

Activity F:

The bomb factor

Teacher's Briefing

Activity F: The bomb factor game

Further notes

Plenary activity

Curriculum links

Materials for Students

Cards for nuclear weapons (two levels)

Cards against nuclear weapons (two levels)

Cards for judges (two levels)

Judge's score card

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Activity F:

The bomb factor: Activity overview

Concepts to examine

Reasons for retaining nuclear weapons, reasons for nuclear disarmament, international disarmament initiatives, morality of nuclear weapons, the nuclear industry.

Materials and space needed

Sugar paper and markers for posters, props for plays or raps. Tables for small group work and space for performance. A table is also needed for the judges' panel.

Learning outcomes

By the end of the lesson:

All students should be able to identify a reason for and a reason against nuclear weapons.

Most students will be able to identify that countries and organisations have different views on nuclear weapons and explain their own view.

Some students will be able to name and/or evaluate the different solutions to reduce the dangers surrounding nuclear weapons.

Overview

This activity will function like a television reality talent show. After a short briefing, students take on the arguments of a group or country either for the disarmament of nuclear weapons or for their retention. They convey their information to a panel of student judges in any medium they wish. The judges, and the rest of the class in a 'phone in', vote for whether they feel disarmament or retention of nuclear weapons is a better security strategy for preventing nuclear war.

Instructions

- Briefly recap any work already done on nuclear weapons. Check the students understand the meanings of terms that are often used in the debate such as 'disarmament' and 'deterrence' and the general gist of the concept (see page 42). This activity will explore views on both sides of the debate.
- Choose 3 students to be the judges (either randomly or the ones you feel would be the best in the role). Hand these students cards A, B and C which give an overview of the debate and possible solutions.
- Divide the rest of the class into an even number of small groups and hand each of them a card. Half of the cards display statements supporting the argument that nuclear weapons are needed, the others give accounts of why nuclear disarmament is a necessity. Ensure that there are an even number of groups for and against.
- Give the students 15 minutes to find a way to present who they are, what view point they are coming from and their information. This can be through making a poster and speech, doing a short play or composing a short song/rap. While the groups are doing this, the judges read through their information and share it with each other and prepare an 'opening speech' to the debate. The speech will give a summary of the views the students are about to hear and background information.
- After the speech, each group in turn presents their information to the panel of judges (and the entire class). They have two minutes to get their message across. The judges are then able to ask follow up questions from the information they have.
- The judges will then (after briefly conferring) give their judgements on what the groups have presented, and which they feel is the most persuasive, imaginative and so on. They may also comment on the content.
- The class then participates in a 'phone-in vote' as to whether they think disarmament or the retention of nuclear weapons is a better security strategy for preventing nuclear war. This can be conducted as a 'blind vote' i.e. with eyes closed.

Plenary

Discuss these questions as a class to ensure full understanding of the issues:

- Name 3 reasons why a country might want to retain nuclear weapons
- Name 3 reasons to give up nuclear weapons
- Name 3 ways a country could disarm its nuclear weapons

Activity F:

The bomb factor: further information

The notion of deterrence as security today

There are eight countries in the world today with nuclear weapons: the United States of America, Russia, the United Kingdom, France, China, Israel, India and Pakistan. North Korea claims to have nuclear weapons and has conducted five nuclear tests in 2006, 2009, 2013 and two in 2016. The reason often given for the possession and retention of these weapons is that they act as a 'deterrent'. This term is used in this case to mean that possession of these weapons will restrain another country from attacking, because they are frightened of the response that they would get. There are many ways in which individuals or countries can deter unwanted actions on the part of others, but nuclear weapons have been particularly associated with this notion of defence. Arguing along these lines, some people state that nuclear weapons are not designed to be used but only to 'deter' nuclear attack, and that continued possession of them means that they will never be used.

During the Cold War, the nuclear arsenals of the USA and the then Soviet Union grew to the point that each was capable of destroying the other – and the whole world – many times over, and this was described as Mutually Assured Destruction (MAD). There would be no advantage to be gained from attacking first – destruction was assured for both sides.

Nuclear weapons as 'usable'

In the years following the 2001 World Trade Centre attacks, the USA became more explicit about the idea of using nuclear weapons. The 2002 Nuclear Posture Review referred to nuclear weapons as part of a 'usable arsenal', and a version of its Doctrine

for Joint Nuclear Operations leaked in 2005 suggested that the USA no longer defined the deterrence notion as a policy against nuclear attacks.

Whilst some say that the possession of nuclear weapons 'deterred' war between the superpowers during the Cold War, this cannot be proven either way. It has been argued that it did not prevent war – rather it transferred the conflict to proxy wars, such as the Vietnam or Korean Wars, in which millions of people died. The possession of nuclear weapons can be seen as a form of nuclear terrorism, where countries with nuclear weapons can intimidate those without. There is also a legal angle to the notion of deterrence, as the World Court has ruled that even the threat of using nuclear weapons could be illegal. Irrespective of whether or not there is the intention to use nuclear weapons, there is always the danger that they could be launched by accident, causing a nuclear explosion, or even triggering a war.

Taking these factors together leads many to the conclusion that the only way to be safe from the danger of intentional or unintentional nuclear attack is for the weapons to be abolished.

International programmes for disarmament

There are ways that we can move towards disarmament. The longest standing legal framework is the nuclear Non-Proliferation Treaty (NPT) which entered into force in 1970 and is signed by almost all the countries of the world. This requires countries with nuclear weapons to get rid of them, and countries without them not to get them. It has been fairly successful in preventing proliferation, as relatively few states have acquired nuclear weapons since the Treaty was signed.

