CLASS : 4C
SUMMER HOMEWORK

Read “The Lord of the Flies” by William Golding
https://cdn.preterhuman.net/texts/literature/books_in_PDF/Lord%20of%20the%20Flies.pdf

Sum up the content of each of the 4 articles and 1 interview, in each summery don’t use more than 350 words, for each write a glossary of new words. Reply to the journalistic questions: Who? What about ?Where? When ? Why?

1.What to Know About China’s Halt of Rare Earth Exports

Since early April, China has stopped almost all shipments of critical minerals that are needed for cars, robots, wind turbines, jet fighters and other technologies.

A truck hauling material out of a mining valley for heavy rare earth metals in April on the outskirts of Longnan, China.Credit...Keith Bradsher/The New York Times

By Keith Bradsher
Keith Bradsher, who has covered the rare earths industry since 2009, reported from Beijing and Longnan, China.
June 3, 2025
The DealBook Newsletter Our columnist Andrew Ross Sorkin and his Times colleagues help you make sense of major business and policy headlines — and the power-brokers who shape them. Get it sent to your inbox.

China has suspended almost all exports since April 4 of seven kinds of rare earth metals, as well as very powerful magnets made from three of them. The halt has caused increasingly severe shortages that threaten to close many factories in the United States and Europe.

Why are these metals so needed, why has China stopped exporting them and, crucially, what happens next?

What are rare earths?

There are 17 types of metals known as rare earths, which are found near the bottom of the periodic table. Most of them are not actually very rare — they are all over the world, though seldom in large enough ore deposits to be mined efficiently.
They are called rare because it is very difficult to separate them from one another. Breaking the chemical bonds that bind them in nature can require more than 100 stages of processing and large quantities of powerful acids.
Image

A close-up of a gram of terbium.Credit...Romain Rabier/Hans Lucas, via Reuters

Why does China control so much of the rare earth supply?

China mines 70 percent of the world’s rare earths. Myanmar, Australia and the United States mine most of the rest. But China does the chemical processing for 90 percent of the world’s rare earths because it refines all of its own ore and also practically all of Myanmar’s and nearly half of U.S. production.

China’s dominance is greatest for seven rare earths that it has mostly stopped exporting since early April: dysprosium, gadolinium, lutetium, samarium, scandium, terbium and yttrium. These are mined almost exclusively in China and Myanmar and are among the hardest to separate chemically. For metals like dysprosium and terbium, so-called heavy rare earths that are used for heat-resistant magnets, China’s refineries produce up to 99.9 percent of the world’s supply.

China has some of the world's best deposits of heavy rare earths. These are found in a band of ore that is particularly rich in a valley near Longnan in south-central China, extending west into northernmost Myanmar.
Editors' Picks

A mine for heavy rare earth metals in a valley of Longnan County, in southern China's Jiangxi Province.Credit...Keith Bradsher/The New York Times

What does heavy rare earth mining look like?

Near Longnan, miners use dirt bikes to carry sacks of ammonium sulfate up to the crests of the low hills flanking the valley. Ammonium sulfate, a cream-colored powder, is a fertilizer when diluted with plenty of water but can be toxic in high concentrations. The miners mix concentrated batches with only a little water and dump it into simple holes dug near the tops of the hills.

The ammonium sulfate dissolves the rare earths inside the clay hills and seeps out as a slurry near their base. During a recent visit to the valley without the knowledge of local authorities, I heard a diesel generator chugging as it pumped the liquid through plastic tubes to simple pits.

Oxalic acid was added to the slurry there, causing the rare earths to form faintly pink crystals and sink to the bottom of the ponds.

The liquid is pumped out of the pits and into a bright orange, mysteriously bubbling creek. The crystals are then dried and shoveled into industrial sacks the size of washing machines and shipped on freight trucks to Longnan's blocks-long rare earth processing factories.

Chinese organized crime syndicates with a reputation for violence ran the valley until the end of 2010, when the premier at the time, Wen Jiabao, ordered government forces to storm the valley and seize the mines.
Image

Visitors inside an electric car at the Shanghai Auto Show in April.Credit...Andrea Verdelli for The New York Times

What's so important about the seven rare earths that China controls?

