

Week 1	Introduction to the plastic cycle, its impacts and Break Free From Plastic Pollution Act (BFFPP act)
Week 2	Recycling Myths
Week 3	False Solutions
Week 4	Solutions
Week 5	What Can I Do & Break Free From Plastic Pollution, BFFPP

JULY Week 1		Introduction to the plastic cycle, its impacts and Break Free From Plastic Pollution Act (BFFPP act)	
Day:			
1.	Video, Plastic Free July 1:12min (>12 and up) (Youth Friendly)	Introduces Plastic Free July	Location: https://www.plasticfreejuly.org/
1.	Video 2:05 min: Humanity's Impact - How many plastic bottles do we produce? (>12 and up) (Youth Friendly)	An animated video demonstrating the amount of plastic bottles uses.	https://www.youtube.com/watch?v=M1_zb10euFo&t=1s
2.	Film 5:12 min: "Not Disposable" (12 and up) (Youth Friendly)	The end of the plastic pollution story is only the beginning. Plastic pollutes across the entire plastics lifecycle, and a global movement is rising up for justice.	https://only.one/watch/not-disposable
2.	Video 5:40 min. Waste Pickers (16 yr. and up)	Meet waste pickers around the world as they conduct a global brand audit and identify problematic materials and top corporate polluters.	https://only.one/watch/not-disposable-waste-pickers
3.	Video 4:05 min: Breath This Air . Peak Plastic foundation film. (>16 and up)	The petrochemical industry and the pollution it creates disproportionately harms people of color and low-income communities. The need for a comprehensive and systemic policy to address the plastics crisis has never been greater.	https://youtu.be/HwVToh8hKfK
4.	Website: Break Free From Plastic Pollution Act (BFFPP act) (>16 and up)	The Direct Website to learn everything about the Break Free From Plastic Pollution Act (BFFPP act)	https://www.breakfreefromplastic.org/pollution-act/
4.	Video 2 min. BFFPP, Break Free From Plastic Pollution Act Introduction (>12 and up) (Youth Friendly)	In introduction to the legislative goals of the Break Free From Plastic Pollution Act	https://www.breakfreefromplastic.org/about/

Week 2		Recycling Myths	
5.	Video 8:06 min. PBS Why your recyclables might have no place to go. (All Ages)	Learn where your recycling goes.	https://youtu.be/UAwCK--pmZ0
6.	Video: 20:31 min. Tracking your plastic: Exposing recycling myths (Marketplace) (All Ages)	Marketplace journalists go undercover overseas and pose as recycling brokers to expose the lucrative plastic recycling business. We reveal that Malaysian companies are willing to break the law to buy Canadian plastic and show how some of it is dumped and burned in illegal landfills, where the toxic fumes and run-off appear to be making people sick. Back in Canada, we buy nine tonnes of plastic and secretly track where big companies are taking it. Will it actually get recycled?	https://www.youtube.com/watch?v=c8aVYb-a7Uw
7.	Video: 8:44min. Plastic Recycling is an Actual Scam Climate Town (>12 and up) (Youth Friendly)	A good, easy, comprehensive look at the history of plastics making connection between fossil fuels and recycling history. Uses some sarcastic comedy.	https://www.youtube.com/watch?v=PJnJ8mK3Q3g
8.	Video: 14:07 min. Should I Stop Recycling? One Small Step (>12 and up) (Youth Friendly)	The news keeps telling us that our recycling system isn't working — and even One Small Step host Lucy Biggers is starting to have her doubts. So we asked the experts: Is recycling still worth it?	https://www.youtube.com/watch?v=p4evwss9NxA
9.	Video: 12:59 min. The One True Solution to Plastic Pollution Wellsley Brown TEDxMidAtlantic (>12 and up)	Companies have long touted recycling as the solution to the plastics crisis, putting the responsibility on individuals to reverse it. But the truth is there's only one way to tackle a problem this massive — and it requires immediate and drastic action from companies, not consumers. Wellsley Brown — plastics campaign associate for Oceana, the largest international ocean advocacy organization — reveals the secrets behind plastic pollution and the one true way to prevent it. As a campaign associate for Oceana, Wellsley is primarily focused on helping build the technical foundation for the organization's plastics campaign. She spends most of her days immersed in the ongoing science and the political and corporate developments around plastic pollution. A graduate of the University of Miami, Wellsley holds degrees in marine science and biology.	https://www.youtube.com/watch?v=JU4n1_3sBTs
10.	Film, 45.59min. Dirty Business: what really happens to your recycling (>12yr. old)	Thousands of tons of plastic scrap collected for recycling from British households have been transported and dumped on sites across the world. We follow the trail of the UK's plastic waste through the country and around the world. Can Britain cope as the largest importer of our recycling shuts the door?	https://www.youtube.com/watch?v=oRQLiXLAIU
11.	Video: 15:25 min. How Gasification Turns Waste Into Energy (14 and up)	Turning waste into energy has usually meant incineration - that is, burning our trash. But this method has major environmental drawbacks. Gasification could be a better alternative. It's an	https://www.youtube.com/watch?v=zm0jsIIE1kk