But it has not been successful with regard to nuclear disarmament: all the original nuclear weapons states retain their arsenals. The vast majority of states in the world would like to see NPT compliance and nuclear disarmament achieved. The NPT is reviewed every five years at international conferences. The latest review conference took place in 2015, but ended without agreement. One of the main problems was the lack of willingness on behalf of the nuclear weapon states to even consider concrete steps towards getting rid of their nuclear arms.

It is not widely known that much of the world is actually already covered by Nuclear Weapons-Free Zones, including all of the southern hemisphere. These are areas in which the stationing, testing or use of nuclear weapons is prohibited and shows how strong anti-nuclear sentiment is. Strengthening and expanding these zones helps to move towards a nuclear weapons-free world and away from the idea that weapons of mass destruction bring security.

The current situation

Frustrated by a lack of progress in international disarmament efforts, many governments are calling for a global ban on nuclear weapons. This would see nuclear weapons outlawed in the same way that treaties have banned chemical and biological weapons. There would be three stages to a global ban.

Firstly, the stigmatisation of these weapons due to the humanitarian and environmental consequences. Secondly, the ban: a global treaty to make nuclear weapons illegal. This could still be signed by countries with nuclear weapons. The final stage would be elimination, seeing the dismantling of all nuclear weapons.

In October 2016, 123 states voted in favour of the UN hosting a conference to negotiate a global ban on nuclear weapons. This is a hugely significant step in international disarmament efforts.

In April 2009, the American President Barack Obama called for a world free from nuclear weapons, saying that his country has a 'moral responsibility' to act, as it is the only country ever to have used a nuclear weapon. In a historic visit in 2016, he became the first sitting US President to visit Hiroshima. Obama has pressed to have the Comprehensive Test Ban Treaty ratified, but has been blocked by the US Senate. This would see a ban on all nuclear explosions: underground, underwater, on the Earth's surface or in the atmosphere.

In addition, the USA is working with Russia to reduce the number warheads owned by each country. In 2010, both countries signed a new treaty in which they agreed to reduce their numbers of nuclear weapons over the next decade. The New START treaty was ratified by America and Russia and came into effect in February 2011.

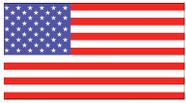
After over a decade of talks, a final deal on limiting Iran's nuclear programme was agreed in July 2015. Under the agreement, Iran will accept some restrictions in return for the easing of economic sanctions. Iran has always maintained its nuclear programme is for developing an energy source only. Some in the international community have doubted this position however, noting that the country is enriching uranium at a far higher level than is necessary for

nuclear power and believing Tehran is actually covering up the development of nuclear weapons. An official Plan of Action is now being implemented, following a deal signed with the UK, Germany, France, China, Russia and the United States.

There has been no progress however in limiting North Korea's nuclear activity. North Korea carried out two nuclear tests in 2016. The UN, as well as individual countries, imposed further sanctions in response. At North Korea's ruling party congress in 2016, leader Kim Jong-un reinforced his policy of economic development coupled with a strong nuclear programme despite international condemnation. Multinational talks aimed at ending North Korea's nuclear ambitions have been stalled for years.

The bomb factor:

Arguments for **keeping** nuclear weapons



United States of America

Card 1

Facts

- We were the first country to make a nuclear weapon.
- We are the only country to ever use a nuclear weapon in war (against Japan at the end of World War Two).
- We now have about 7,260 nuclear weapons and have tested nuclear weapons more than 1,000 times.

Beliefs

- We think nuclear weapons stop people attacking us with nuclear weapons as they are too scared we'd fire back.
- If we have nuclear weapons our friends don't need to get them as they can be protected by ours.

Future plans

- We still keep our eye on Russia and countries who might get nuclear weapons like Iran. We are agreeing with Russia to reduce the number of nuclear warheads we each have.



United Kingdom

Card 2

Facts

- We have about 215 nuclear weapons based in Scotland.
- Other countries are getting the ability to make nuclear weapons and one day terrorists might get hold of them.

Beliefs

- Even though there is no threat against us now there might be in the future and we should be prepared.
- Nuclear weapons keep us safe as no-one would want to use their nuclear weapons against us in case we fired back.
- Nuclear weapons show how important we are and provide thousands of jobs.

Future plans

- We recently voted to replace our nuclear weapons and it will cost up to £205 billion over 40 years.



The bomb factor:

Arguments for **keeping** nuclear weapons



Russia

Card 3

Facts

- We were the second country to make a nuclear weapon.
- We made them because America had nuclear weapons and when we made ours they made theirs even more powerful. The competition and fear this created was called the Arms Race, and was part of the Cold War.
- We now have about 7,500 nuclear weapons, the largest arsenal in the world.

Beliefs

- We think we need nuclear weapons as America still has them.

Future plans

- We are developing new missiles for use on new submarines.
- We are agreeing with America to reduce the number of nuclear warheads we each have.



Atomic Weapons Establishment (AWE) Management Ltd

Card 4

Facts

- We are the UK's nuclear bomb factory. We make and repair the warheads for Britain's nuclear weapons system. A warhead is the part of the missile that contains the bomb.
- We are based at Aldermaston and there has been work on nuclear weapons happening here since the 1950s. We work for the Government.

Beliefs

- We think that we help keep Britain safe because we make such powerful bombs, other countries would be afraid of attacking us in case we fired them back.
- Nuclear weapons already exist and you can't 'un-invent' them. We might as well keep on making them.

