Support pack for Secondary Schools

EARTH HOUR 2019

JOIN THE FIGHT FOR YOUR WORLD





Saturday 30 March at 8.30pm wwf.org.uk/earthhour





Nature is vital. It provides our life-support system, and we can't survive without it. But today it's under threat like never before. We're using up our precious planet's resources so fast that nature can no longer restore itself.

We're the first generation to understand the damage we're doing to the planet, and the last that can do something about it. We all have a vital role to play in achieving a fairer and more sustainable world where people and nature can thrive. By joining WWF's Earth Hour, your students can show they want to be part of the fight for our world.

At **8.30pm on Saturday 30 March 2019** hundreds of millions of people across the world will be turning out their lights and coming together to celebrate Earth Hour. It's a time to show we care about our world and a symbolic reminder that the future of our planet hangs in the balance.

They will be making a promise to help restore nature and to give our planet a brighter future. When one person chooses to act it may seem like a small step, but when millions act together change can really happen.

When nature thrives, so do we. Join us for Earth Hour 2019 and together we can fight for a planet that thrives for future generations.

wwf.org.uk/earthhour

EARTH HOUR 2018 HIGHLIGHTS







Last year, in a spectacular display of unity and action, hundreds of millions of people around the globe joined Earth Hour to celebrate our planet and promise to fight for our world.

A record 188 countries and territories, across seven continents, took part in the biggest global movement to protect our planet. Close to 18,000 landmarks and monuments from the Sydney Opera House to the Eiffel Tower and from Buckingham Palace, Principality Stadium to Edinburgh Castle switched off their lights as millions united to fight for our planet.

In the UK over 10 million people showed their support for Earth Hour. Over 7,000 schools took part and organised events and activities in their local communities. They took part in a number of ways, including:

- turning off lights, electrical appliances, whiteboards and computer screens for an hour during the day;
- helping with a big beach clean;
- hosting stalls in local shops to inform their local community about WWF's Earth Hour;
- creating posters and films to inform everyone in the community about Earth Hour;
- holding a school event to promote awareness of climate change and habitat loss, and inviting the wider community and local press along.

This year even more people will be taking the opportunity to make a difference by joining Earth Hour. Millions will be inspired to take further steps beyond Earth Hour and join the fight for our world.

FIGHT FOR OUR WORLD

Earth Hour inspires us to think about what we can do for our planet. Whether it's making sustainable choices like using less plastic, cutting down on our food waste, or choosing to buy products that don't harm the environment, every decision we take can make a difference. Here are some ways that we can all make a choice that's good for nature.



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LOOK AFTER OUR WILDLIFE

Your students will be familiar with many characters from nature, from Mr Toad in 'The Wind in the Willows' to 'Fantastic Mr Fox'. Yet, in the last 40 years, the UK has seen an unprecedented collapse in its wildlife populations, making it one of the most nature-depleted countries in the world. Since 1970, more than half of our native species have declined.

Over 70% of our land is used in agriculture but our intensive farming methods mean that we have lost many of the flower meadows, hedgerows and trees that provide homes for pollinating insects such as bees and other animals. Pesticides pass up the food chain harming predators such as hedgehogs or birds and polluting our rivers.

We need to act now to help restore nature.



FIX OUR FOOD SYSTEM

We all need to eat. But the way we produce and consume our food is one of the greatest threats to our planet. Across the globe, forests are chopped down to grow crops like palm oil or soy, which is used to feed livestock in the meat and dairy industries. The food supply is responsible for 20% of the UK greenhouse gas emissions and contributes more to global warming than transport.

Our Western diets are high in meat, dairy and processed foods. We eat almost twice the amount of protein from animal products than we need to. And every year in the UK we throw away a third of all the food we buy.

Small changes in our diets can make a massive difference to our planet. Eating a more varied diet and replacing some of the meat and dairy with plant-based foods would be healthier for us and our planet.

