



CLIMATE LITERACY LESSONS FOR 9-12

Subject	Resources
ELA	Effective Speech Writing (90 mins) - Learn effective strategies for talking about climate change, then write and present a short speech. https://bit.ly/ClimateHSELA3 
History and Social Science	<i>Climate Change is Exposing the Racism Behind an Oregon Water War</i> (Video - 26 mins) https://bit.ly/ClimateHSHSS2 
Math CA Math Framework	Students interpret graphical data from the Yale Program on Climate Change's Six Americas Super Short Survey and answer questions about the info (30 mins) https://bit.ly/ClimateHSMath1



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	<u>Climate Dashboard</u> - This interactive resource allows students to explore graphs and maps of New Jersey's historical and projected weather conditions, from 2000 to the year 2100 https://bit.ly/ClimateHSMath2
P.E.	Podcast discussing how traveling for sports affects the climate & ways to make sports events more sustainable (29 mins) https://bit.ly/ClimateHSPE2



Subject	Resources
Science	<u>Climate Impacts on Crops</u> (Video, planting seed exercise, monitoring growth under different conditions) https://bit.ly/CLimateHSScience1  <u>Climate, Weather and Trees</u> This resource provides a deeper understanding of the impact of climate variability on maple syrup production. Students learn how to analyze weather data and show trends in different spatial scales. https://bit.ly/ClimateMSScience1  <u>Gaming and Climate Change</u> - Students explore the role of video games in bringing awareness to climate change and evaluate or design a climate change video game (70 mins) Computer Science https://bit.ly/ClimateHSScience3



Subject	Resources
	“Two Decades of Fire-Driven Loss In Unprecedented Detail” - Article presenting global study on forest fires and the resulting tree cover loss over the last twenty years (8 min read) https://bit.ly/ClimateHSScience4
STEAM	Climate Change: Do Corporations Have an Obligation to Share Their Research Findings for the Public Good? Media literacy activity in which students analyze two web video clips for conflicting perspectives on Exxon's research into climate change and its responsibility to release its findings to the public



Subject	Resources
	https://bit.ly/ClimateHSSTEAM1  <u>National Security and Climate Change</u> Students will learn about the many ways climate change affects national security, interpret maps, explore case studies all over the United States, and investigate adaptation solutions identified by the IPCC https://bit.ly/ClimateHSSTEAM2 
	<i>Transforming Human Poop Into Eco-Friendly Fertilizer</i> - Nat Geo (Video - 3 mins) https://bit.ly/ClimateHSSTEAM3



Subject	Resources
	 NATIONAL GEOGRAPHIC
ALL	Professional Engineers in California Government - VIDEOS 1) <i>The Next Frontier - Engineering the Golden Age of Green</i> (Video - 56 mins) Look at technologies and policies that address the serious problem of excessive carbon dioxide emissions and our dangerous dependence on fossil fuels - different energy sources pros and cons https://youtu.be/-3fFYkrlk4Y?si=iJ6aMtWwJC5GDpCm  2) <i>We've got the Power</i> (Video - 56 mins) Extension of The Next Frontier video, highlighting newer-age renewable energy sources and the pros and cons We've Got the Power Presented by PECG - YouTube



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ALL	<i>Climate of Doubt</i> (Video - 53 mins) PBS video about why/how climate change became a polarizing and political issue, great for HS English, Government, or science classes https://www.pbs.org/wgbh/frontline/documentary/climate-of-doubt/ 
ALL	En-ROADS - MIT's Climate Impact simulator This tool allows users to control a range of variables that impact climate change while projecting long term impacts. Below is a link to a guided assignment that could be used with students. Assignment: En-ROADS-Short-Student-Assignment-v12.pdf (climateinteractive.org)



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ALL 	Why Healthy Air Matters High School Air Quality Education Program (WHAM) - South Coast AQMD's high school air quality education program https://www.aqmd.gov/home/research/students-teachers
ALL	The California Regional Environmental Education Community (CREEC) Network is a program of the California Department of Education. The CREEC Network fosters regional partnerships throughout the state of California to promote environmental education and environmental literacy by providing teachers with access to high quality professional learning opportunities and education resources. https://www.creec.org/Home/Region/11 - Los Angeles County 



Subject	Resources
ALL	Guided by California's Environmental Principles and Concepts, the Education and the Environment Initiative (EEI) Curriculum consists of 85 engaging units that address core academic standards in science, history-social science, and English language arts. https://tenstrands.org/eeicurriculum/curriculum/ 
ALL	<u>12 Key Indicators of Climate Change</u> The National Science Foundation and NBC Learn have partnered to create Changing Planet, a series of 13 videos and associated lesson plans about our planet's changing climate. https://www.windows2universe.org/earth/changing_planet/changing_planet.html&lang=en 
STEM	Dept. of Energy STEM Resources for K-12 Educators https://www.energy.gov/doe-stem/search-doe-stem-resources?keywords=&Audience=High+School+Students



Subject	Resources
	
ALL	Our Climate Our Future is a collection of educational resources on climate science, climate justice, and climate solutions. Check out our collection lesson plans, discussion guides and now Kahoots! that accompany our videos. Each resource is aligned with Next Generation Science Standards (NGSS) and explores a particular aspect of climate science, justice, impacts and solutions. Resources are designed for high school grade levels, but also adaptable for middle school grades as well as informal education. https://ourclimateourfuture.org/resources/ 
ALL	EPA website provides K-12 students and educators with access to quality homework resources, lesson plans and project ideas for learning and teaching about the environment. Environmental education (EE) is a multi-disciplinary approach to learning about environmental issues that enhances knowledge, builds critical thinking skills, and helps students make informed and responsible decisions.



Subject	Resources
	https://www.epa.gov/students
ALL	Heal the Bay and Surfrider Foundation - Local beach cleanup events and teaching resources Heal the Bay - Ocean & Watershed Protection in Los Angeles County LA Home Page (surfrider.org) Heal the Bay
ALL	Comprehensive list of Solutions and Challenges that address the climate crisis and the regeneration of planetary ecosystems. Each Nexus entry explores what can be done on all levels of agency, including individual, community, classroom, city, company, and government. For each topic, they curate organizations that are actively engaged, describe actions that can be taken, link to educational opportunities, and provide examples of transformation. Welcome to Regeneration Project Regeneration



Subject	Resources
	
ALL	Resources and lesson plans for digging into data on everything from CO2 emissions to population density, analyzing environmental and ecological systems, and understanding renewable energy and conservation. With these resources, students can reckon with the realities of climate change and feel like a better world is possible. Climate Change Resources for Students and Teachers Common Sense Education 
ALL	<u>Climate Change Education and Sustainability</u> - Comprehensive lesson plan collection is designed to support educators and parents in guiding preK-12 students through the complexities of climate change, a subject that young people are increasingly leading discussions on. These resources aim to address key questions such as the difference between weather and climate, their impacts on humanity and the environment, and the actionable steps that can be taken to mitigate climate change. Climate Change Education Share My Lesson



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ALL	CA Climate Corp - hosts volunteer events around CA and locally. Also includes Climate action resources for everyday sustainable choices https://www.californiavolunteers.ca.gov/california-climate-action-corps-community-climate-action-days/ https://www.californiavolunteers.ca.gov/10-ways-to-take-climate-action-from-home/ 
ALL	Free Climate Change Presentations by Trained Speakers https://www.laclimatereality.org/ 