Future plans

- We have built a machine called the Orion Laser. This will let us test new nuclear weapons without actually setting them off.
- We have a contract to make nuclear bombs until 2025.



The bomb factor:

Arguments for **keeping** nuclear weapons



North Atlantic Treaty Organisation (NATO)

Card 5

Facts

- We are an international organisation of 28 different armies from across Europe and North America.
- We were formed in 1949 to defend each other but now have agreed to enter other countries together.
- We have a nuclear first strike policy. This means we are willing to be the first ones to use a nuclear weapon in an attack.

Beliefs

- We believe that we keep peace in the world as we won't fight each other.
- Countries in NATO with nuclear weapons can protect those without.

Future plans

- We will continue to keep nuclear weapons for the foreseeable future. This includes the USA keeping nuclear weapons in Europe.



India

Card 6

Facts

- We conducted our first nuclear weapons test in 1974 and nicknamed it 'Smiling Buddha'. We currently have up to 110 nuclear weapons.
- We think our bombs stop people from attacking us. We won't use the bomb against anyone first, unless they use biological or chemical weapons against us.

Beliefs

- We see Pakistan, our next-door neighbour, as the biggest threat to us. We want to make sure our bombs are as good as theirs. We are also worried about China.
- We haven't signed the NPT (a treaty against nuclear weapons) as we think it makes countries without nuclear weapons weaker. Until countries with nuclear weapons give them up, why should we sign the treaty to give up ours?

Future plans

- We are building new nuclear submarines to protect us and stop other countries from attacking us.



The bomb factor:

Arguments for **keeping** nuclear weapons



Pakistan

Card 7

Facts

- We started getting ready to build nuclear weapons in the 1970s and tested our first in 1998.
- Now we have up to 120 bombs and could make more if we wanted to. We have the fastest growing amount of nuclear bombs in the world at the moment.
- We feel threatened by our neighbour India and started developing weapons because they had them.

Beliefs

- We feel our weapons stop people attacking us with nuclear weapons and may put them off taking our land too.
- We haven't signed the NPT (a treaty against nuclear weapons) as we won't until India does.
- Some people don't think that our nuclear weapons are safe from people like terrorists who might want to steal them, but we believe that they are very secure.



Future plans

- We plan to find new and better ways to fire our weapons.
- We might agree to disarm our weapons if India does, but we think this is very unlikely in the future.

The bomb factor:

Arguments for **removing** nuclear weapons



Campaign for Nuclear Disarmament

Card 8

Facts

- We are one of the best known peace organisations in the world and have been campaigning against nuclear weapons since 1958.
- We are against nuclear weapons as they would kill millions of innocent civilians if they were ever used again. They could destroy everyone on the planet.

Beliefs

- We believe that the £205 billion to be spent on nuclear weapons would be better spent on education and healthcare.
- We believe that by saying we need nuclear weapons for our security it encourages others to get them. We should get rid of them now.



Future plans

- We will continue to campaign against nuclear weapons and campaign for a global ban. This would make nuclear weapons illegal across the world.



South Africa

Card 9

Facts

- We used to have nuclear weapons but chose to give them up.
- We began making nuclear weapons in the 1960s but gave them up in the 1990s and signed an international agreement called the nuclear Non-Proliferation Treaty.
- Other countries have also given up their nuclear weapons. Belarus, Ukraine and Kazakhstan agreed to destroy the weapons on their land or to give them back to Russia.

Beliefs

- We believe that nuclear weapons do not make countries more safe and secure, in fact it distracts from building peace.
- We believe that no-one should have nuclear weapons, it makes the world less safe.



Future plans

- We will continue to co-operate with other countries to work towards nuclear disarmament.
- We support a treaty to ban nuclear weapons across the world.

The bomb factor:

Arguments for **removing** nuclear weapons



International Campaign to Abolish Nuclear Weapons (ICAN)

Card 10

Facts

- We are a campaign started by doctors across the world who want to get rid of nuclear weapons so that the human race has a future.
- The campaign now has supporters across the world who want to see nuclear weapons banned.

Beliefs

- We believe that human beings cannot co-exist with nuclear weapons. They are the only weapons that can destroy life on the whole planet in a matter of hours.
- There should be a treaty to ban nuclear weapons across the world. All countries should sign this.
- Nuclear weapons do not keep peace. There are nearly 16,000 in the world that could destroy humankind many times over. They have not stopped any wars.



Future plans

- We will keep on campaigning for there to be a global ban and for all countries to support it.



Japan

Card 11

Facts

- We are the only country to have ever been bombed with a nuclear weapon. The cities of Hiroshima and Nagasaki were destroyed and 250,000 people were killed.
- America dropped the bombs at the end of World War Two and people are still suffering today more than 65 years later.
- Even though we have the ability to make nuclear weapons, we haven't produced any as we know the pain and suffering they can bring.

Beliefs

- Most people in Japan are against nuclear weapons as they know about the suffering of the survivors.

Future plans

- The mayors of Hiroshima and Nagasaki will continue to lead the Mayors for Peace group which brings together mayors from across the world to raise awareness about nuclear weapons.



The bomb factor:

Arguments for **removing** nuclear weapons



United Nations

Card 12

Facts

- We were formed at the end of World War Two to keep peace and security in the world.
- We are against nuclear weapons. In fact it was our first ruling to call for nuclear disarmament.
- We encourage international agreements or 'treaties' against nuclear weapons.