SAY NO TO PLASTIC POLLUTION

Plastic is everywhere. From our local rivers and beaches to the remote Arctic sea, it is choking our oceans and killing wildlife. Every year we dump 8 million tonnes of plastic waste into our seas - the equivalent weight of over 600,000 double decker buses.

Plastic pollution is also a major threat to marine life. According to scientists, plastic particles can be found in 90% of the world's seabirds. If we don't act now, by 2050 there will be more plastic in the sea than fish.

We can all try to use less plastic and to reuse and recycle. But we also need to persuade producers to curb plastic pollution.



TACKLE CLIMATE CHANGE

Climate change, caused by human activity, affects every corner of our planet and one in six species are at risk of extinction as a result. In the Arctic Sea, the loss of ice makes it much more difficult for the polar bears to hunt and breed. The warming of our oceans is destroying coral reefs which are home to more animal species than rainforests.

And climate change affects people too. We are seeing more extreme weather events such as floods, forest fires, or drought. Some experts predict that by 2050 climate change will have forced up to 200 million people to leave their homes.

We can all play a part in tackling climate change. And the choices that we make will shape the future of our planet.



1 IN 6 SPECIES ARE AT

RISK OF EXTINCTION DUE

TO CLIMATE CHANGE.



Young people today are vital to protecting our planet, both now and in the future. This resource contains plenty of engaging activities to help you build your students' understanding of key environmental issues and encourage them to see themselves as part of an interconnected world with a key role to play in building a thriving and sustainable future.

All activities are linked to UK curricula and they can be adapted for use with different ages and abilities. You can use them to take a cross-curricular approach over several weeks in the lead up to Earth Hour, or you can carry out some standalone sessions. Some activities can also be linked to a particular unit of work that you may be undertaking in the months beyond Earth Hour.

All resources sheets are available as separate PDF files.

CURRICULUM LINKS

ENGLAND KS3

Design and Technology: designing, making and evaluating; Art and Design: developing creativity and ideas; English: spoken English - giving short speeches and presentations, expressing ideas; Science: biology - interactions and interdependencies, relationships in an ecosystem, genetics and evolution; Geography: human and physical geography; Citizenship: developing research skills, debating and evaluating viewpoints, presenting reasoned arguments, taking informed action

NORTHERN IRELAND KS3

English with Media Education; Environment and Society: geography; Learning for Life and Work: local and global citizenship, equality and social justice, democracy and active participation; Science and Technology: technology and design - education for sustainable development; Science: the environment, biodiversity, education for sustainable development

SCOTLAND CURRICULUM FOR EXCELLENCE S1 – S3

Literacy and English: listening and talking; Sciences: planet Earth - biodiversity and interdependence, energy sources and sustainability; Social Studies: people, place and environment; Technologies: craft, design, engineering and graphics, food

WALES KS3

Design and Technology: designing and making; **English:** oracy - developing and presenting information and ideas; **Geography:** understanding places, environments and processes; **Science:** interdependence of organisms, the sustainable Earth; **Personal and Social Education:** active citizenship, health and emotional well-being, sustainable development and global citizenship

ACTIVITY 1 LOOK AFTER OUR WILDLIFE: ANIMALS ON THE BRINK

This activity encourages students to consider some of the threats to our UK wildlife and explore the steps that we can take to help nature thrive.

LEARNING OUTCOMES

- Students will understand the ways in which different UK native species are under threat
- Students will practice writing for a purpose
- Students will build their understanding of climate change and how it affects UK nature
- Students will develop their group work skills
- Further option: students will use digital skills to make their own film

RESOURCES NEEDED

- One 'UK nature fact' for each student
- One copy of the 'UK nature pictures' displayed around the classroom
- iPads if making a film

PREPARATION

Cut up the 'UK Nature facts' so that each student has one. You will need to adjust the number of animal species focused on, depending on the size of the class.

WHAT TO DO

Introduce the activity by discussing nature in the UK with students. How many students have spent time in nature in the last week? Did they see or hear any animals? Can students name some native UK animal species? What is the natural habitat of these species?