		<p>old technology that proponents hope to repurpose as a cleaner and more economical waste-to-energy solution, and now a number of companies in this space say they're on the verge of commercialization and expansion. We produce over 2 billion tons of waste per year, a number that's expected to grow by 70% by 2050. We've long sought ways to turn all this waste into energy, but this has usually meant incineration - that is, burning our trash - a method that many environmentalists say is far too polluting. A better solution may lie in gasification, an old technology that advocates are trying to repurpose as a way to deal with our waste. Gasification companies don't burn trash, instead they turn it into a synthetic gas, in a process they say is both economical and eco-friendly. This synthetic gas can then be converted into a wide variety of end products like electricity, diesel fuel, hydrogen fuel, or ethanol, depending on what's most valuable in any given market. While in the past, gasification companies have struggled to scale-up and meet their energy production targets, now companies like Sierra Energy, Enerkem and Plasco say they're ready to commercialize and expand.</p>	
Week 3		False Solutions	
12.	<p>Video: 13.35 min. Can Chemical Recycling Solve The World's Plastic Problem? (>14 and up)</p>	<p>Plastics recycling is failing, and the plastics industry is betting big on a technology called chemical recycling to save it. This tech can supposedly convert any type of used plastic into plastic that's as good as new. But skepticism abounds.</p>	<p>https://www.youtube.com/watch?v=LPIlpwMuV9Y</p>
	<p>Video 15:19 min. Can These Companies Solve The Plastic Waste Problem? (>14 and up)</p>	<p>Plastics are useful. They're used to help make lifesaving medical supplies, lightweight, fuel-efficient car parts, and insulation for our homes. But nearly half of all plastic produced goes towards single-use items such as bags, straws, utensils and takeout containers. Since the 1950s, humans have produced about 8.3 billion metric tons of plastic. Every year, 8 million metric tons end up in the ocean. Globally, only 9% of plastics are recycled. As the waste piles up, there's a growing demand for alternatives. There's a number of companies trying to develop cost-efficient and eco-friendly substitutes, from mushroom packaging to advanced fibers and plastic-free online shopping. But it may take serious legislative efforts to incentivize adoption and slow the rise of the industry overall. Video 15:19 min. Can These Companies Solve The Plastic Waste Problem?</p>	<p>https://www.youtube.com/watch?v=fjHW5kBvonY</p>