Beliefs

- Our former leader, Kofi Annan, made the point that the more that some countries say they need nuclear weapons for their security, the more other countries will say the same and also get them.



Future plans

- We will continue to call for countries across the world to get rid of nuclear weapons.



Global Zero

Card 13

Facts

- Global Zero means all countries in the world would have zero nuclear weapons.
- Our organisation was started in 2008. We are made up of all kinds of leaders from across the world, as well as ordinary citizens, who want to get rid of nuclear weapons and reach a 'global zero'.
- We helped make a major documentary called Countdown to Zero that shows people how dangerous nuclear weapons are.
- We are supported by US President Obama, former Russian President Medvedev, David Cameron and UN Secretary General Ban Ki-Moon.

Beliefs

- We believe the only way to get rid of the dangers of nuclear weapons is to stop countries from creating them and to get rid of the ones we already have.
- We calculate that, in the next 10 years, the world will spend US\$1 trillion on nuclear weapons. This huge amount of money should be spent on other things, like education and health care.

Future plans

- We have a step-by-step plan for helping the world get rid of all nuclear weapons in the next 20 years.
- We think if the US and Russia lead the way, other countries will follow and we can finally start making progress.



The bomb factor:

Arguments for **removing** nuclear weapons



Marshall Islands

Card 14

Facts

- We are a group of islands in the Pacific Ocean, near Australia. The United States tested nuclear bombs here more than 60 times from 1946-1958.
- Our people have suffered from cancers and other illnesses for over 65 years as a result.
- The biggest bomb ever tested by the US was on Bikini Atoll (part of our islands). It was as powerful as 1000 Hiroshima bombs. The bikini swimsuit was named after this test as the makers wanted to shock people!

Beliefs

- The US never really protected us from the effects of nuclear testing. Even though they moved us to other islands, there wasn't much to eat there and it was hard to build new houses.
- The US knew we would all be affected and we feel like human guinea pigs. After the blasts, their scientists were more interested in studying the effects of radiation on us, than providing medical care.



Future plans

- Many of our people are still fighting for compensation from the US and we will continue to campaign until everyone affected has received the money they deserve.

The bomb factor:

Judges' overview cards

A: Arguments for nuclear weapons

- Nuclear weapons act as a deterrent. They keep peace in the world because those countries with nuclear bombs will not use them against each other for fear of the other side firing back and starting a nuclear war. If that happened, both countries would be destroyed. This doctrine is called Mutually Assured Destruction (MAD).
- Nuclear weapons can be used to protect other countries that do not have nuclear weapons. This is known as a nuclear umbrella and means that fewer countries have to develop these weapons as they can rely on allies who already have them.
- You cannot 'un-invent' nuclear weapons. Now the technology has been developed, we cannot just pretend these weapons never existed.
- We face an uncertain future and do not know who is going to make nuclear weapons in the future so we should keep ours.
- Nuclear weapons can be used to threaten other countries to make them perform an action or to come to some sort of agreement for the greater good.

The bomb factor:

Judges' overview cards

B: Arguments against nuclear weapons

- Nuclear weapons do not keep the peace. Nuclear weapons have not stopped any of the wars since World War Two. Also a war was started when Iraq was suspected of having weapons of mass destruction.
- Nuclear weapons do not build trust in the world as it causes people to live in fear. Countries trust each other even less and compete to build weapons.
- Nuclear weapons do not help the biggest problems we face in the world: climate change and terrorism. In fact, the cost of the weapons can divert funding and specialists from other important projects.
- Nuclear weapons are very expensive. \$100bn is spent on them every year across the world. This is the same amount of money that is needed for everyone in the world to have clean water, enough food, basic healthcare and education.
- Nuclear weapons cannot tell the difference between military targets and ordinary people. This is against international law. A single nuclear attack could kill millions. There are nearly 16,000 nuclear weapons in the world and this could kill everyone on the planet several times over.

The bomb factor:

Judges' overview cards

C: Solutions to reduce nuclear dangers

- All countries should agree to never be the first to use a nuclear weapon. Then hopefully they will never be used.
- All countries should stick to their promises made under the NPT (Nuclear Non-Proliferation Treaty) – a treaty to stop the spread of nuclear weapons. The UK, USA, Russia, China and France promised to get rid of their weapons in return for other countries not making any.
- Nuclear Weapons Free Zones should be expanded to cover the whole planet. These are areas of the planet where the deployment or testing of nuclear weapons is banned. They currently cover almost the entire southern hemisphere.
- Countries that have nuclear weapons should promise not to make new ones. The development of new bombs can lead to the proliferation (spread) of weapons and competition between countries.
- There should be a global ban on nuclear weapons. All countries should sign a treaty that would outlaw nuclear weapons in the way that biological and chemical weapons are banned.

The bomb factor:

Arguments for **keeping** nuclear weapons



United States of America

Card 1

Facts

- We were the first country to make a nuclear weapon and the only one to use them in war (against Japan at the end of World War II). We currently have around 7,300 nuclear weapons in total and have carried out more than 1,000 nuclear tests.
- The United States' nuclear weapons also protect our allies. This means that several of our allies don't have to build or maintain nuclear arsenals as they can rely on ours to protect them. This is called our 'nuclear umbrella'.
- We plan to build new nuclear weapons that will be more advanced. We plan to spend \$350bn over the next decade on nuclear weapons.
- However, we have also agreed to cut down our numbers of weapons in a treaty with Russia called 'New START'.

