

Reclaim the City (KS3)

Using two examples from Berlin, Germany explore the ways human and physical processes interact to influence and change landscapes, environments and the climate, and how human activity relies on effective functioning of natural systems. In fitting with the new National Curriculum for KS3 Geography this resource looks at environmental interaction and sustainable development on a regional scale and invites them to apply that learning to their own setting.



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Subject	Topic	Teaching Set
Geography	Climate change and sustainable development Urbanisation	KS3 – Year 8

Context: These resources were created to explore the ways human and physical processes interact to influence and change landscapes, environments and the climate; and how human activity relies on effective functioning of natural systems. The activities use case studies from the city of Berlin and were captured in 2014. These case studies act as start points for students to be able to firstly relate to a regional context but then explore wider issues such as climate change or urban development.

These resources have been created in response to the new National Curriculum for Geography for KS3.

Teaching Notes:

Wilderness or wildland is a natural environment that has not been significantly modified by human activity or has been left for a period of time so that it might return to wilderness. Sometimes governments, or local governments, establish these spaces by law or administrative acts, usually in land tracts that have not been modified by human action in great measure. The main feature of them is that human activity is restricted significantly. These actions seek not only to preserve what already exists, but also to promote and advance a natural expression and development. Human activity does not have to stop altogether. In the example used in Lesson One (below) the wilderness park in Berlin still has regular visitors but their impact on that environment is restricted to promote natural growth and transformation of the land.

Urban gardening: The city of Berlin has undergone a transformation in recent years and is now very active when it comes to fostering a wide variety of gardening and agriculture projects within the reunited city. The capital city of Germany, once divided by the Berlin Wall, has been growing together through urban gardening. Many of the projects are very light on the land, creating gardens that can be moved to accommodate the changes in land ownership that characterize a city that is rapidly growing. Prinzessinnengarten is a large agriculture undertaking located on Moritzplatz in the diverse city quarter of Kreuzberg. In the summer of 2009, hundreds of volunteers converted the square, a formerly empty and unused urban wasteland the size of a city block, into a highly productive vegetable and fruit garden. Local residents have maintained and expanded the garden in the years since, adding seven beehives to the square. The garden has been designed so that it can be easily moved if needs be. All of the plants are in wooden or plastic crates that can be picked up and carried away.

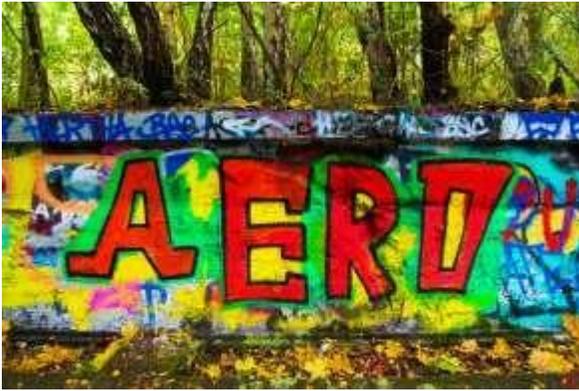
World AIMS Global Learning Lesson Plan One – Reclaiming environments for nature.

