

Culloden Academy
March 2025



Classroom code: idjpjy4

### **MEET THE TEAM:**

Teachers: Ms Cavellini Mrs Skinner

Pupils:

Sophie Jones Evie Henderson

Elliot Goldie Roni Brady

Scott Mackay Flora Alexander

Skye Searles Caitlin Mackinnon

Ailish Boyd Soraya Ovalle-Kiedthy

Jessica MacDonald

Matthew Allan

Roderick Hart

Ellie Henderson

The equalities and rights respecting group meet every Thursday lunch time in Ms Cav's classroom.

We'd love to see you there!





# Small Glacier, Big Problem

#### SOPHIE JONES

One of the major visible effects of climate change on our environment is glacial melt. This has an incredibly negative impact on the environment with leaking of gases stored in the glacier, the rising of sea levels and imbalance in the chemistry of the oceans due to the massive influx of glacial fresh water.

Recently, there was a Geography-run school trip to Iceland, during which students participated in a hike across part of the Myrdalsjokull glacier which is situated near the town of Vik and is flanked by two volcanoes - Katla (which is long overdue to erupt) and Eyjafjallajökull (famous for its 2010 eruption). The Myrdalsjokull glacier is the fourth largest ice-cap in Iceland. Iceland boasts glaciers that cover around 11% of its surface, including the largest ice-cap in Europe. Because of this, we can clearly see the impact of rising global temperatures of our ice-caps and glaciers.

In just 25 years, the glaciers that cover Iceland have lost around 250 cubic kilometres of ice, which is equivalent to around 7% of their total volume. This is a staggering amount of ice lost in a relatively short period of time. Solheimajokull, an outlet glacier of Myrdalsjokull has receded every summer since 1996. It has lost around 380 metres in the last decade alone!

According to experts at the <u>Vatnajökull National Park</u>. the rising sea levels have devastating consequences for coastal regions, including flooding, cliff erosion and habitat loss for birds. Furthermore, glacial erosion weakens bedrock often causing dangerous landslides and flash flooding. These immediate consequences are particularly concerning as glaciers, ice caves and glacial lagoons are some of the country's most popular tourist attractions. Last year was one of the worst on record for glacial decline in Iceland according to the Icelandic Meteorological Office.

### Shrinking Glacier, Bigger Problem



Skálafellsjökull Glacial Retreat 1890-2019 (Icelandic Meteorological Office)

Since 1900, the surface area of Iceland's glaciers has shrunk by almost 2200km2. Climate change, and as a result, glacial decline, have been accelerating since 2000. In the last twenty years alone, glaciers in Iceland have shrunk by over 800 km2.

It is not just Iceland's glaciers that are melting. In September, Switzerland and Italy had to redraw their border in the Alps due to melting glaciers with record volume losses of 6% in 2022 and 4% in 2023.

This is a major problem as melting glaciers add to rising sea levels which in turn increases coastal erosion and storm surges in tropical storms, for example hurricanes. It can also change the circulation patterns of the oceans which will negatively affect animal migration patterns and the cycle of nutrients and warm water from the tropics to the poles. Numerous animal and plant species are at risk from extinction from habitat loss as the ice melts. In addition, it threatens low-lying coastal and island communities, like the Maldives, that are already at risk from submersion due to rising sea levels.

In order to slow glacial melt and save glaciers like Myrdalsjokull, global action needs to be taken in cutting carbon-dioxide emissions thereby reducing the excess greenhouse gas levels in our atmosphere and being more responsible and sustainable in the way we live and function in our daily lives.

#### BY SOPHIE JONES

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# Culloden Staf

### Sustainability Questionnaire

By Scott Mackay and Ailish Boyd



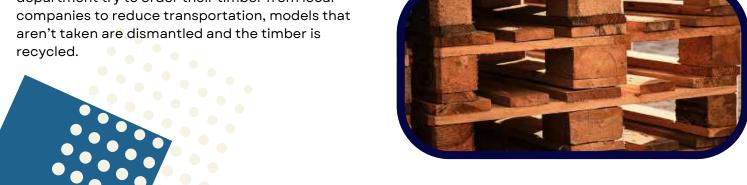
We asked the principal teachers of Culloden Academy how their department contributes towards sustainability. The questions and responses were as follows.