13.	Video: 13.35 min. Can Chemical Recycling Solve The World's Plastic Problem? (>14 and up)	Plastics recycling is failing, and the plastics industry is betting big on a technology called chemical recycling to save it. This tech can supposedly convert any type of used plastic into plastic that's as good as new. But skepticism abounds.	https://www.youtube.com/watch?v=LPIlpwMuV9Y
14.	Video 2:04 min. The Plastic Mining Cooperation: Let's start plastic recycling on islands. (>12 and up)	<p>Islands are the globe's barometers of environmental changes. They are affected by sea level rise, ocean acidification, but especially by plastic pollution. A combination of poor waste management, a waste-intensive tourism industry, and a plastic marine debris that wash ashore expose islands to large concentrations of plastic waste and litter. This negatively influences both tourism and fisheries as their main sources of income. Plastic Mining Cooperation offers a plastic recycling program so every island can start plastic recycling and stop plastic pollution. Together with local governments, environmental organizations and businesses we make recycling possible in 3 years. This program is a package that consists of: (1) an awareness program (2) an industrial mobile recycling machine (3) access to our trading platform and (4) access to our monitoring systems and data Our program is based on a circular economic model that provides economic growth by stopping plastic from leaking into our environment. Let's start plastic recycling on islands. No time to waste!</p> <p>Who is created this “advertisement” that leads us to think consumer recycling is the solution? Why is this not a solution? (Refer to one of the major goals of BFFPP act)</p>	https://www.youtube.com/watch?v=wf_ISkN00Y4
15.	8:27 min. Can Everything Be Recycled? Welcome to TerraCycle One Small Step NowThis (Youth Friendly) (>12 and up)	<ul style="list-style-type: none"> • Why is this not a solution? • Not realistic to pay to ship my entire “recycle bin” full of waste every week. • Cost to ship it contribute to CO2 in the atmosphere and contributes to greenhouse gas. • Most products are being down cycled from original product to a different product. • Note: This company has a lawsuit against it for false business practices and claims. But how could this information be useful? 	https://www.youtube.com/watch?v=o5JqrdxnZfg

16.	Video 5:54 min. Why the world needs recycled plastic bricks (and how to make one yourself!) (>12 and up)	<p>Possible problems with this “solution”</p> <ul style="list-style-type: none"> ➤ Plastics are burned and create toxics. ➤ When plastic is burned, it releases dangerous chemicals such as hydrochloric acid, sulfur dioxide, dioxins, furans and heavy metals, as well as particulates. These emissions are known to cause respiratory ailments and stress human immune systems, and they're potentially carcinogenic. In general inhalation of plastic fumes can lead to an increased risk of heart disease, respiratory side effects such as aggravated asthma, skin irritations, headaches, nervous system damage, and other organ damage such as the kidney, liver, and reproductive system. https://engineering.mit.edu/engage/ask-an-engineer/can-we-safely-burn-used-plastic-objects-in-a-domestic-fireplace/ ➤ The burning of plastics releases toxic gases like dioxins, furans, mercury, and polychlorinated biphenyls (better known as BCPs) into the atmosphere, and poses a threat to vegetation, and human and animal health. ... Burning plastic also releases black carbon (soot), which contributes to climate change and air pollution. May 2, 2019 ➤ https://www.unep.org/news-and-stories/story/plastic-bags-bans-can-help-reduce-toxic-fumes ➤ Does not encourage less consumption. ➤ Does not encourage Producer Responsibility ➤ Other Pros and Cons?.... 	https://www.youtube.com/watch?v=Aqn1PYbkgf0
17.	Video: 2:20min. Global Alliance for Incinerator Alternatives (GAIA) (>14 and up)	<ul style="list-style-type: none"> • Imagine if we could solve plastic pollution with one miracle technology. Sound too good to be true? That’s because it is. Here are 5 things plastic polluters don’t want you to know about chemical “recycling.” • Produced in collaboration with Changing Markets Foundation and Zero Waste Europe. Animation by Miritte Ben Yitzchak. 	https://www.no-burn.org/5things/
18.	Website Article: False Solutions (Global Alliance for Incinerator Alternatives (GAIA)) (>14 and up)	<ul style="list-style-type: none"> • As the global plastic pollution crisis continues to grow, so does industry hype around techno-fixes, including waste-to-energy incineration and chemical processing of plastic waste. Such downstream approaches create more problems and distract from the real imperatives, however, by emitting more pollutants and perpetuating overproduction 	https://www.no-burn.org/false-solutions/