Subject: Geography	Topic: Climate change and sustainable development Urbanisation	Age group Year 8 (KS3)
<p>Context Part one of three lessons exploring some of the local responses people have made in Berlin, Germany to global climate change.</p> <p>These resources were created to explore the ways human and physical processes interact to influence and change landscapes, environments and the climate; and how human activity relies on effective functioning of natural systems. The activities use case studies from the city of Berlin and were captured in 2014. These case studies act as start points for students to be able to firstly relate to a regional context but then explore wider issues such as climate change or urban development.</p> <p>These resources have been created in response to the new National Curriculum for Geography for KS3.</p> <p>Natur-Park Suedgelaende, Berlin The 18 hectares park was once part of Tempelhofer marshalling yard (train station yard), which closed in 1952. It was being taken over by nature when it was designated a Nature Park in 1996 and opened to the public in 2000. Relics of the railway were made into art objects for incorporation in the park. These include a steam train and a turntable.</p> <p>The Nature-Park impresses numerous visitors with its biodiversity: 30 bird species, 57 spider species, 95 wild bee species, 15 grasshopper species as well as over 350 plant and 49 mushrooms inhabit this area. The park is also now a protected environment and visitors watch with fascination the way nature has buried, reclaimed, and has even used, the urban environment of the train yard over the past fifty years.</p>		
<p>Learning Objectives</p> <ul style="list-style-type: none"> • Understand how humans interact to influence, and change landscapes and environments. • Differentiate between made-made environments and natural environments. • Identify some of the key issues in preserving and protecting the natural environment within an urban landscape. 		
<p>Learning Outcomes</p> <ul style="list-style-type: none"> • All students will be able to differentiate between natural and man-made. • Some students will be able to describe the influence humans have on the natural environment. • The most able students will be able to relate the regional case study to wider issues of regenerating urban spaces for sustainable development. 		
<p>Skills / Literacy / Numeracy / ICT foci Literacy – Using persuasive language.</p>	<p>Key Words Sustainable, urban, environment, landscape, re-greening, natural, man-made, wildlife, nature, climate.</p>	
<p>Starter</p> <p>On a whiteboard write up two headings labelled ‘natural’ and ‘man-made’. With your students look at the images from Berlin’s Natur-Park Suedgelaende, Berlin using the World AIMS PowerPoint ‘Nature Fights Back’. Ask students what they see? List observations under the two headings. What interesting observations do students have? Did anything surprise them?</p>		<p>Time 10/15 minutes</p>
<p>Activity 1</p> <p>Print images from the PowerPoint presentation and ask students in small groups of four or five to add sticky dots to the images marking out areas showing man-made elements or natural elements.</p>		<p>5 minutes</p>

<p>Activity 2</p> <p>Explain history of the Natur-Park Suedgelaende in Berlin (see context). Give out case study worksheet 'Art v Nature' attached to this lesson plan. Ask students to consider some of the problems associated with protecting a natural space in an urban environment. For less able students we suggest creating a word bank that they can use to help them answer the questions.</p>	<p>25 minutes</p>
<p>Plenary</p> <p>Spilt class into two halves. One half will be arguing 'for nature' and one half will be arguing against: Ask students to consider turning over a part of the school grounds to nature. Nature will be allowed to take shape there over a period of fifty years rather like the park in Berlin. What would be the arguments for and against such a suggestion?</p>	<p>10 minutes</p>
<p>Suggested Homework</p> <p>To write an argument for or against the school allowing part of the grounds to be 'left to nature'.</p>	
<p>Resources</p> <p>Visit the World AIMS Website to download the following resource:</p> <ul style="list-style-type: none"> • "Nature Fights Back" • Print images from 'Nature Fights Back' enough for student groups of four/five pupils. <p>Other:</p> <ul style="list-style-type: none"> • Sticky dots 	

Art.V. Nature – KS3 Worksheet

Street art (also called graffiti) is really popular in the city of Berlin in Germany. Young people enjoy using spray paint to create graphic and bold art around the urban environment. When the Natur-Park Suedgelaende was designated as a protected area the people managing the park worried that their efforts would be ruined by young people who would spray paint some of the urban elements of the old train yard. In order to create a compromise they granted permission for a 100-yard stretch of wall by the old railway bridge to be used for street art. To date the young street artists have stuck to their designated area where they are allowed to spray paint as they wish and the rest of the park has been completely left to nature.