## Could you give us more information about your department's sustainability efforts?

Many departments have moved to Chromebooks to access class and homework electronically, to avoid the usage of paper when printing. In subjects like Technology, timber is sourced from local sources to reduce transportation, and any models that are not taken home are dismantled so the timber can be recycled in the department. Some departments include Learning for Sustainability through their curriculum. For example, Business cover Sustainability in the Business Context unit, Art includes the importance of sustainability and how it can affect us individually and as a society. In Social Subjects, students explore themes around Climate Change, Human Rights and Sustainability across Geography, Modern Studies and RMPS. The Tech department try to order their timber from local

### What can your department do to improve its sustainability?

Some departments think that they should cut down on printing out, or print more efficiently, or to recycle more. Many departments are moving to digital record keeping to avoid printing. The Music and Drama department told us that they would like to be able to buy more things second hand, but Highland Council's procurement process requires that certain things be purchased new. A lot of departments also said that they need to be better about dividing their recycling into paper and plastics in order to stick to the Highland Council's new recycling policy. Some departments would like to recycle more paper than they do such as tech.





### **Sustainability Questionnaire**

### What does your department do to contribute to a healthy environment?

One of our school values is Community, and students are taught to have a better appreciation for the environment. They are given opportunities to earn house points by contributing to the maintenance of the school, through helping staff with recycling and keeping classrooms and the school campus tidy. The Music and Drama department recycle all their costumes and instruments from charity shops or donations, rather than buying new to prevent waste. In Technology, all paints have been swapped to water-based paints to avoid pollution, and across the school, all staff are required to make sure their devices (laptops, pupil PCs and Smartboards) are switched off at the end of the school day to conserve energy. The tech department has moved to water based paints to reduce solvent cleaning and monitors and smart boards are turned off when not in use.





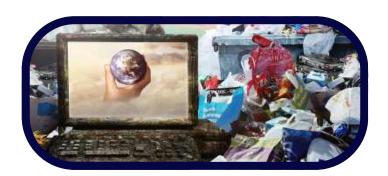




# What do you include with teaching students that could leave an impact on how they think about the environment and how they can help it out to become the best it can?

A lot of departments just lead by example by recycling as much as they can, and some departments try to include examples of questions about sustainability in their work. These would lead to questions about common problems with the environment, and teaching pupils about sustainability in a way they might not expect, for example, through the Business sustainability topic, the students are required to complete a wheel to evaluate how eco-friendly they are in terms of water usage and recycling. In Technology, S2 students complete a project where they upcycle pallet wood to make Christmas decorations, and this continues into NC Architecture where pupils study an entire unit on sustainable construction. The tech department do different units that cover sustainability and upcycling from S2 through to higher qualifications.

Many thanks to the staff and departments that contributed to this report.





Fast fashion has become very popular in this day and age, first of all because it's cheap but also it's fast. People would rather buy cheap, bad quality and easily accessible clothes instead of finding better quality and more eco friendly brands for a slightly more expensive price.

Flora, Roni, Caitlin and Soraya visited S5/6 Creative Thinking to find out about fashion and sustainability. The class had been learning about ethical clothing, and how clothing and textiles can be reused to reduce waste.

"The class told us about COCOON, a website where people can sign up to borrow bags, rather than buying so many themselves and contributing to excess. This is just one of many examples that the class has learned about to broaden their knowledge about sustainability in fashion.

The class were designing their own sustainable brand, and had been discussing the benefits of thrifting as a means to get clothes. As part of their designs, they also designed their own clothes and made them to fit using sustainably sourced materials. They even discussed how mainstream brands like H&M are moving towards using more sustainable sources of textiles and fabric.

We asked the class what they thought teachers could do to promote sustainability in class. They said that they thought that teachers should make sure to promote the use of sustainable sources among their students, and highlight places where pupils can make sustainable sources.

We think sustainable fashion is very important because it develops creativity and if we continue to educate pupils on it then sustainable fashion will become more popular therefore companies and creators will use products and if we do little by little we will slowly reduce our carbon footprint."





