EDUCATIONAL COMPANION FOR THE FILM PROVIDED BY NATIONAL WILDLIFE FEDERATION

an inconvenient sequel TRUTH TO POWER







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INTRODUCTION

A decade after *An Inconvenient Truth* brought climate change into the heart of popular culture, comes the riveting and rousing follow-up that shows just how close we are to a real energy revolution. Vice President AI Gore continues his tireless fight traveling around the world training an army of climate champions and influencing international climate policy. Cameras follow him behind the scenes – in moments both private and public, funny and poignant – as he pursues the inspirational idea that while the stakes have never been higher, the perils of climate change can be overcome with human ingenuity and passion.

As the film's education partner, <u>National Wildlife Federation</u> has teamed up with <u>Participant Media</u> and <u>Paramount</u>. <u>Pictures</u> to provide educational resources to help students understand climate change while inspiring them to find ways to bring our nation across the finish line to a viable clean energy economy.

In 2006, Nobel Laureate and former US Vice President Al Gore got the world talking about climate change with the Academy Award-winning film *An Inconvenient Truth*.

It was just the beginning of a climate revolution, and later that year, he founded The Climate Reality Project to move the conversation forward and turn awareness into action. The Climate Reality Project is a diverse group of passionate individuals who have come together to solve the greatest challenge of our time. We are cultural leaders, organizers, scientists, and storytellers, and who are committed to building a better future together.

To access the Truth in 10 slide presentation, please follow the link to Climate Reality Project, <u>www.climaterealityproject.org/truth</u>.



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LESSON SUMMARY

The climate crisis affects all of us and it is up to us to solve it. That is why Al Gore created the Truth in 10 slideshow, a 10 minute presentation that will help you spread a simple message to your community. The presentation is an excellent resource for presenting and/or reviewing the science, the societal changes and the solutions necessary to curb global warming and address the effects of climate change. The following activities are designed in concert with *An Inconvenient Sequel: Truth To Power* and the slide presentation.

Without language there is no science. To be practicing scientists and derive new knowledge, we need language – reading, writing, talking, listening, enacting, and visualizing. Writing is one way to communicate understanding of our learning while allowing us to be creative in our delivery and provide insight and possible solutions to problems.

LEARNING OBJECTIVES

Students will:

- 1. Define and use climate change related vocabulary to discuss and write about current events.
- 2. Based on the facts presented in *An Inconvenient Sequel: Truth to Power* students will strengthen their ability to discern truth (scientific fact) from opinion; differentiate between credible sources and evidence that is strong compared to evidence that is weak.
- **3**. Improve skills in reading and writing across content areas, specifically the social studies, sciences and technical subjects.
- 4. Practice scientific argumentation using empirical data (evidence) to support claims.
- 5. Develop an ability to differentiate between types of sources, such as primary and secondary and credible versus unreliable.

TIME NEEDED

1-2 class periods or 1 after school gathering.



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MATERIALS

- Website: An Inconvenient Sequel: Truth to Power Education www.inconvenientsequeleducation.org/
- Download: Truth in 10 slide presentation
 <u>www.climaterealityproject.org/truth</u>
- Vocabulary List
- Teacher Notes
- Science Notebook
- Internet Access



LESSONS

These following activities provide research, reflective, and persuasive writing opportunities for students. They may be used with the activities in the **watch kit** or independently, for shorter, writing focused exercises relating to the topics covered in Truth in 10 slide presentation.

CLIMATE CHANGE

- 1. Use your search engine and input the following search criteria:
 - a. Switch from viewing "All" to viewing "News".
 - b. Narrow your search to the "last 30 days" or "last month".
 - c. In the search field type, "Climate Change" and "United States".
 - d. In your science notebook write the titles of the first three articles and their sources.
 - e. Next, in the search field, keep "Climate Change" and change "United States" to "World".
 - f. In your science notebook write the titles of the first three articles and their sources.

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Choose two articles to read, one from the "United States" search and one from the "World" search. Write a summary of each article and include the following:

- What similarities or intersections are there between the United States and other places in the world?
- What's the tone of the article? Note: Tone is the speaker's attitude toward a subject. Tone is described with adjectives and it is detected through the writer's word choice and style. Tone must match purpose in order for an argument to be successful.



- What's the author's purpose? To inform, persuade, describe, etc.
- What solutions, if any are provided?
- What questions do you have as the result of reading these articles? How will you ensure your sources are credible and based on fact?
- 2. Keep a journal for one week cataloging all of the news, advertisements and social media posts you see about climate change. (Twitter, TV, online ads, articles, clothes, signs, etc...)

ICE MELT AND SEA LEVEL RISE

3. Explain why warming seas, melting Arctic ice and sea level rise has an impact regardless of your location with in the United States. Think about the social, economic and environmental impacts. Reference current and historical data at <u>www.climate.nasa.gov/vital-signs/arctic-sea-ice/</u>

MEDICAL EMERGENCIES

4. How are medical emergencies a consequence or effect of climate change, such as heart attack, heat stroke, dehydration, Zika, West Nile virus, Chikungunya? Support your explanation with at least three different types of evidence, such as, *An Inconvenient Sequel: Truth To Power*, Truth In 10, photographs, charts and graphs, and citations.