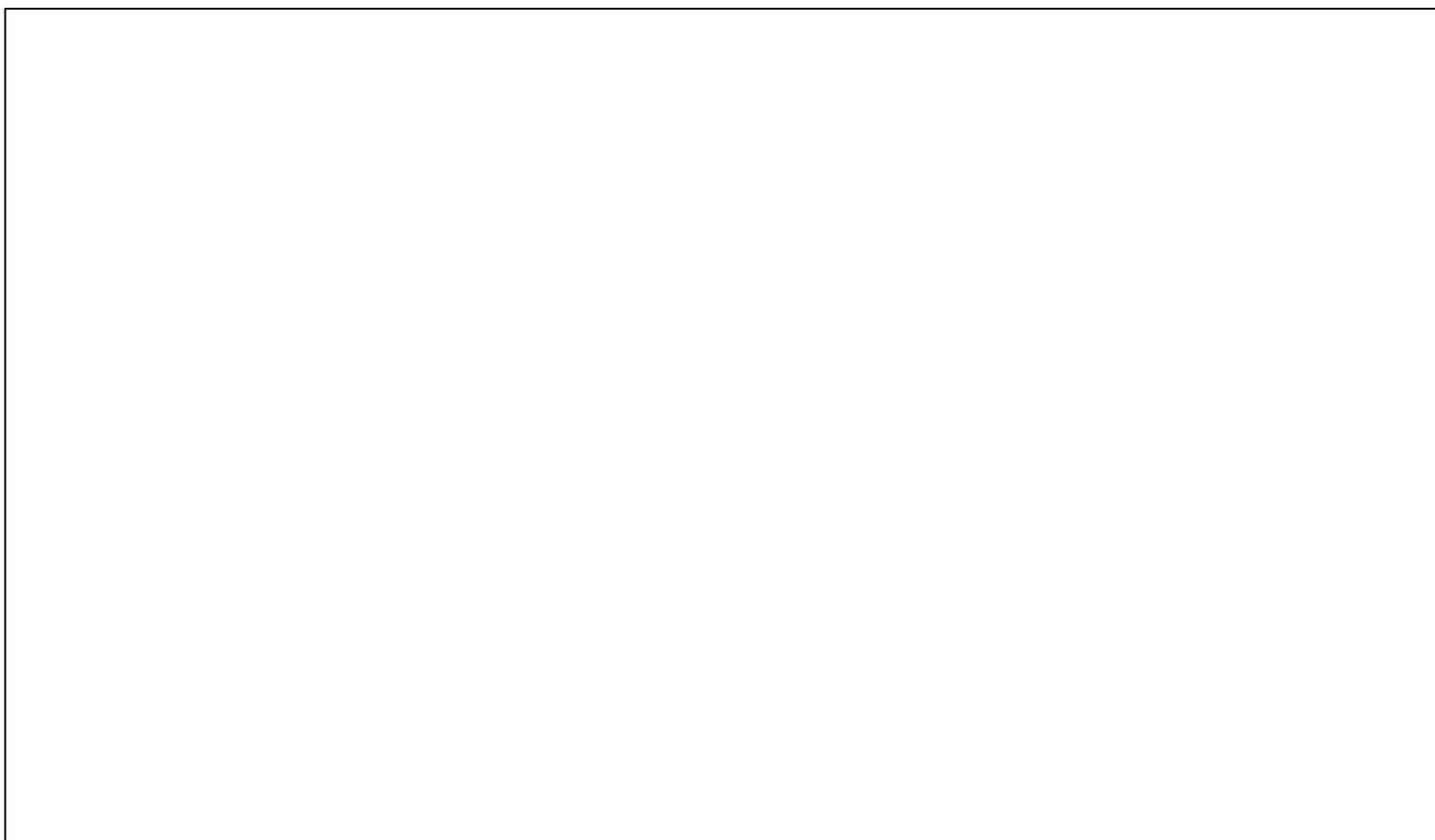
Why would spray paint artists be a threat to the protected environment?

Why do you think street artists agreed to follow the guidance of the park officials and stick to only graffitiing in the allocated area?

Do you think the young people should be allowed to graffiti in the park at all? Why/why not?

Create an a flyer in the box below advertising the graffiti space to street artists. On this flyer you need to:

- Encourage them to only use the graffiti wall
- Tell them about the natural beauty of the park

A large, empty rectangular box with a thin black border, intended for the student to create a flyer based on the instructions above.