Healthcare services like the NHS are some of the biggest contributors to climate change, being responsible for about 5% of all greenhouse gas emissions. Although 5% might not seem like much, it's equivalent to the annual greenhouse gas emissions of more than 500 coal fired power-plants. This makes sense when you think about the thousands of hospitals and centres there are around the UK- these all have to be lit, often with lights on 24/7, and all of the one-use plastic that doctors, nurses and surgeons have to use. But that's just the tip of the iceberg, with machines going constantly to clean equipment and clothes, or for scans. However, climate change and global warming also have negative impacts on our health, creating a vicious cycle. The NHS has a goal to be net zero by 2040, with an 80% reduction achieved by 2036. So, how can the NHS and the healthcare system become more sustainable?

St Mary's Hospital on the Isle of Wight has done lots to improve sustainability and their carbon footprint and are a great example of what more hospitals should begin to do. Patients on the Isle of Wight going through Chemotherapy have to have their medication delivered on the day due to its short shelf life, and the medicine has to be delivered from the mainland. This creates a big carbon footprint and can cause chaos for the staff due to any delays. To counteract these issues, the hospital has been experimenting with using drones to deliver the chemotherapy medicine. After using redundant medicine to test the flights and conditions, ensuring the medication wouldn't be damaged and the temperature can remain constant for the medication. After these tests were successful, they were given permission to transport live medication this way. The impact of this is that it reduces wastage, improving sustainability, and reducing the carbon footprint. It has significantly refined the journey of the medication, going from using cars, hovercrafts and ferries to deliver the medication in a four-hour timespan to just one drone, which takes about 30 minutes.

# Sustainability in fleatingue

A Bristol based charity, STAND We Walk Together, formally Legs for Africa, is a great example of how we can increase sustainability in prosthetics while helping others as well. There are millions in sub-Saharan Africa with limb differences who don't have access or money to get prosthetics. Currently, when someone grows out of their prosthetics in the UK, they are thrown away despite being in good condition. To counteract this, STAND takes apart these prosthetics and refurbishes them in Men's Shed's around the country, creating a sense of community in this effort of sustainability. These prosthetics are then given to those that need them, but can't afford the price of a new prosthetic. These prosthetics are also sent to centres around sub-Saharan Africa at a significantly lower price.

These are just two examples of the many different ways that we can be and are being more sustainable in our healthcare systems, but there are many other ways that we are globally improving medical sustainability from the slowly developing 'remote surgery' to using solar panels at teaching hospitals. Even though we are improving there are still so many areas that are still in need of improvement and countless ways and opportunities to improve these areas.

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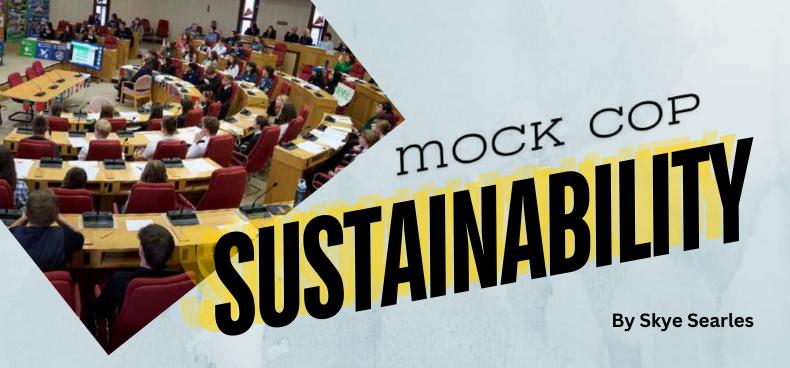
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Every year both delegates and pupils gather to discuss the climate emergency and what can be done to tackle the effects of climate change. On one hand, the COP (Conference of the Parties) which is where world leaders and delegates from across the globe liaise, negotiate and debate on what can be done every year, this year's conference COP29 taking place in Baku, Azerbaijan. On the other hand, MOCK29 is where many pupils can participate, to really understand the environmental and political issues which are at the heart of the debates every year.