Beliefs

- We want to show countries across the world that we have the means and the will to respond to aggression, threats to our interests or the use of nuclear weapons by being prepared to use our weapons against them.
- We think that our nuclear weapons prevent other countries from attacking us because they fear that we would use nuclear weapons against them in return. We are still worried about threats from countries such as Russia and about other countries that might develop nuclear weapons, like Iran.
- We feel we need a Missile Defence System to protect us from missiles fired at America. Parts of this system will be stationed in Europe.
- Since we have been fighting the 'War on Terror', it's been even more important to make sure that we can defend ourselves against any possible threat – including terrorists and 'rogue' states that might get and use nuclear weapons.



The bomb factor:

Arguments for **keeping** nuclear weapons



United Kingdom

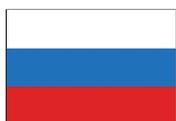
Card 2

Facts

- We were the third country to get nuclear weapons, after the US and Russia. Our nuclear weapons programme started in 1952 and continues today.
- Our nuclear weapons system is called Trident and we currently have about 215 nuclear weapons. These weapons arm our four nuclear submarines. The subs are based in Scotland, but one is always on patrol in the oceans.
- Although there is no threat against us at the moment from nuclear-armed states, there may be in the future and we argue our weapons deter (put off) attack.

Beliefs

- We believe we need a nuclear weapon system to protect the security of the UK's citizens. Even though our relationship with the US does offer us some nuclear protection, we think it is important for Britain to have its own nuclear weapons as well.
- The number of countries with nuclear weapons could go up in the next 20 years. We fear new security threats from countries that might create nuclear weapons and terrorist groups, who might get them and use them against us.
- As one of only nine countries that have nuclear weapons, we must keep up ours because we need to show that the UK is still an important power in the world.



Russia

Card 3

Facts

- We were the second country to develop nuclear weapons and did our first nuclear test in 1949. We have the largest number of nuclear weapons in the world today – about 7,500.
- We started making nuclear weapons because we saw their effects at Hiroshima and we thought that if only one country – the United States – had nuclear weapons, that country would be able to intimidate and overpower us.
- When we began creating nuclear weapons, this prompted the US to make more powerful nuclear weapons and an arms race began where we competed to build bombs. We each created thousands of weapons during the Cold War.
- Our former President Medvedev and US President Obama signed the New START Treaty in 2010. This is a step forward in reducing the number of weapons we both have.

Beliefs

- Our nuclear weapons programme was based on a constant threat from the US – as long as it keeps a nuclear weapons programme, we feel like we must keep ours.
- We are developing new missiles for use on new submarines, as well as generally updating our nuclear forces to face today's threats. Even though we agreed to get rid of some weapons through the New START treaty, we need to remain a powerful nuclear state in the future.
- We are also concerned about the Missile Defence System that the US is constructing to protect them from incoming missiles. We feel they are targeting it at us to make our weapons useless.



The bomb factor:

Arguments for **keeping** nuclear weapons



Atomic Weapons Establishment (AWE) Management Ltd **Card 4**

Facts

- There has been research into nuclear weapons at our factory since 1950. We are based in Aldermaston, near Reading in south-east England.
- We assemble and maintain the UK's Trident nuclear weapons. We build the warheads, check them and repair them if necessary. We are run by three companies in the nuclear and weapons industries and we work for the UK government.
- AWE Management Ltd (a private company) has a contract to manage AWE until March 2025. This is an important contract, and we want to keep it as long as possible.
- We have built a new machine called the 'Orion Laser'. This, and very powerful supercomputers, let us test new nuclear warheads without actually setting them off by re-creating the same conditions in the laboratory. This will be a safer and more effective way to test nuclear technology without the negative effects of exploding the weapons.

Beliefs

- We feel that it is still very important to keep nuclear weapons in this country. They add to the country's security as we believe it would stop other countries wanting to attack us with a nuclear bomb. We think it keeps the peace in the world and we feel proud to be a part of it.
- AWE's work is part of important advancements in science and technology. Now that we have nuclear weapons, we can't 'un-invent' them, so we might as well keep on developing them.
- If the UK gave up its nuclear weapons, then we would worry about our employees as there are over 4,500 people who work for the AWE. We would not want them to lose their jobs, especially during this hard time for Britain's economy.



The bomb factor:

Arguments for **keeping** nuclear weapons



North Atlantic Treaty Organisation (NATO)

Card 5

Facts

- NATO was formed in 1949, as an international military alliance at the beginning of the Cold War. We bring together 28 different countries, including the UK, other countries in Europe, the US and Canada.
- After the Cold War ended, we expanded into the countries of the former Soviet Union and changed our mission statement. We are no longer just a defensive organisation – we intervene in other countries if we decide to.
- We have nuclear weapons in five European countries, and see these weapons as key to our aims. To keep the peace and stop wars, NATO will keep nuclear weapons for the foreseeable future.
- We have a nuclear first strike policy. This means we are willing to be the first ones to use a nuclear weapon in an attack.

Beliefs

- We believe that if our armies work together it will make us stronger and act to keep peace in the world as we won't fight each other. The countries with nuclear weapons in NATO can protect the countries that don't have them.
- We will continue to keep US nuclear weapons in Europe because we think it makes Europe more secure and is good for the relationship between Europe and North America.
- As long as there are possible nuclear threats to NATO countries, we must continue to hold nuclear weapons to act as a deterrent (to put off attack) and protect our member countries.