		of plastic. Real solutions to the plastic pollution crisis lie in:	
19.	Website Resource: Chemical Recycling resources (Global Alliance for Incinerator Alternatives (GAIA) (>14 and up)	Website pdf on why chemical recycling is not the answer to our plastic dilemma.	https://www.no-burn.org/chemical-recycling-resources/
Week 4		Solutions	
20.	Video: 30:08 min. How we will rid the oceans of plastic - Boyan Slat LIVE The Ocean (>12 and up)	Collecting Ocean Plastic Gyres In May 11th 2017, Boyan Slat, Founder and CEO of The Ocean Cleanup, the Dutch foundation developing advanced technologies to rid the oceans of plastic, announced a design breakthrough allowing for the cleanup of half the Great Pacific Garbage Patch in just 5 years. The main idea behind The Ocean Cleanup is to let the ocean currents do the work. An installation of U-shaped screens channels floating plastic to a central point. The concentrated plastic can then be extracted and shipped to shore for recycling into durable products. The improvements involve the introduction of a mobile, or drifting system. Rather than fixing the floating screens to the seabed at great depths, The Ocean Cleanup will apply sea anchors to ensure the floating screens move slower than the plastic. Rather than one massive barrier, the improved, modular cleanup system consists of a fleet of screens.	https://www.youtube.com/watch?v=du5d5PUrH0I
21.	Video: 11:30min. Inside the Lab That Could Solve the World's Plastics Problem (Unsolvable: Episode 1)	Plastics are everywhere in our lives, but those bottles, utensils, and electronics can take hundreds of years to decompose. Since the material is too useful to abandon, we're faced with two problems: how can we develop environmentally friendly products, and how do we clean up the plastics we've already discarded? We travel to a materials lab in Minnesota and a recycling plant in California to find the answers in this episode of Unsolvable.	https://www.youtube.com/watch?v=ergwipqLwqY
22.	Have Australian scientists discovered a recycling solution to our plastic. (>12 and up) <i>Licella co.</i>	If pilot program ramps up it can recycle 20,000 tons BUT Alstralian use 3.5 million tons produced. So they would need 30+ plants. Government needs to support entire investment chain (not grants or subsidies) But need to address over consumption.	
23.	ZUME - Hyped Pizza Robot Company Is Now Tackling Our Plastic Waste Problem- Backyard compostable packaging! (>12 and up)	Backyard compostable packaging! Softbank-funded Zume, formerly a robotic pizza start-up, is now making compostable packaging out of agricultural waste, creating a closed-loop system for customers. The \$274.2 billion-dollar sustainable packaging market is expected to grow to \$413.8 billion by	https://www.youtube.com/watch?v=VpD_gPWOz3o