Explain that today the UK is one of the most naturedepleted countries in the world. They are going to find out about some of the animals that are most threatened.

Draw students' attention to the animal pictures and their habitats displayed around the room. These are all UK native species that are under threat. Give each student one of the 'UK nature facts' and ask them to move around the classroom, sharing their fact with others. After sharing the facts for a short time, ask students to form a group with those whose facts refer to the same animal.

Once in groups, students should take the picture of the animal and its habitat and discuss the threats that the animal faces. Ask students to list the threats that are caused by human activity. These might include changes in farming methods, plastic waste, climate change, and damage to rivers from fertiliser and pesticide pollution, as well as taking out too much water.

In their groups explain to students that they are going to be presenting a news bulletin on threats to a UK wildlife species. Students should think of one key message that they would like to convey. They should make sure that their bulletin answers the six questions: WHAT is happening? WHEN did it start? WHERE is it happening? WHY? WHO is involved? HOW is this happening? Students should also decide who they are going to 'interview' for their reports.

Once students have had time to prepare, give them three minutes to present their reports verbally to the class, with different students taking on the roles of reporters and interviewees. A further option is to make a short film to present to the class.

Come together as a class and discuss the issues that have been raised. How do people feel about what they have learned?



FURTHER IDEAS

POETRY ACTIVITY

Students could write a poem about one of the UK wildlife species that is under threat. This could take the form of a kenning, haiku, or even an elegy (there is a good model for an elegy – 'Future Past' by Judith Nicholls which focuses on an elephant). Students will need to collect some more information on the individual animals and build up a word bank to describe them. They should also think about why the animals are under threat and what we need to do to change this.

CITIZEN SCIENCE



Why not get involved in a citizen science project and record the nature that is on your doorstep? You can use the **iNaturalist app** or **iNaturalist.org** to upload photos that students have taken of their wildlife observations. These will contribute to a world-wide database of biodiversity, supporting local and global research projects.



Opal Explore Nature also has a wide range of citizen science surveys for schools and families which include surveying the health of trees, looking at pollution levels in lakes and ponds, and counting bugs. www.opalexplorenature.org

Look out for WWF's fabulous citizen science resources and challenges linked to Our Planet - an amazing new natural history series with streamed and free content. Available from April 5 2019. www.ourplanet.com

IMPROVING BIODIVERSITY IN YOUR SCHOOL GROUNDS

From feeding wildlife to planting a wildflower area, there is plenty that you can do. How about:



A bug hotel wwf.org.uk/gabughotel



A butterfly feeder wwf.org.uk/gabutterflyfeeder

ACTIVITY 2 FIX OUR FOOD SYSTEM: MAKING THE LINKS

This activity uses photographs to encourage students to ask questions and make connections between the food that they eat and the health of our planet.

LEARNING OUTCOMES

- Students will develop an understanding of the impact of food production on our planet
- Students will explore how we can all make a difference through our food choices
- · Students will develop their group work skills

RESOURCES NEEDED

- Post-it notes
- An A4 copy of the 'Making the links discussion' resource sheet
- Copies of the 'Making the links pictures' resource sheet, cut up for each group of students
- A range of products that contain palm oil: margarine, instant noodles, pizza dough, packaged bread, chocolate, biscuits, ice-cream, shampoo, soap, lipstick, candles or washing detergent
- · A large sheet of paper for each group

WHAT TO DO

Show the photos of the orang-utan and the supermarket shelves on the 'Making the links - discussion' resource sheet to the class. Ask students to think of any questions that they have about these photos and write them on Post-it notes. For example: Where do orang-utans live? What do they eat? Are they in danger? Where does our food come from? What does it contain?

Show students the range of products and ask them to think about what all these products have in common. Draw out that they all contain palm oil, which is found in close to 50% of the packaged products we find in supermarkets.

In small groups ask students to stick the photos from the 'Making the links pictures' resource sheets in a timeline on a large sheet of paper, which connect the two photos that they have just looked at. They should write a 'story', in a storyboard format across their sheet of paper and highlight the links between the photos. During this process, you may wish to give students the 'Palm oil' resource sheet to read.