The bomb factor:

Arguments for **keeping** nuclear weapons



India

Card 6

Facts

- We conducted our first nuclear weapons test in 1974 (named Smiling Buddha) and tested more weapons in 1998. We currently have around 90-110 nuclear weapons but we don't say exactly how many, we keep this secret.
- Although our first test was a response to China's, we feel that our biggest threat regionally is from Pakistan. They are well-known rivals of ours and there is much tension between the two countries.
- We are now developing nuclear-powered submarines as a new form of nuclear deterrent. We already have nuclear-armed missiles based on our land and nuclear-armed planes.

Beliefs

- Like Pakistan, we have not and will not sign the nuclear Non-Proliferation Treaty (NPT). Most countries in the world are signed to this agreement which obliges countries with nuclear weapons to disarm them in return for other countries not developing them. However, we feel that it is hypocritical and unjust. Why should countries with nuclear weapons prevent other countries from developing them when they haven't disarmed theirs first?
- The goal of our nuclear weapons programme is to have a 'credible minimum deterrent' – the least possible number of weapons to prevent someone from attacking us first. We would not be the first to use a nuclear weapon unless somebody used a biological, chemical or nuclear weapon against us.
- We feel our nuclear weapons show that we are self-reliant. We don't have any powerful allies to call upon with nuclear weapons, so we need to keep our own.



The bomb factor:

Arguments for **keeping** nuclear weapons



Pakistan

Card 7

Facts

- We began developing nuclear weapons in the 1970s because India had already started a programme.
- Currently, we have around 100-120 weapons, and possibly the fastest growing number in the world. We don't say exactly how many weapons we have, we keep this secret.
- We have complete control over our nuclear weapons, even though they have been threatened recently by groups like the Taliban who may want access to nuclear material.
- We're updating our missiles and making our weapons more efficient and effective for the future.

Beliefs

- Our nuclear programme is created as a "minimum deterrent" and we see them as "weapons of last resort". However, we don't have a no-first use policy. We have indicated we may use our nuclear weapons first if there is large-scale attack on our country.
- India is the greatest threat to our security. As long as India has nuclear weapons, we will too. We might disarm if India does, but then again, we might want to make ourselves look like the most powerful country in the region.
- Like India, we have not and will not sign the nuclear Non-Proliferation Treaty (NPT). Most countries in the world are signed to this agreement which requires countries with nuclear weapons to disarm them in return for other countries not developing them. However, we feel that it is hypocritical and unjust. Why should countries with nuclear weapons prevent other countries from developing them when they haven't disarmed theirs first?



The bomb factor:

Arguments for **removing** nuclear weapons



Campaign for Nuclear Disarmament

Card 8

Facts

- CND is one of the most well-known peace organisations in the UK and its symbol is known world-wide. We have campaigned for over 50 years for Britain to stop its nuclear weapons programme and for global nuclear disarmament.
- Although the UK's nuclear weapons system is small compared to some countries, it actually has enormous killing power. Each of our nuclear bombs is eight times more powerful than the Hiroshima bomb, which killed over 140,000 people. Britain's arsenal alone (215 nuclear weapons) could kill millions of innocent civilians.
- CND and its members use a large range of methods to get our message across. We collect petition signatures, organise marches and rallies, lobby MPs, hold public meetings, make leaflets and posters, protest at nuclear bases and appear in the media to make our voices heard. Everything we do is non-violent.

Beliefs

- Nuclear weapons threaten the existence of the whole planet and all living creatures. Such weapons are barbaric and have no place in society.
- Nuclear weapons would be no help against terrorists as they would not be deterred (put off) by the threat of death, and any attack on them could kill hundreds of thousands of innocent people.
- We cannot tell other countries not to get nuclear weapons when we have them ourselves. Replacing or updating our nuclear weapons encourages others to develop them. Instead of replacing our nuclear weapons, we should lead the way and work together with other countries to make sure that these weapons are dismantled globally. This would be a genuinely important role for Britain in the world.
- The £205 billion it would cost to replace our nuclear weapons would be better spent on education and healthcare. The people who work in the nuclear weapons industry could put their skills to other uses, including dismantling weapons and generating sustainable energy.



The bomb factor:

Arguments for **removing** nuclear weapons



South Africa

Card 9

Facts

- We first developed nuclear weapons in the late 1960s because we felt cut off from the international community and wanted greater security.
- We gave up our nuclear weapons in the early 1990s and signed an international agreement called the nuclear Non-Proliferation Treaty. This treaty is supposed to stop the spread of nuclear weapons across the world and is signed by most countries that have nuclear weapons, including the US, UK and Russia.
- Those in favour of nuclear weapons often argue that if countries get rid of nuclear weapons, then they may be attacked. We have not suffered a nuclear attack since dismantling our nuclear weapons.
- Other countries have also eliminated their nuclear weapons. In 1991, Belarus, Ukraine and Kazakhstan agreed to destroy the weapons on their land or to give them back to Russia.

Beliefs

- When apartheid (legalised separation and discrimination against black South Africans) was coming to an end we decided we should no longer have them. We wanted to make good links with the global community based on trust and the new South African government were also against nuclear weapons.
- As we have got rid of our nuclear weapons permanently, it shows that a country can do so after building such weapons – it is possible to disarm. We are the proof! We continue to call for nuclear disarmament across the globe.
- F. W. de Klerk, our former president, said that we 'have learned that true security comes from our ability to solve complex problems peacefully rather than by imagining that we can achieve anything by threatening ultimate destruction.'