World AIMS Global Learning Lesson Plan Two – Urban gardening

Subject: Geography	Topic: Climate change and sustainable development Urbanisation	Age group Year 8 (KS3)
<p>Context Part two of three lessons exploring some of the responses people have made in Berlin, Germany to global climate change.</p> <p>These resources were created to explore the ways human and physical processes interact to influence and change landscapes, environments and the climate; and how human activity relies on effective functioning of natural systems. The activities use case studies from the city of Berlin and were captured in 2014. These case studies act as start points for students to be able to firstly relate to a regional context but then explore wider issues such as climate change or urban development.</p> <p>These resources have been created in response to the new National Curriculum for Geography for KS3.</p> <p>Prinzessinnengarten (Princess Garden), Berlin Prinzessinnengarten is a large agriculture undertaking located on Moritzplatz in the diverse city quarter of Kreuzberg. In the summer of 2009, hundreds of volunteers converted the square, a formerly empty and unused urban wasteland the size of a city block, into a highly productive vegetable and fruit garden. Local residents have maintained and expanded the garden in the years since, adding seven beehives to the square. The garden has been designed so that it can be easily moved if it needs to be. All of the plants are in wooden or plastic crates that can be picked up and carried away. Many similar projects in Berlin are very light on the land, creating gardens that can be moved to accommodate the changes in land ownership that characterize a city that is rapidly growing</p>		
<p>Learning Objectives</p> <ul style="list-style-type: none"> • Understand how humans interact to influence, and change landscapes and environments. • Identify some of the key issues in preserving and protecting the natural environment within an urban landscape. 		
<p>Learning Outcomes</p> <ul style="list-style-type: none"> • All students will be able to identify one way that humans have created an environmentally friendly space within the city of Berlin • Some students will be able to name numerous ways that humans have created an environmentally friendly space within the city of Berlin • The most able students will be able to identify some of the pros/cons of creating an environmentally friendly space in an urban environment. 		
<p>Skills / Literacy / Numeracy / ICT foci ICT – Using multimedia resources to support learning in Geography</p>	<p>Key Words Sustainable, urban, environment, landscape, wildlife, nature, climate, garden, sustainable, cultural, social, financial.</p>	
<p>Starter Ask the class what a garden means to them and collect quick answers.</p> <p><i>e.g. 'A garden is..... a space to grow things/a place to play with friends/a place for BBQs in the summer etc.'</i></p>		<p>Time 2 minutes – quick fire questioning.</p>

<p>Activity 1 After watching the video as quickly as they can in groups of four or five students need to think of as many positive outcomes of having a garden in the city as they can based on what they have seen. They need to write each positive answer on a post-it note. And stick this on to a shared table space.</p> <p>Now point out four signs that you have stuck on the wall on different corners of the room. These signs are labelled 'social', 'nature', 'financial' and 'cultural'. Explain each word to the students and ask them to then classify their post-it note answers under the sign they best fit (e.g. students that have written '<i>lots of bees now use the hives</i>' may want to put this post-it note under the 'nature' sign. As a class read some of these post-it notes out. Make sure it becomes obvious that an environmental project such as Prinzessinnengarten can also have huge benefits beyond simply being good for nature. Draw special attention to the social benefits of this sort of project.</p>	<p>5 minutes</p> <p>10 minutes</p>
<p>Activity 2 Give each student one of the five attached worksheets (see below). Each shows a photo taken in 2014 of a different element of Prinzessinnengarten's work. Students need to identify the positive aspects of this part of the project (what might the social, cultural, financial and natural benefits be) and some of the challenges they think Prinzessinnengarten in creating this element of the project.</p>	<p>25 minutes</p>
<p>Plenary Ask a couple of students with different case study sheets to read out their ideas and to share with the rest of the class.</p>	<p>10 minutes</p>
<p>Suggested Homework and next lesson Students to research urban gardens online. They can start with http://prinzessinnengarten.net but will need to make sure they use the Google translate option (unless they speak German well). The blog is an excellent source of information. This research will aid students in the next World AIMS lesson in this series.</p>	
<p>Resources</p> <ul style="list-style-type: none"> • Post-it notes • Four pre-prepared signs stuck around classroom saying 'social', 'nature', 'financial' and 'cultural' • See below for attached handout worksheets. 	



Growing various plants in crates including different herbs and spices. Here you can see some Thyme growing; a popular cooking ingredient. These plants can be bought by visiting customers.

Write any positive outcomes you can think of for this part of the project in the grid below....

<p>Social</p>	<p>Financial</p>
<p>Nature</p>	<p>Cultural</p>



Different types of bug boxes for insects are both demonstrated and sold in the Prinzessinnengarten project.

Write any positive outcomes you can think of for this part of the project in the grid below....

Social	Financial
Nature	Cultural



Large planting space where different species of plant are planted in bags, crates and portable holders. All of the plants can be picked up and moved if Prinzessinnengarten was forced to find a new location to be based in Berlin.

Write any positive outcomes you can think of for this part of the project in the grid below....

Social	Financial
Nature	Cultural



Outside the garden Prinzessinnengarten advertises the different services it offers including plants for sale and a café selling drinks and food.

Write any positive outcomes you can think of for this part of the project in the grid below....

<p>Social</p>	<p>Financial</p>
<p>Nature</p>	<p>Cultural</p>

Prinzessinnengarten – KS3 Worksheet

Community gardening workshops are offered to visitors to Prinzessinnengarten including some specialist workshops on topics such as bee-keeping. These workshops encourage people to set up their own gardens at home and to use some of the techniques learnt. Education is very important at Prinzessinnengarten.