COP stands for the Conference of the Parties, a meeting of all 198 countries that have signed the UN Framework Convention of climate change. It had started in 1995 with the aim of encouraging global cooperation to tackle the increasing problem of climate change. It takes place over a series of days in a different place every year where a mix of world leaders and diplomats liaise, make deals and promises as well as and more importantly create policies and promises to tackle the climate emergency.

The Mock COP is an event for schools in the Highlands to get a feel for what happens at the conference, like negotiating and debating policies between countries and companies as well as learn more about the climate emergency, the politics around climate change and what countries are doing or planning on changing to adapt or mitigate the effects of climate change. This event runs alongside the actual COP and previous years have actually had people from the conference droop in via zoom and give a talk on the importance of being involved and doing your part on sustainability.

How Mock COP works is that a 'delegation' from each school which all represent a different actor, for example USA, Nordic Council or Royal Dutch Shell, gather in the Highland Council Chambers and give the introductory speech regarding what your delegation's goals are and whether you are open or resistant to change on certain issues. Then for two rounds of ten minutes you are assigned to other delegation teams and you debate and negotiate on certain policies with the goal of coming to an agreement of a vote. Then for a third round you get to choose who you will debate with next either a country or organisation, eventually all the teams will submit their final votes on their policies, you can either stick to your word or keep your cards close to your chest and go for the self-preservation strategy.

### WORDSEARCH

#### **Environment**

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Play this puzzle online at : https://thewordsearch.com/puzzle/7671696/

## **WORDLE**

Click the above link to try our sustainability themed Wordle.

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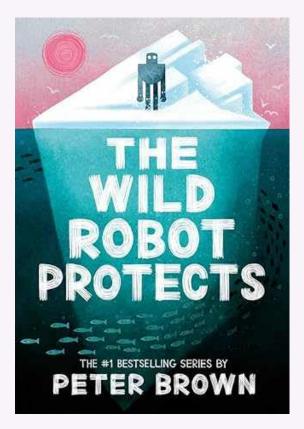
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### **BOOK CLUB**

A selection of great stories supporting equality for Young Adults



# The Wild Robot Protects by Peter Brown (3rd in series, now a big movie)

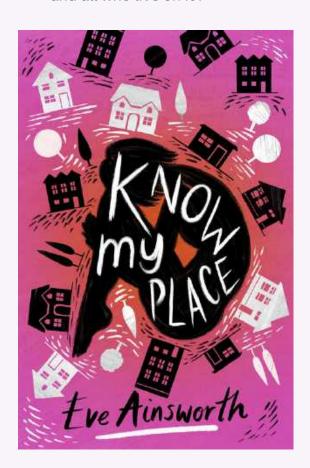
Roz the robot has made an unlikely home for herself on an idyllic island dense with forests, wildflowers and friendly animal inhabitants - including her own young son Brightbill the gosling. Life on the island is perfect, until a dying seal washes ashore and warns of dangerous, cloudy waters that are flowing towards the island, bringing new dangers for the animals.

Forced inland they will have to fight over fewer resources - and Roz realises that she must march into the waves and undertake an incredible undersea adventure to find a way to protect her beloved island and all who live on it.

#### Know my Place by Eve Ainsworth (dyslexia friendly)

A teenager's longing for family and a place to call home is poignantly portrayed in this heartfelt and ultimately uplifting story of life in the foster-care system.

Feeling betrayed when her long-term foster placement breaks down, Amy is sent to live with a new family, the Dawsons. Although initially reluctant to trust them, she eventually starts to let down her guard. But just when it seems like she's found her forever family, she hears a telephone call that suggests things aren't going to work out. Will Amy be abandoned again - or does she dare hope that she might finally have found home?