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LOSS OF SPECIES

5. The loss of plant and animal species due to climate change is occurring at an alarming rate as are species migration and the rise of invasive species. How are plants and animals being impacted in your region or state? Why does it matter? Use photography and video to document changes in your location. What other evidence is there to support your claims?

II. CAN WE CHANGE?

- 6. Go to U.S. Energy Information Center's state site: <u>www.eia.gov/state/</u> and choose your state.
 - On the map click "Layers/Legend" and click on "Remove all layers"
 - Now click to turn on the following layers: State Mask and On Shore Meter Tower Wind Potential.
 - Next to On Shore 50 Meter Tower Wind Potential click the plus to open up the wind potential legend.
 - Click in the title bar "Layers/Legend" to make the box go away.
 - Click on "Find Address" and type in the zip code of your home or school.
 - What is the wind potential for your specific location? Clicking on the blue location dot will show you your potential or you can go back into the "layers" tab to view the key.



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- Next, "turn off" the *On Shore Meter Tower Wind Potential* and "turn on" the Solar Resources in the Layers/Legend tab.
- Repeat steps 4-6.
- Now write one of the two persuasive letter options to be shared with your principal, facilities director and school board.

OPTION 1: Use evidence to support your claim(s) warranting further investigation into the use of wind and/or solar to either supplement the school's reliance on fossil fuels to power the school or to completely convert the school to 100% reliance on wind and/or solar energy. Remember to include the impacts on the community, the economy and the environment.

OPTION 2: Use evidence to support your claim(s) that wind and/or solar energy is not a viable option for your school. Remember to include the impacts on the community, the economy and the environment.

III. WILL WE CHANGE?

PARIS ACCORD -

- 7. In the 2015 Paris Agreement, virtually every nation in the world agreed to work together to achieve net zero greenhouse gas emissions. The following prompts can be used to direct class discussion, writing assignments or both.
 - What was the role of the United States during the Paris Climate talks? How is climate change impacting the U.S. and what were the U.S. commitments as a part of the Accord? What is the current status of our commitment?
 - Allow students to pick a country who participated in the Accord, such as Afghanistan, Brazil, Canada, China, Cuba, France, Ghana, India, Maldives, Mexico, Thailand, or the United Kingdom and research their role during the Paris Climate talks, how climate change is impacting the country and their commitments as a part of the Accord.
 - Students should be prepared to discuss the role of each country, what their commitments mean not only to the country, but to the Earth systems.
 - Students should be able to argue with evidence why pulling out of the accord is beneficial or detrimental to their countries communities, economy and environment.

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- **8**. Write an essay about your climate or ecological foot print, comparing it to those of others in this country and other countries. Describe the kinds of actions you, your school and community could take to reduce the carbon footprint and decrease environmental impacts.
- **9**. Discuss how U.S. consumption affects other cultures, examining the social equity issues. What would you think if you were from another culture looking at U.S. consumption patterns? Write an essay about how you would feel. Would you want to be like us?
- 10. Write about the process of making choices. How does it make you feel to have so many choices? What factors go into your decision to walk or drive a car? Buy one product over another? What would make you change your mind? What makes one choice better than another? Evaluate the purchasing practices at your school. Conduct an environmental audit to see what kinds of purchasing decisions are being made, from the type of energy, paper, food, other products and services. What changes might be made?
- 11. Ask student to list their top 10 values on a piece of paper privately. Then ask them to reduce the number to eight and then to five. Give them ample time to think and consider between each reduction. Then, ask for several volunteers to share their lists with the class or write them on the board. Are they the same? Different? What do they discover? Ask them if they think they could agree on a class list of top ten values. What type of discussion would that take? What are some of the effects of different values in the real world? How do people reconcile their different values? How do our values and priorities have an effect on decisions related to climate change - locally, at the state level, nationally and globally?

TEACHER NOTE

www.writingexplained.org/grammar-dictionary/tone



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VOCABULARY FOR ALL EDUCATION MATERIALS

Terms and definitions for *An Inconvenient Sequel: Truth to Power* watch kit, Truth in 10 slide presentation, Lesson Plans and Truth to Power School Climate Solutions Challenge.

atmosphere	green energy	pollution
battery storage	greenhouse gases	poverty
carbon dioxide	habitat loss	renewable resources
clean energy solutions	heat exhaustion	scientific community
climate change	heat stroke	sea level rise
climate refugees	heat trapping gases	solar energy
COP21	high tide	solar radiation
crystalline silicon solar cells	ice mass	statistically significant
drought	ice melt	stop gap measures
electric vehicles (EVs)	ice sheet	storm surge
electricity grid	infectious disease	stratosphere
EPA	infrared radiation	sustainable development
extreme weather events	IPCC	Sustainable Development Goals
financial assets	LED lights	troposphere
flood	mass extinction	water cycle
food shortage	NASA	water shortage
fossil fuels	NOAA	waterborne disease
glacier	ocean current	wildfire
global ocean heat	pandemic	wildfire season
global surface temperature	Paris Climate Accord	wind energy
global warming	People's Climate March	World Economic Forum