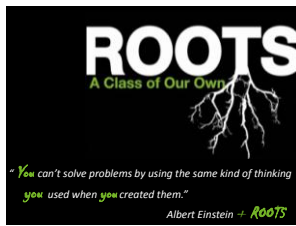


**SLIDE 1** (ON SCREEN FOR STUDENTS AS THEY COME 'ON STAGE')



Hello – my name is Madison Holt. I'm 14 years old.

These are my friends - <introduce everyone>

We are all from Accrington Academy, a secondary school in the north of England, and we represent Roots - a company made up of students age 12 – 14 years old.

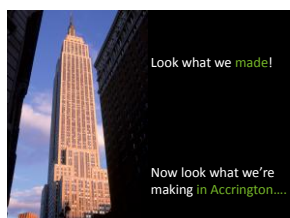
**SLIDE 2**



We've come a long way to let you know what we're doing in our little town of Accrington, and thank you for inviting us. We're really happy to be here.

Accrington has a rich heritage as an industrial town. We are famous for our textiles, but most of all, for making the toughest building bricks in the world.

**SLIDE 3**



"The Accrington NORI" brick is still used today and it's used in the construction of some great buildings, including one of America's most famous landmarks.

In the same way that these little bricks give a building a solid foundation, we believe that the support of children in school design is really important and can be the difference between failure and success. Today we're going to tell you the story of our Eco Classroom.

## SLIDE 4



Our big idea started with a workshop.

18 months ago, some nice people from the Class Of Your Own company came into school and challenged us to design the ultimate green building and garden for our school and its community.

16 teams of students became managers, surveyors, architects and landscape designers and competed against each other to create a unique, eco friendly and sustainable school environment.

The challenge not only involved measurement and design. We also had to work out a plan that would encourage our community to get involved and really think about the ways they could improve their everyday lives and help leave the world a better place for us – the future generation.

The designs and ideas of the top three teams – 30 students in all – were chosen, and pulled together with the help of our new professional friends to make our vision a reality and build a classroom of our own.

## SLIDE 5



Our plans involve a lot of commitment and drive to ensure our ideas are as realistic and eco-friendly as possible.

We're a team. We're showing that people of all cultures, all ages, boys or girls – can work really well together by listening, sharing and communicating.

We live in Accrington, and it's where our community is. Our classroom will be a long term sustainable facility for many families and community groups to enjoy and benefit from. By involving our community in the development and sustainability of our project we are helping to change the way people think about environmental issues.

As temporary guardians, we're well aware that this is not just our classroom. It's also for our little brothers and sisters who will enjoy it for a long time.

We want to leave it as our legacy for future pupils of Accrington Academy and for the people of East Lancashire.

## SLIDE 6



We know what makes a good school better than anyone else. After all, we spend a great deal of time there!

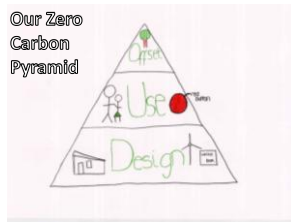
Some school buildings are really ugly. Or they all look the same. And even if we get to meet the designers at first, kids don't see what goes on behind the big fences that construction firms put up when they're actually building our new schools.

We want to know what's going on! No wonder most kids think that building is just about bricklaying. Our journey in developing our own classroom has shown us that there's a whole world of professional careers in Construction. Not only architects, surveyors and landscape designers, but also accountants, lawyers and a whole host of other specialisms.

We aim to employ local people to assist in the building and maintenance of our classroom. They can learn new construction techniques and how to fit renewable energy systems.

Not only this, want local colleges to employ students to assist so that they can gain valuable work experience on a real project. This might inspire younger people to recognise the relevance of construction and consider it as a real option in the future of their education.

## SLIDE 7



Helped by our professional friends, we now understand how to make our eco classroom be zero carbon and help the planet by helping others to reduce their carbon use. This pyramid diagram helps us to show you what our classroom will do.

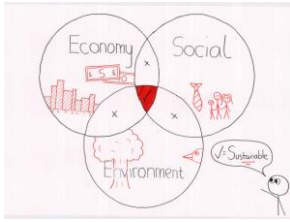
At the bottom of the pyramid is DESIGN, our starting point. We need a building that works well no matter how many people are in it at any one time. It needs to be cool in Summer and warm in Winter and our straw bale insulation will be great for this. If it's designed well, we won't use lots of energy, but when we do need it, we can use the energy created by the sun and the wind. We'll make use of natural daylight and bring the outside in whenever we can. We're using wood and recycled bricks to build with as it uses less energy than other materials. We'll use our big white box for air transfer to get heat.

Next up - if we get our design right – it will be easy for our community to use it in a way that saves energy, water and waste. As an example of good practice, our building and the information we provide can educate our families and friends in good sustainability. We'd like to have a big red button which the last person out can push and turn the whole building off.

At the top of the pyramid, we can try to balance any carbons our project might use. We can plant trees to capture carbons, encourage people to travel to the classroom on bike, foot or by public transport, and most we can teach our builders to think green before they design and build their next construction.

If we do a lot of this we can actually make our classroom carbon positive by saving more than we use. This really will help our planet.

## SLIDE 8 - DAN



Diagrams really help us to understand difficult things like sustainability. Here we have a Venn diagram of the social, economic and environmental things we need to think about.

It's good to talk about being green and environmental but as we design the building we have to think about its cost, and how it will help our community.