The main consumer of these seven metals is the car industry, which uses a lot of heat-resistant rare earth magnets. But these elements are also needed by manufacturers of semiconductors, medical imaging chemicals, robots, offshore wind turbines and a wide range of military hardware.

Rare earth magnets are up to 15 times as powerful as iron magnets of the same weight. They are essential for the dozens of small electric motors found in today's cars. The motors for brakes, steering and many other systems all rely on rare earth magnets. A single luxury car seat may include 12 rare earth magnets for the motors that adjust it. Electric cars have additional rare earth magnets for the motors that turn their wheels.

China makes about 90 percent of the world's supply of rare earth magnets.

If the supplier of parts for one of these systems runs out of magnets, an entire car assembly plant may have to shut down and thousands of people may be temporarily laid off. Last week, Ford temporarily closed its Ford Explorer sport utility vehicle factory in Chicago for a week for lack of magnets.

Most rare earth magnets are made from two light rare earth elements, neodymium and praseodymium, that China continues to export and that are also available in much smaller quantities from Australia and the United States.

But those rare earth magnets can lose much of their magnetism if they are exposed to heat or a strong electrical field. To prevent this, small amounts of the heavy rare earths dysprosium or terbium can be added during production.

Gasoline engines and many electric motors produce considerable heat, so the car industry mostly buys rare earth magnets with dysprosium or terbium included. Right now, China is selling almost none of these heat-resistant magnets.

The world's magnet industry produces nearly 200,000 tons a year of rare earth magnets with dysprosium or terbium. Another 80,000 tons a year are made without these metals for less demanding applications, like purse clasps.

Image

A Lynas processing plant in Kalgoorlie, Australia, last year.Credit...Carla Gottgens/Bloomberg

Has China halted rare earth exports before?

Yes, China halted exports of all rare earths to Japan for two months in 2010 during a territorial dispute, scaring Japanese manufacturers, which nearly ran out of supplies. Sumitomo, a Japanese trading group, and the Japanese government subsequently helped Lynas, an Australian company, build more mining capacity in Australia and processing capacity in Malaysia, so that Japan would have an alternative to China.

Many Japanese companies have kept very large stockpiles ever since, holding as much as 18 months' supply of dysprosium in the semiconductor industry, for example. Some Japanese automakers, like Honda and Nissan, recently began paying extra to buy costlier heat-resistant rare earth magnets that do not require dysprosium, even as automakers elsewhere have been reluctant to pay for the alternative technology.

South Korea's big electronics companies do not appear to have accumulated stockpiles. But after China signaled last December that it might restrict rare earth exports, South Korea imported large quantities of dysprosium from China in January and February, China's customs records show.

The United States and Europe tried to set up their own rare earth metals and magnet industries after the 2010 embargo. But they face high costs for environmental compliance and must pay large salaries to attract chemical engineers. China has 39 universities with rare earths training programs while the United States has none.

Image

A U.S. Air Force F-35 fighter jet during a NATO exercise in Leeuwarden, the Netherlands, in April.Credit...John Thys/Agence France-Presse — Getty Images

Why did China suspend exports this time?

The Chinese government has said repeatedly that it suspended exports of the seven rare earths, and magnets made from them, because they are "dual-use items" with both military and civilian applications.

The most heat-resistant magnets, for applications that may be exposed to temperatures in the hundreds of degrees Celsius, use samarium, not dysprosium or terbium. Samarium, which China stopped exporting this spring, is needed for the guidance systems for intercontinental ballistic missiles. An F-35 fighter jet has about 25 pounds of rare earth magnets, mostly samarium-cobalt magnets.

Yttrium is used in lasers, including artillery range finders. Scandium can be combined with aluminum to make lightweight aircraft parts.

The other four rare earths subject to China's new export license requirement are mostly used for civilian purposes. Military applications represent only about 5 percent of the rare earth magnet market.