<p>Social</p>	<p>Financial</p>
<p>Nature</p>	<p>Cultural</p>

World AIMS Global Learning Lesson Plan Three – Creating space for nature (creative task)

Subject: Geography	Topic: Climate change and sustainable development Urbanisation	Age group Year 8 (KS3)
<p>Context Part three of three lessons exploring some of the responses people have made in Berlin, Germany to global climate change. This lesson must follow lesson two in this pack in order for students to have a grasp of relevant information.</p> <p>These resources were created to explore the ways human and physical processes interact to influence and change landscapes, environments and the climate; and how human activity relies on effective functioning of natural systems. The activities use case studies from the city of Berlin and were captured in 2014. These case studies act as start points for students to be able to firstly relate to a regional context but then explore wider issues such as climate change or urban development.</p> <p>These resources have been created in response to the new National Curriculum for Geography for KS3.</p> <p>Prinzessinnengarten (Princess Garden), Berlin Prinzessinnengarten is a large agriculture undertaking located on Moritzplatz in the diverse city quarter of Kreuzberg. In the summer of 2009, hundreds of volunteers converted the square, a formerly empty and unused urban wasteland the size of a city block, into a highly productive vegetable and fruit garden. Local residents have maintained and expanded the garden in the years since, adding seven beehives to the square. The garden has been designed so that it can be easily moved if it needs to be. All of the plants are in wooden or plastic crates that can be picked up and carried away. Many similar projects in Berlin are very light on the land, creating gardens that can be moved to accommodate the changes in land ownership that characterize a city that is rapidly growing</p>		
<p>Learning Objectives</p> <ul style="list-style-type: none"> • Understand how humans interact to influence, and change landscapes and environments. • Apply learning to student’s own context. 		
<p>Learning Outcomes</p> <ul style="list-style-type: none"> • All students will be able to plan a garden space taking into account some of the things they have learnt from the Prinzessinnengarten case study. • Some students will be able to offer four or more environmentally/socially friendly ideas when creating their garden design. • The most able students will be able to identify ways to make their garden a socially, culturally, financially sustainable place as well as a great space for nature to thrive. 		
<p>Skills / Literacy / Numeracy / ICT foci Graphic Design – creating a plan ICT – using ICT for research</p>	<p>Key Words Sustainable, urban, environment, landscape, wildlife, nature, climate, garden, sustainable, cultural, social, financial.</p>	
<p>Starter Ask students to recap learning from the last lesson. What were some of the key features of Prinzessinnengarten in Berlin, Germany? Think of social features (e.g. education for the community), cultural features (e.g. bringing together minority groups in the community), financial features (e.g. running a café creating food from the produce grown) and the features that benefit nature (e.g. bee keeping).</p>		<p>Time 5 minutes</p>
<p>Long activity (to potentially be finished as homework or spread over two lessons depending on level of detail you want students to go into) In pairs or groups of three students to create a design for a nature friendly community garden that could exist within the school grounds. If there is already a similar garden in the school students might</p>		<p>40 minutes or extension version over two lessons (40</p>

<p>want to think about features that they could add to improve it. Provide students with a range of materials to create their plans but explain it is up to them how they show their learning and design. However; they need to include the following:</p> <ul style="list-style-type: none"> • They need to think of areas in their garden that will benefit both nature and the people using it. Think back to the Prinzessinnegarten. • They need to label their garden clearly or use a key to identify different features. <p>You could extend this lesson over two lessons by asking students to create a rough plan in lesson one and then turn this into a 3D design in lesson two. Or students could create their plans in lesson one and present in detail (see Plenary) in lesson two.</p> <p>A photo plan of features in Prinzessinnegarten is provided below to give to less able students who made need prompting.</p>	<p>minutes per lesson)</p>
<p>Plenary Groups to present their garden plan.</p>	<p>20 minutes depending on level of detail you want (see above)</p>
<p>Suggested Homework Finish garden plans if relevant.</p>	
<p>Resources</p> <ul style="list-style-type: none"> • Art resources for 3D models (e.g. sugar paper, coloured paper, scissors, glue, sellotape, felt tips etc.) • Prompt sheet (see below) 	

Here are some photographs taken in 2014 showing some of the features of Prinzessinnengarten to give you your own ideas for creating a garden space in your school....