We want it to benefit our school and community and help us learn to live more sustainable lives  
<POINT TO SOCIAL>

We need to think how much our classroom will cost to build and how much it will cost to run, and how we can support our local economy. Local projects should help local people and that makes business sense. We aim to source all building and landscape supplies from within a 50 mile radius of our school thereby helping to support and sustain those local businesses. <POINT TO ECONOMY>

As Amy said, we want it to be really green with no carbons. We don't want it to cost the Earth, so we're careful about what we use, how we use it and where - and who - it comes from. <POINT TO ENVIRONMENT>

We want our eco classroom to be fit for our planet, fit for us and fit for its purpose.

If we can get everything balanced, right in the middle where these three circles meet <POINT TO CENTRE>, we will have a truly sustainable zero carbon classroom.

## SLIDE 9

Our Design...



This is an impression of our building.

We designed a new learning environment for everyone to experience.

We're making use of a wind turbine and photovoltaic cells to provide a natural source of electricity, and solar panels to provide hot water, capturing the natural energy of the sun.

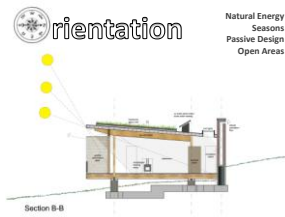
Timber beams support the building and we're using Glulam to maintain a strong structure. We'll be using locally sourced chip board flooring. One of our walls will be constructed in recycled Accrington brick and we plan to insulate the walls with straw bale insulation, because it is a natural material which can be locally sourced.

Our foundations will include rammed earth tyres which we will recycle and roll in from the local garage in Accrington.

We want a grass roof, which will look attractive from a bird's eye view and will attract wildlife to the area. There is a pond at the front of the building which we hope will attract more wildlife which can be observed in the hide at the front of the building.

We took our design to the local planners and told them why it was so important to give us permission to build it. They really liked what we were trying to achieve, and gave us the go ahead. Actually, they were so impressed with what kids like us can do, the planners are going to involve young people in a council projects!

## SLIDE 10



The best design in the world will fail unless our building is orientated carefully and accurately. Our classroom faces South so that we can make the most of the heat and light in Winter when the sun is low and so reduce artificial heating and lighting. Our overhanging roof will create shade when the sun is high and hot in the Summer, reducing the need to artificially cool our workspace.

We'll even be going on our site and learning how to position our building properly. Easy really – it's just angles and Pythagoras theorem!

## SLIDE 11



Across our Academy we do lots to focus on our impact on climate change. We will reinforce our whole-school approach in leading the way to reduce carbon emissions. Our classroom will allow students and the community to learn more about the impact a school building has on the environment and how we can effectively reduce energy and water use. They can then use this knowledge and adapt it to their own lifestyles.

Information regarding energy, water and waste will be measured, recorded and made available to everyone. Our building and its garden will be managed by a school committee throughout the seasons and during holiday periods. We will encourage the whole community to use it, so it doesn't stand empty outside school hours.

Our building will be a real life example of sustainability for everyone to learn from, both in real life and in a virtual world. We are going to reproduce our design in 3D using the same technology used by professional people. We will compare how our real building performs against our virtual building, and see if we could have made any improvements. We'll share our new skills with kids everywhere so they really can get involved in school design. Before you know it, they'll be redesigning the White House and the Houses of Parliament!

With heaps of imagination and no worries about politics, wouldn't it be interesting to see if kids could do it better than the grown ups?!



## SLIDE 12



Across our Academy we do lots to focus on our impact on climate change. We will reinforce our whole-school approach to leading the way in reducing carbon emissions.

By involving role models from the world of work we ensure that young people are encouraged to understand the excitement and importance of science, technology, engineering and mathematics, and the career opportunities to which these STEM subjects can lead.

We have also been able to develop our own Learning and Thinking Skills and also how to become better citizens. We are great team workers, and get involved in all aspects of decision making with confidence.

Our classroom will be open outside the normal school hours, so our community can learn at their own pace, and hold their own special events and activities. It will allow people to learn more about the impact a school building has on the environment and how we can effectively reduce energy and water use. They can then use this knowledge and adapt it to their own lifestyles.

The most important fact is that we're able to encourage our community to be inspired by what we've done. We can teach them that living sustainably is actually very easy. We are actually upskilling our mums and dads and our wider community.

We've even been to the Houses of Parliament and inspired people from our government!

### SLIDE 13



The plants we choose for our green roof and eco garden will attract bees.

This little guy is crucial in our food chain and pollinates 30% of the food we eat. If we didn't have bees it would take 30 million people in the UK alone to do their job.

They seem small and insignificant, and yet bees play a very important role in our lives and in our future.

Children are a lot like bees. To some people, we're small and insignificant too, but all of us have important part to play in a sustainable society. We deserve to have a voice. It's our planet too.

### SLIDE 14



Every year in the England and Wales alone, 90 million tonnes of material is wasted by the Construction and demolition industries. We also dispose of 50 million tyres each year.

Our design includes recycled materials including bricks and tyres which cuts down on landfill and makes our values even stronger.

## SLIDE 15



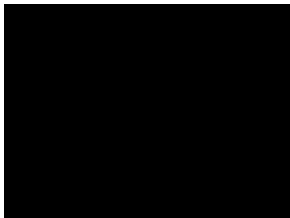
What we are doing at Accrington Academy gives us a chance to do something life changing and we're very excited by the challenges of this next academic year.

Our project has taught us about teamwork, and how to care for and preserve the environment which is a knowledge that many adults lack. We're going to show our community exactly how to look after OUR planet!

We hope that projects like ours and those of our new found friends in American schools inspire others to treat climate change seriously. The changes we make as individuals will bring big rewards if we work together and future generations may have less of a mess to clear up.

The leaders of the world should take a leaf out of our book and base their actions and decisions on the future of the world's children. Our future depends on everyone pressing the big red button switching off.....

## SLIDE 16



## SLIDE 17 (FINAL)



Thank you for listening and we hope you'll visit our classroom next year.