The United States has contended that China's real motivation in imposing export controls has nothing to do with military applications, but was part of China's retaliation for the Trump administration's decision days earlier to impose much higher tariffs on imports from China and dozens of other countries.

Image

Treasury Secretary Scott Bessent, center left, with He Lifeng, China's vice premier for economic policy, in Geneva last month.Credit...Keystone/EDA/Martial Trezzini, via Reuters

What happens next?

China and the United States agreed on May 12 in Geneva to reduce their tariffs on each other. China also agreed to suspend the application of non-tariff measures imposed on the United States since early April.

But China has contended that the rare earth export controls apply to all countries, not just the United States. The implication, although not clearly stated by Chinese officials, is that the export halt may not qualify as a non-tariff measure imposed on the United States.

The U.S. trade representative, Jamieson Greer, and Treasury Secretary Scott Bessent reached the deal with China in Geneva. But another agency, the Commerce Department, tightened its controls the next day on Huawei's computer chips, barring Americans from buying or financing any of them. That has angered Chinese officials.

China's Ministry of Commerce has also struggled to come up with a process for issuing export licenses for rare earths, which could explain some delays. A few European companies have obtained supplies, like Volkswagen, but others have not. Shipments to Europe have been interrupted, and some factories there may have to close temporarily even though China is trying to improve relations with Europe.

Detroit automakers were approved a week ago for a few shipments but are also running short on supplies. China currently requires a separate license and elaborate paperwork for each shipment. Western businesses are urging China to approve three-month or yearlong licenses for each overseas customer to speed up the process.

2. LISTEN TO THIS INTERESTING INTERVIEW AND SUM IT UP IN 350 WORDS

https://www.nytimes.com/2025/06/03/opinion/ezra-klein-podcast-emma-ashford.html

3. Elon Musk Calls Trump Policy Bill a 'Disgusting Abomination'

The tech executive criticized the president's legislation in a series of posts on Tuesday, signaling a widening rift with Republicans.

Elon Musk lashed out on Tuesday against the far-reaching Republican bill intended to enact President Trump's domestic policy agenda, posting on X that it was a "disgusting abomination" and telling House members who voted for it: "You know you did wrong."

The tech billionaire criticized the bill, one of Mr. Trump's top priorities, in a series of about 10 posts. In them, Mr. Musk reshared commentary from lawmakers like Senators Rand Paul of Kentucky and Mike Lee of Utah, two Republicans who had sided with him in opposing the rising U.S. deficit.

"I'm sorry, but I just can't stand it anymore," Mr. Musk wrote on X. He called the domestic policy bill "massive, outrageous, pork-filled," adding that it would "massively increase the already gigantic budget deficit" and that "Congress is making America bankrupt."

He did not target any specific members of Congress, but hinted that he might support efforts to unseat those who backed the bill in the 2026 midterm elections. "In November next year, we fire all politicians who betrayed the American people," he wrote.

The blitz of messages signaled a widening rift between Mr. Musk and Mr. Trump as the tech mogul winds down his governmental role leading the Department of Government Efficiency. While the men have publicly professed continued admiration for each other, Mr. Musk's departure from Washington has appeared to liberate him from presenting a united front with the White House.

Instead, he has returned to wielding his brand of unpredictable political influence through X, the social media platform he owns. In December, before Mr. Trump's inauguration, Mr. Musk torpedoed a bipartisan spending bill with an onslaught of posts on X, including a threat to find primary challengers for Republicans who

supported it. In March, he tried unsuccessfully to sway the outcome of a Wisconsin judicial race with myriad posts in favor of the conservative candidate.

Now unshackled from loyalty to the Trump party line, Mr. Musk can again foment chaos with his X feed.

Mr. Musk, 53, has often criticized legislation, agencies and others that are against the interests of himself and his companies, which include the electric carmaker Tesla and the rocket company SpaceX. In its current form, Mr. Trump's domestic policy bill would end subsidies and tax credits meant to spur consumers to buy electric vehicles, which would have ramifications for Tesla.