The bomb factor:

Arguments for **removing** nuclear weapons



International Campaign to Abolish Nuclear Weapons (ICAN) Card 10

Facts

- ICAN is a campaign started by doctors across the world in 2007 to abolish the production, testing, possession and use of nuclear weapons.
- There are nearly 16,000 nuclear weapons in the world today and just 50 of the most powerful ones could kill 200 million people.
- We are campaigning to achieve a global ban. This would abolish nuclear weapons in the same way that existing treaties ban land mines, biological and chemical weapons.

Beliefs

- We believe that nuclear weapons have no lawful purpose and are totally immoral. Nuclear weapons don't address the biggest security threats the world faces, such as terrorism and climate change.
- Nuclear weapons disarmament is the only way to peace. Nuclear weapons do not keep the peace. Real peace is not only the absence of war, but is based on trust and cooperation between nations. Human beings cannot co-exist with nuclear weapons.
- If countries work together on an international treaty, nuclear disarmament is possible!
- We have high profile supporters such as the Dalai Lama (Tibetan Buddhist Spiritual Leader), Hans Blix (Former UN Weapons Inspector) and Jody Williams (a campaigner who helped bring about the Mine Ban Treaty).



The bomb factor:

Arguments for **removing** nuclear weapons



Japan

Card 11

Facts

- We are the only country which has ever been bombed by a nuclear weapon. The bombing of Hiroshima and Nagasaki killed 250,000 people in the first year. Our people are still suffering from cancers and other illnesses more than 65 years later.
- We have done a lot of work for peace internationally. The Mayors of Hiroshima and Nagasaki started a movement called Mayors for Peace which aims to get mayors from across the world to promote peace between nations and the dismantling of nuclear weapons. More than 5,700 cities across the world have signed up.
- Even though we have the ability to make nuclear weapons, we have not produced any.

Beliefs

- We believe the USA decided to use nuclear weapons on us for several reasons, not just to end the war. Other reasons include showing US power and testing out the bombs' effects. This proves that we cannot trust the world's super powers with these bombs, and that having nuclear weapons leads to a temptation to use them.
- As we know how much suffering nuclear weapons can bring, general opinion is against having nuclear weapons.
- We are a country dedicated to peace and want our young people to understand the dangers of nuclear weapons by making sure that the horrors at Hiroshima and Nagasaki are never repeated.



The bomb factor:

Arguments for **removing** nuclear weapons



United Nations

Card 12

Facts

- We were formed as an organisation at the end of World War II to keep peace and security in the world. We also take a stand against nuclear weapons and help to work towards getting rid of nuclear weapons everywhere.
- The UN works to monitor all nuclear activity across the world to ensure that no country attempts to create a new nuclear weapons programme.
- Our current Secretary General, Ban Ki-moon, has spoken about the importance of nuclear disarmament. He has said he supports an international ban on nuclear weapons.
- We organise international meetings to discuss the progress of the nuclear Non-Proliferation Treaty (NPT) which is designed to stop the spread of nuclear weapons and it requires states to disarm.

Beliefs

- We recognise the extreme dangers that nuclear weapons present and argue that 'disarmament is the best protection against their dangers'.
- Our former Secretary General, Kofi Annan, made the point that the more that some countries say they need nuclear weapons for their security, the more other countries will say the same and also get them.
- We also encourage and monitor international treaties such as the NPT and treaties against nuclear testing. The success of treaties banning land mines and biological/chemical weapons show that international agreements can succeed!



The bomb factor:

Arguments for **removing** nuclear weapons



Global Zero

Card 13

Facts

- We started in 2008 as an organisation of political, military, business, faith and civic leaders from across the world, as well as ordinary citizens, who want to get rid of all nuclear weapons to reach a 'global zero'. There are now 300 leaders and more than 450,000 citizens involved.
- We have created a four-phase plan that will help the world move gradually to a nuclear-free world. It starts with the US and Russia leading the way by reducing their weapons, and then the rest of the nuclear-armed countries following. There should be no nuclear weapons in the world by 2030.
- We co-produced a major documentary called Countdown to Zero that shows how dangerous it is to live in a world with so many nuclear weapons.

Beliefs

- We believe the only way to eliminate the danger from nuclear weapons is to stop countries from making them, secure all nuclear materials and get rid of the weapons we already have. This is the only way to stop non-state actors (like terrorist groups) from getting access to nuclear weapons.
- We calculate that, in the next ten years, the world will spend US\$1 trillion on nuclear weapons. This colossal amount of money should be spent on other things, like education and health care.
- We think now is the perfect time to push for 'global zero' because there is more popular support and government support than ever before.
- We have support from the leaders of the UK, the US, Russia, Japan, India and elsewhere. In 2011 President Obama stated: 'I want each of you to know that Global Zero continues to have a partner in my Administration and that we will never waver in pursuit of a world free of nuclear weapons'.



The bomb factor:

Arguments for **removing** nuclear weapons



Marshall Islands

Card 14

Facts

- We are a group of islands in the South Pacific where the United States conducted over 60 atomic weapons tests from 1946-1958.
- We have suffered for over 65 years from cancers, other illnesses and poverty from the effects of atomic and hydrogen bomb testing on our islands.
- The biggest bomb ever tested by the US was the Bravo hydrogen bomb test in 1954. This occurred on Bikini Atoll and was as powerful as 1000 Hiroshima bombs. The bikini swimsuit was named after this test!
- We were relocated to many different islands when the US started testing the bombs, where our people faced starvation and death because the new islands didn't support our traditional methods of farming and fishing. A United Nations expert has reported that many of us still 'feel like nomads' in our own country, as we've never been able to settle again.
- When the white fallout began falling on the islands, the children thought it was snow and rushed out to play in it. Many then became ill.

