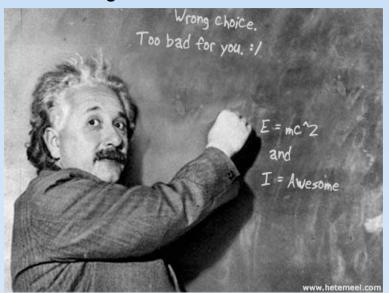
# What Have You Done!? Florence Nightingale

- You've just dropped the founder of the modern nursing profession! Next time you're in the hospital, your caretakers won't be as well-trained or professional as they would have been with Nightingale's influence.
- Notice how your doctors wash their hands between patients? And how they sterilize their instruments? Nightingale was the figurehead for improved hygiene and sanitation in hospitals, the results of which you can see in today's hospitals.
- You've also altered the face of statistics: Nightingale was a gifted mathematician who revolutionized the representation of information, including such methods as the pie chart.



# What Have You Done!? Albert Einstein

- Now you've done it. Einstein is considered the greatest contributor to science since Newton, and some of his ideas are such pure genius, it's unlikely anyone else would have come up with them, at least not for a very long time.
- Einstein's theory of special relativity changed the world. Without it, we could have no understanding of elementary particles and the atomic nucleus. We would also have no lasers.
- Without Einstein, we would also lose quantum theory as we know it, theory of Brownian motion, and the theory of general relativity--all of which have had immeasurable impact on our technology and our understanding of the universe.

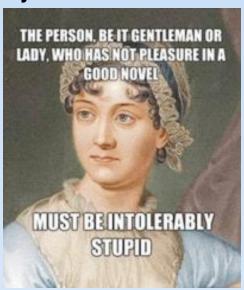


For more, visit "A Century of Einstein."



# What Have You Done!? Jane Austen

- You have changed the face of modern literature. Austen's acerbic humor and wit helped shaped our current tastes in literature and film. The delivery of an insult with a "light, bright, and sparkling" smile--a kind of sarcasm we love today--can find its origins in Austen.
- Without Austen, we're missing a crucial voice for women. Austen's subtle feminism used characters who resisted and mocked the contemporary expectations of women. Indeed, her work is among the first to suggest that people should marry for love, not wealth.
- Austen's work also contributed to social change. Her novels, for instance, regularly comment on the fact that women couldn't inherit wealth or maintain the rights to their property after marriage, a condition that left many real women destitute.





# What Have You Done!? Martin Luther King, Tr.

- You've erased the most influential voice in the American Civil Rights Movement.
- King's use of peaceful resistance, in addition to his powerfully charismatic speaking style, brought international attention to the severe inequalities and human rights violations in the United States.
- In particular, King's March on Washington and his famous "I Have a Dream" speech helped push the 1964 Civil Rights Act through Congress.

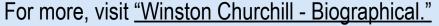




### What Have You Done!? Winston Churchill

- You've erased one of the greatest leaders of the 20th century.
- Many believe that Churchill's particular leadership skills and timely election enabled the United Kingdom to resist destruction by or corroboration with the Axis powers.
- Although he was not universally popular, Churchill helped strengthen the UK's armed forces, particularly its navy. He is remembered today for being a tenacious war leader and an inspirational orator.







### What Have You Done!? Mother Teresa

- You've just removed one of the greatest humanitarians in recent history.
- By erasing Mother Teresa, you have affected the millions of men, women, and children for whom she provided medicine, food, shelter, and education.
- Despite recent controversies about her work, Mother Teresa's example has encouraged many others to recognize the influence a single person can have on the world.



For more, visit "Mother Teresa - Biographical."



# What Have You Done!? Wahatma Gandhi

- You've just tossed out the world's most famous peaceful dissident.
- Gandhi's peaceful protests not only empowered India's independence movement against the British Empire, but they also inspired leaders around the world, including Martin Luther King, Jr.

 Gandhi demonstrated that a single man (without a single weapon) can wield great power against an entire empire. Such a successful demonstration of peaceful resistance has yet to

be repeated.





# What Have You Done!? Vincent Van Gogh

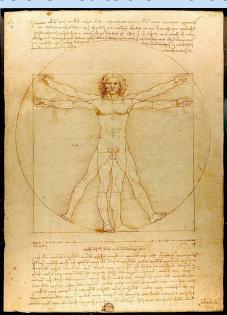
- In tossing Van Gogh, you have altered the face of modern art.
- Van Gogh, a post-impressionist painter, might also be considered the Father of Expressionism, an art-form that moved away from strictly realist painting to the abstract work done by artists like Picasso.
- Although it's tempting to think about art as just "stuff to hang on the wall," keep in mind the influence expressionist and surrealist art had on society, especially in documenting and publicizing the horrors of World War I.





### What Have You Done!? Leonardo da Vinci

- Yikes. You just tossed one of the most significant figures in all of Western history. There isn't enough room on the page to enumerate what we would lose if we lost da Vinci.
- The original Renaissance man, da Vinci contributed not only to art, but to anatomy, civil engineering, geometry, geology, hydrodynamics, engineering, mathematics, physics, zoology....
- If you need some specific examples: da Vinci first developed the use of solar energy for power. He invented the parachute. He created a calculator prototype. He developed a rudimentary theory of plate tectonics. He produced some of the most detailed images of the human skeletal, circulatory, and muscular systems. His ideas even led to the invention of the first robot, in the late 1400s.





#### What Have You Done!? Abraham Lincoln

- By tossing Lincoln, you've removed possibly the only person with the intelligence, charisma, and position necessary to maintain the Union during the Civil War.
- Lincoln is also credited with freeing the slaves. Although the Emancipation Proclamation did not immediately affect the then-seceded Confederacy, after the war was over, the law--and the intentions behind it--helped protect the freedom of all slaves.
- In truth, Lincoln was one of the most important voices--and possibly the most important actor--in freeing the slaves. Contrary to rumor, there is no conclusive evidence that Lincoln owned slaves. Moreover, Lincoln openly opposed slavery, though he admitted he was unsure about how to end the terrible practice, or what should become of the slaves once they were free.





# What Have You Done!? Ludwig van Beethoven

- When we lose Beethoven, we lose much of modern musical theory and, therefore, modern music itself.
- New art arises out of previous influence: We wouldn't have current rock music without The
  Beatles, we wouldn't have The Beatles without Elvis, we wouldn't have Elvis without the blues, and
  we wouldn't have the blues without slave songs. Likewise, the techniques Beethoven developed-such as emphasizing composition over performer--directly impacted today's music.

In particular, Beethoven added to the architecture of music, giving us new approaches (such as juxtaposing unexpected keys), as well as signifying the transition from the classicist to the

romanticist musical style.



# What Have You Done!? Marie Curie

- You've just erased the first woman to ever win a Nobel Prize--and the first person ever to win Nobel Prizes in multiple sciences.
- Curie discovered radium and developed a theory of radioactivity. She was the first to use radioactivity to treat abnormal cell growth. In other words, she pioneered modern cancerfighting techniques.
- While she did not invent the x-ray, Curie made it portable, easing the pain of thousands of soldiers during WWI, and forever changing medical history.





# What Have You Done!? Johann Gutenberg

- Gutenberg didn't invent the printing press, but his press was the first to be used for English printing.
- This revolutionized education. Suddenly, books didn't have to be hand-copies, and so they
  became cheap and widely available: reading no longer belonged only to the wealthy elite.
- The printing press lent to the explosion of the Renaissance and helped move Europe out of the Middle Ages. Scientific ideas could be shared with great ease. The printing press is even credited with helping initiate the Protestant Reformation!