		2027, according to Grand View Research. Zume has re-commissioned its fleet of robots to compete in this growing industry. CNBC got a first look inside Zume's packaging plant, and sat down with Zume Chairman and CEO Alex Garden to learn how compostable products could help solve the plastic waste problem.	
24.	15:21 min. Video: Why Demand For Seaweed Is About To Boom (>12 and up)	Seaweed is used in more than just sushi. It can be found in almond milk, baby food and lotion. Kelp is used in medicine, animal feed, fertilizer and even as a biofuel. That's why the commercial seaweed market size could surpass \$85 billion by 2026, according to Global Market Insights. Seaweed farmer Bren Smith says all one needs to start in the business is \$20,000, twenty acres and a boat, and that investment in a single seaweed farm can net up to \$90,000 to \$120,000 per year. Here's why the global demand in seaweed is expected to boom in the coming years.	https://www.youtube.com/watch?v=qYnGAAU-05Y
25.	12:25 min. Video: Could Plastic-Eating Bacteria Save The Planet? (>10 and up)	Plastic is one of Earth's biggest problems. Its discovery transformed everyday life, but its failure to degrade is choking the planet. Recent discoveries, however, have given scientists hope that enzymes from bacteria might help fight plastic waste and even make future products less harmful.	https://www.youtube.com/watch?v=DDhPuyrSq3E
26.	16:04 min. Video: Why the United States Is Turning To Recycling Robots (>10 and up)	For decades, the United States and other wealthy countries have been dependent on China to buy and process almost half of the world's plastic waste. Now, stricter recycling standards in China mean it's cheaper for some US cities to simply send recyclables to the dump rather than pay a higher fee to process them. That's why a number of researchers and tech companies are working on robots to make US recycling more efficient	https://www.youtube.com/watch?v=1mxaN_xqQh4
27.	10:08 min. Video: 6 Roof and Pavement Tiles from Plastic Waste (>16 and up)	Plastic waste is becoming a scourge of the earth. Lack of recycling has led to massive islands being created in the ocean made of plastic. New eco friendly plastic & sand tiled houses are starting to be a common sight in Africa. Containers, bags, soda holders and all other types of plastic get wrapped around sea life or ingested leading to their demise. A few individuals though have taking it upon themselves to create machines and processes to create something useful from waste plastic. On this episode we'll how to to recycle waste plastic into paving tiles from 6 different sources. Pavement tiles made from plastic waste only benefit everyone and have no downside to them. Whether it's roof tiles or pavements made from plastic waste these processes will remove plastic from the environment.	https://www.youtube.com/watch?v=ckWqR1JD158

28.	Video: 14:46 min. A radical plan to end plastic waste Andrew Forrest, TEDx (>10 and up)	Plastic is an incredible substance for the economy -- and the worst substance possible for the environment, says entrepreneur Andrew Forrest. In a conversation meant to spark debate, Forrest and head of TED Chris Anderson discuss an ambitious plan to get the world's biggest companies to fund an environmental revolution -- and transition industry towards getting all of its plastic from recycled materials, not from fossil fuels.	https://www.youtube.com/watch?v=I5g9-4fx60A
29.	Video: 18:39 min. Plastic Pollution Needs Bigger Solutions Chris Reeves TEDxNewport, (>10 and up)	His talk, "Plastic Pollution Needs Bigger Solutions", exposes the actual scale of oceanic contamination and makes the case for global, systemic changes to elicit any tangible improvements. Chris is a trained marine ecologist, writer, and educator who was born and raised in Southern California. He has spent the last 15 years interpreting marine science research and developing interactive teaching programs that have enlightened a wide range of audiences, from elementary students to senior citizens. He has a BS in Ecology and Evolutionary Biology from UC Santa Cruz and he's currently earning a master's degree from Johns Hopkins University in science-writing. For over 5 years, he was the Visitor Programs Manager for the Seymour Marine Discovery Center at Long Marine Laboratory. In 2014 he moved to Newport with his wife, as her marine science career brought her closer to the Atlantic. Chris also works on Schooner Madeleine and is a scientific SCUBA diver who previously created courses on reef biology and ecology for use in Dive Master training.	https://www.youtube.com/watch?v=g11tJ6BMuQw
30.	Maxine Bédat Urges the Fashion Industry to Make a Change Now, Not in 2030	Instagram site to buy clothes by people you can see FASHION REVOLUTION campaign "I made your clothes"	https://www.instagram.com/explore/tags/imadeyourclothes/
Week 5		What Can I Do	
31.	TLC Foundation, Move Past Plastic (MPP) campaign.	Become a member to learn about how you can join others to move past single use plastics. Become a member and go to the "What Can I Do" tab. Find additional Books, Article and much more.	www.tlceducation.info
31.	Beyond Plastic	Informative Resources and things you can do from signing on to the BFFPP Act, Writing and calling you legislators and writing a letter to the editor.	https://www.beyondplastics.org/
31.	Film: 2:22 min. Plastic Pollution Coalition	Watch this original video <i>Open Your Eyes</i> narrated by Jeff Bridges to see how you can help to stop plastic pollution.	https://www.plasticpollutioncoalition.org/