The House speaker, Mike Johnson, called Mr. Musk's criticism of the domestic policy bill "very disappointing." He told reporters at the Capitol that the two spoke on Monday and that Mr. Musk "seemed to understand" the virtues of the legislation.
Editors' Picks

Mr. Musk, 53, has often criticized legislation, agencies and others that are against the interests of himself and his companies, which include the electric carmaker Tesla and the rocket company SpaceX. In its current form, Mr. Trump's domestic policy bill would end subsidies and tax credits meant to spur consumers to buy electric vehicles, which would have ramifications for Tesla.

The House speaker, Mike Johnson, called Mr. Musk's criticism of the domestic policy bill "very disappointing." He told reporters at the Capitol that the two spoke on Monday and that Mr. Musk "seemed to understand" the virtues of the legislation.
Editors' Picks

The White House and the president were caught off guard by Mr. Musk's posts, a person with knowledge of the situation said, but it's not yet clear whether Mr. Trump will return fire.

"The president already knows where Elon Musk stood on this bill," said Karoline Leavitt, the White House press secretary. "It doesn't change the president's opinion. This is one big, beautiful bill, and he's sticking to it."

A representative for Mr. Musk did not respond to requests for comment.

Mr. Trump has urged swift passage of the legislation — officially called the One Big, Beautiful Bill Act — which would slash taxes, providing the biggest savings to the wealthy, and steer more money to the military and immigration enforcement. As written, the legislation would cut health, nutrition, education and clean energy programs to cover part of the cost.

White House officials and Mr. Johnson have claimed that the bill would shrink the national debt, although the Congressional Budget Office and a number of independent analysts have estimated that the bill would increase federal deficits by well over $1 trillion, even when economic growth is factored in.

Mr. Musk posted his criticism at a critical moment for the bill, which passed the House on May 22 in the face of a strong pressure campaign by Mr. Trump. As Mr. Johnson corralled several competing Republican factions, the president summoned recalcitrant holdouts to the White House, and his staff likened Republican opposition to the bill to "the ultimate betrayal."

But Republican senators have already made clear that they plan to make changes to the bill. Fiscal conservatives, alarmed at the estimates that it would swell the national debt, have demanded further changes and cuts to Medicaid and other programs that could help rein in deficits. Mr. Trump has warned Republicans not to mess with Medicaid, a program that many of his supporters rely on.

Mr. Musk started publicly criticizing Mr. Trump's bill last week, saying on CBS News's "Sunday Morning" that he was disappointed in the legislation's size and impact on the deficit.

4. American antisemitism

Three times in as many months, people who claim to fight for Palestinian rights have attacked Jews on American soil.

Sunday's Molotov cocktail assault in Boulder followed the killing in May of two young Israeli embassy aides in Washington, D.C., and the April firebombing of the governor's mansion in Harrisburg, Pa., where Gov. Josh Shapiro and his family were celebrating Passover.

This is what a resurgence of violent antisemitism looks like.

The attacks were also acts of anti-Zionism — a clear response to the war in Gaza. There is a useful distinction between the clear bigotry of Jew hatred and the political and historical debate over Zionism — the support for a Jewish state. But, partly in response to the Oct. 7 war, the categories are collapsing. Salvos against Israel are colliding with longstanding prejudice, sometimes with deadly effect.

Today's newsletter is about that collision.

The collapse

It is a moment of despair for advocates for Palestinian rights. Many are desperate: More than 50,000 have died in Gaza, and much of the territory has been razed.

The Trump administration appears to believe any defense of Palestinian lives is evidence of Jew hatred. (As my colleague Tyler Pager put it last night, the president has lots to say about antisemitism and little to say about Jews.) It has used pro-Palestinian speech as a pretext for assaults on higher education, science funding, foreign students and immigrants.

But attacks on Jews for the actions of an Israeli government a world away are collective punishment, and collective punishment is bigotry. This was not even a question when Muslims in America were attacked as retribution for the murderous actions of Al Qaeda on 9/11.