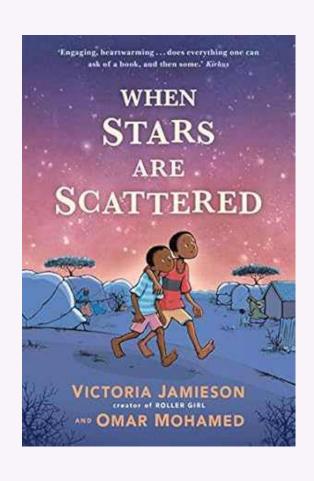


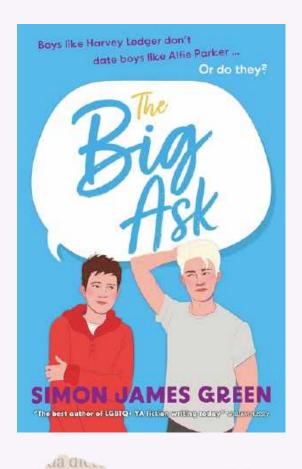
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# When Stars are Scattered by Omar Mahmood Mohamed and Victoria Jamieson (graphic novel)

Omar and his friends Jeri, Nima and Maryam all want to learn and aspire to escape to the West. The injustice of the lack of spaces for older children, of girls who are not allowed to study and of who gets selected for resettlement are unforgettably conveyed. The relationships between Omar and Hassan, his mute and damaged brother, and with Fatima who lost all her sons in Sudan but cares for them is beautifully and movingly portrayed. They never lose hope that they might find their mother and in the afterword we discover how that story turned out. Readers cannot help but develop empathy and compassion for people like Omar. This is an outstanding book that is truly engaging, educative and heart-breaking but ultimately a story of hope and doing the best you can.





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## The Big Ask by Simon James Green (dyslexia friendly)

Alfie Parker has bagged the hottest date to prom ...
hasn't he? A life-affirming teen romance from
bestselling author Simon James Green.
Harvey is popular, cool, plays football and has been
in a relationship with his girlfriend Summer for as
long as anyone can remember. Alfie is not popular,
not cool, has a sick note so he doesn't have to play
any sport, and has been in a relationship with his
Xbox since forever.

So when Summer dramatically dumps Harvey just a few days before the school prom, no one is expecting Alfie to ask Harvey to be his date. Least of all Alfie. But sometimes amazing things can happen when you take a chance. Particularly suitable for readers aged 13+ with a reading age of 8.

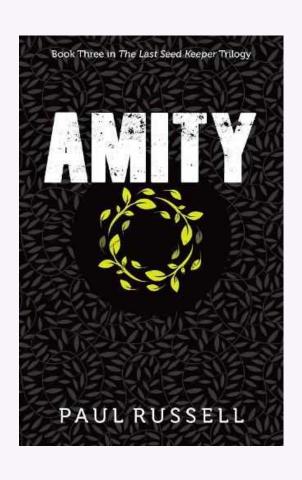
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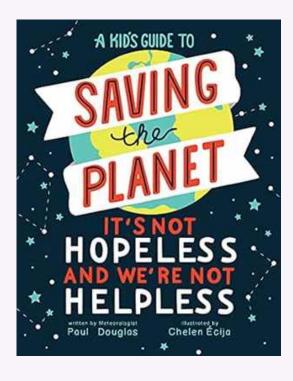




# Amity by Paul Russell (part of a series)

Moving between the past and the present, Amity shines a light on how, years ago, a thirst for power by two people set the planet on a collision course with environmental destruction, and how two small babies, born as the world around them crumbled, became destined to forge a new kind of leadership and a friendship that would withstand even the greatest of challenges. It follows the friends as they find their place in a new world, suffer setbacks and loss, and learn to champion a dying planet and its people. Amity brings to a thrilling close this story of family and friendship, and shows how taking a different approach can change the future.





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#### A Kid's Guide to Saving the Planet by Paul Douglas & Chelen Ecija (non-fiction)

The Earth is warming. The climate is changing. Sea levels are on the rise, and plastic is showing up... everywhere.

We have every reason to be concerned about our planet, our only home. New inventions and technologies will help, but cleaning up the planet--saving the world-will require all of us to pay attention and take action.

What can you do to help? Plenty!

Despite what you may hear on the news, the situation isn't hopeless, and we aren't helpless. In this inspiring, informative book, nationally recognized meteorologist Paul Douglas clearly and thoughtfully presents the daunting problems of climate change. And he offers realistic solutions (including some that are already working!) and actions that kids can participate in now. It's imperative that we all step up and become part of the solution, by engaging in new, smarter ways of living.

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