Beliefs

- The US had a responsibility to protect us as they controlled the area at the time. They failed to protect us and owe us money for destroying our islands with radiation.
- The US used our people like guinea pigs to test the effects of radiation on humans. This is completely unacceptable. Our suffering helped spur on the signing of a treaty against nuclear testing.
- The US Government and its scientists continually lied to us about the amount of radiation on our islands, and told us it was safe to move back even though radiation levels were still very high.
- We will have to be careful to protect our islands against the effects of climate change, especially due to the nuclear legacy.
- Many of our people are still fighting for compensation from the US and we will continue to campaign until everyone affected has received the money they deserve.
- If countries work together on an international treaty, nuclear disarmament is possible! A global ban on nuclear weapons would make them illegal and can be achieved in the near future with enough pressure from committed countries.



The bomb factor:

Judges' overview cards

A: Arguments for nuclear weapons

- Nuclear weapons act as a deterrent. They keep peace in the world because those countries with nuclear bombs will not use them against each other for fear of the other side firing back and starting a nuclear war. If that happened, both countries would be destroyed. This doctrine is called Mutually Assured Destruction (MAD).
- Nuclear weapons can be used to protect other countries that do not have nuclear weapons. This is known as a nuclear umbrella and means that fewer countries have to develop these weapons as they can rely on allies who already have them.
- You cannot 'un-invent' nuclear weapons. Now the technology has been developed, we cannot just pretend these weapons never existed.
- We face an uncertain future and do not know who is going to make nuclear weapons in the future so we should keep ours.
- Nuclear weapons can be used to threaten other countries to make them perform an action or to come to some sort of agreement for the greater good.

The bomb factor:

Judges' overview cards

B: Arguments against nuclear weapons

- Nuclear weapons do not keep the peace. Nuclear weapons have not stopped any of the wars since World War Two. Also a war was started when Iraq was suspected of having weapons of mass destruction.
- Nuclear weapons do not build trust in the world as it causes people to live in fear. Countries trust each other even less and compete to build weapons.
- Nuclear weapons do not help the biggest problems we face in the world: climate change and terrorism. In fact, the cost of the weapons can divert funding and specialists from other important projects.
- Nuclear weapons are very expensive. \$100bn is spent on them every year across the world. This is the same amount of money that is needed for everyone in the world to have clean water, enough food, basic healthcare and education.
- Nuclear weapons cannot tell the difference between military targets and ordinary people. This is against international law. A single nuclear attack could kill millions. There are nearly 16,000 nuclear weapons in the world and this could kill everyone on the planet several times over.

The bomb factor:

Judges' overview cards

C: Solutions to reduce nuclear dangers

- All countries should agree to never be the first to use a nuclear weapon. Then hopefully they would never be used.
- All countries should stick to their promises made under the nuclear Non-Proliferation Treaty (NPT) – a treaty to stop the spread of nuclear weapons. The UK , USA, Russia, China, and France promised to get rid of their weapons in return for other countries not making any.
- Nuclear Weapons-Free Zones should be expanded to cover the whole planet. These are areas of the planet where the deployment or testing of nuclear weapons is banned. They currently cover almost the entire southern hemisphere.
- Countries that have nuclear weapons should promise not to make new ones. The development of new bombs can lead to the proliferation (spread) of weapons and competition between countries.
- There should be a global ban on nuclear weapons. All countries should sign a treaty that would outlaw nuclear weapons in the way that biological and chemical weapons are banned.

The bomb factor:

Judges' overview cards

Tips for Judges

Judges

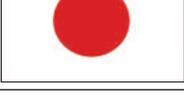
- It is your role to make sure that everyone understands the basics of the argument at the beginning of the debate and keep this in mind when you see all the groups/acts. You then must give your judgement at the end before the whole class votes. You will be deciding which presentation you think is the best.

Providing an overview

- The judges should provide an overview of the arguments for and against nuclear weapons. This can either be given as an opening speech, highlighting the different sides of the argument to get the debate started or as a closing speech to wrap up after the groups have spoken.
- Make sure you put across the key points of each side and the possible solutions. It may be clearest if you divide the debate between the three of you:
 - One to talk about the arguments for nuclear weapons
 - One to talk about the arguments against nuclear weapons, and
 - One to explain the solutions to reduce the dangers of nuclear weapons

Whilst judging

- Be as neutral as possible. You may wish to come up with a number of categories and give them points. For example: persuasiveness, imagination, humour, information. You could make score cards or use whiteboards to give the score or keep them waiting until the end.
- You may question the groups/acts if you want them to give you more information! Use your overview cards!
- At the end give a judgement as to which group you thought were the best. You may also wish to say what you think sounds a better idea for security using all the evidence you heard. Should we keep nuclear weapons or disarm them?

Country/Organisation	Score	Comments
 <p>For United States of America</p>		
 <p>For United Kingdom</p>		
 <p>For Russia</p>		
 <p>For Atomic Weapons Establishment</p>		
 <p>For NATO</p>		
 <p>For India</p>		
 <p>For Pakistan</p>		
 <p>Against Campaign for Nuclear Disarmament</p>		
 <p>Against South Africa</p>		
 <p>Against ICAN</p>		
 <p>Against Japan</p>		
 <p>Against United Nations</p>		
 <p>Against Global Zero</p>		
 <p>Against Marshall Islands</p>		