What resistance, though, is permissible? For a story I wrote last year about when garden-variety criticism of Israel spills into antisemitism, I had fraught conversations with non-Jews and Jews, many of whom have felt frightened since Oct. 7, 2023. On campus and at protests, they hear the slogan "Globalize the Intifada," for instance. Intifada is the Arabic word for "uprising," and the term used to describe the often violent Palestinian resistance movements of the early 2000s and late 1980s.

Meanwhile, Jonathan Greenblatt, the chief executive of the Anti-Defamation League, which for a century has been patrolling the dark worlds of bigotry, told me "there is no debate": In his view, opposition to a Jewish State in the land of Jewish ancestry is antisemitism.

. 5. Why Harvard has no way out by Jess Bidgood and Michael Schmidt

The Trump administration's attempt to block international students from attending Harvard University was a sharp escalation in the showdown between the federal government and one of the nation's oldest and most powerful institutions.

It also showed how the younger side — the government — is the one with the upper hand.

Harvard has won praise for fighting back, and many legal experts believe the law is squarely on its side. But the administration holds the levers of power, and is methodically and creatively using them in a take-no-prisoners assault on the school.

To cut off the university's pipeline of international students — who make up about 27 percent of Harvard's enrollment — the government has turned to an obscure tactic it usually uses to shut down shoddy diploma mills.

"I was dumbfounded," Ted Mitchell, the president of the American Council on Education, told me. "What's becoming increasingly clear is that this administration will use any tool that it can."

A federal judge has already blocked the move for now, but my colleague Michael Schmidt, an investigative reporter who has been covering every twist in this story, tells me the damage may already be done. Today, he explained just how dire Harvard's predicament has become — and why the federal government's power over the nearly 400-year-old institution is even greater than he had appreciated.

JB: You have long covered the way Trump has used the power of the government to target his perceived enemies. How is this time different?

MS: There's been an audacity and creativity to the way that Trump has tried to use his power in the second term, and this is the latest example. Coming into this, we concentrated on his threats to lock up his enemies, like Liz Cheney or James Comey. The use of the government's power for purely political ends has manifested itself in ways that I think go beyond what we had imagined, and even beyond what Project 2025 contemplated.

Today, a judge temporarily blocked this Trump effort to bar international students from Harvard. Is that good news for Harvard? Is this over?

It's not over at all. For now, it allows foreign students to continue to attend Harvard. But what it doesn't remove is the question of what's going to happen.

If you're an international student at Harvard, are you going to be like, "OK, cool, I'll just go to school in the fall, and I'll be checking the federal docket to see if the restraining order is still in place"?

I'd imagine that for international students, this makes the prospect of attending Harvard feel deeply uncertain — even unappealing. Where would the university find itself, even if it wins?

Even if Harvard runs the table in court, it's still persona non grata with the Trump administration, and that means that it's going to continue to face investigations, including from the Justice Department and the Department of Homeland Security.

Trump has stripped extensive federal funding from Harvard. Let's say a judge gives back all of that money for this year. Half of the university's research budget comes from the federal government. Where is Harvard going to get the money in the year after that, and the year after that? If you're a researcher, do you want to be doing research at a school where your funding is in question?

Harvard finds itself in this impossible position. If it continues to fight the administration, it will continue to get hit with these extraordinary uses of federal power to punish the university.

The federal government has more levers to use against an institution like Harvard than certainly I had appreciated. If you are persona non grata with Trump, he's got you by the lapels in a way that is extraordinary. And Harvard is feeling it. What we saw yesterday is just the latest pressure point.

What's happening at Harvard behind the scenes?

Harvard officials have privately determined they are in a major, major, major crisis with very few, if any, good off ramps.

If you're a law firm and you get hit with an executive order, you can go to court and get a restraining order. You can go back to work and things are semi-normal.

Harvard is much more complicated than that.

Is there anything happening behind the scenes to de-escalate this?

Harvard's board, as far as we know, won't let the university go back to the table. The board members don't trust that you can negotiate with Trump. And the things that Trump keeps hitting Harvard with are so destructive. How could you go back to the table?

This interview was condensed and edited.