Come back together as a class and share students' findings. How do students feel about what they have learned? Explain to your students that palm oil does not have to be destructive and, through the food choices we make, we can all help to build a food system that is better for our planet.

SAY NO TO PLASTIC POLLUTION: WILD CREATIONS

This creative activity allows students to work in groups to create a large-scale model of an endangered animal from recycled plastic waste. You may wish to link up with a local community group to make the models, perhaps displaying the animals and their messages in a shared space.

LEARNING OUTCOMES

- Students will explore an environmental issue through a visual and creative approach
- Students will consider the use of plastic in their everyday lives
- Students will consider a range of steps that can be taken to reduce the use of plastic
- · Students will develop their group work skills

RESOURCES NEEDED

- · A large collection of plastic waste (see below)
- Some larger scrap pieces of wood or plastic waste, such as broom handles, that can be used to make a frame for the animals. If the animal will be displayed indoors then strong cardboard could also be used
- Wire or string to join the pieces together. You can also make ties using strips of plastic bags
- A copy of the 'My plastics diary' worksheet for each pupil

PREPARATION

As a whole class you will need to build up a large collection of plastic waste in the weeks before this activity but make sure that you don't buy any extra plastic in order to have more material for this activity. If you spread the word, members of the local community will probably be more than happy to contribute washed and cleaned items of plastic.

Think creatively and remember that practically anything will be useful! Items could include plastic packaging, bottle tops, used CDs, carrier bags, food wrappers, plastic pots and bottles of all sizes, single use cutlery that cannot be reused, string bags from fruit, straws etc. You may also find it helpful to visit a scrap store, if there is one in your local area.

WHAT TO DO

Introduce students to Nadia Sparkes who, when she started secondary school, became concerned by the amount of rubbish she spotted on her two mile walk to and from school. She began collecting litter but her green habits led to her being bullied and called 'Trash Girl'. Nadia didn't let this put her off her environmental work. She embraced the name and set up a Facebook group, 'Team Trash Girl', to encourage everyone to "pick up three pieces of litter today". In her first term at school she collected more than two 80 litre green bins worth of what is mostly recycling /plastic and, around the world, people are following Nadia's example.

wwf.org.uk/trashgirl

Divide the students into groups and ask them to think about the plastic that they use in their lives. How often do they use plastic? What do they use it for? Do they feel that they could use less?

Explain to students that plastic is choking our oceans and killing wildlife. The information in the introductory section will be useful here. Students are now going to turn plastic waste into a reminder of how important it is to protect our planet from its effects. They will work in teams to create a sea

ACTIVITY 3 SAY NO TO PLASTIC POLLUTION: WILD CREATIONS

animal that is affected by pollution, using recycled items of plastic. These might include seals, turtles, seabirds, fish, whales and dolphins. Alternatively, you may wish to create a giant whole-class animal, with each group responsible for one part of the body.

As they work, encourage students to experiment with the different plastic materials and not have too many fixed ideas about what they are going to do – some of the best ideas come about through happy accident! Limbs can be created by stuffing carrier bags with plastic packaging. Students may wish to cut off the base of plastic bottles and then cut slits from the bottom to near the top of the bottle. These can be used to create a feathery texture for seabirds.

Once groups have had enough time to create their animals, perhaps over two sessions, add a number of postcards or banners carrying messages and facts about plastic pollution. Display the animals prominently to pass on the message about plastic pollution.

Whilst students are creating their animals, ask them to keep a plastics diary for a week, using the 'My plastics diary' worksheet. Come back and compare how much single-use plastic they have used. Where were most plastics used? Have students changed what they think about how much plastic they use? Can they think of ways that they could use less plastic? Perhaps they could reuse more items? For example, yoghurt pots can be used to store their packed lunch fruit in. Or students may choose to drink water from the tap rather than a plastic bottle. Remember that every one of us has a part to play in protecting our oceans from plastics pollution! Please remember to dismantle models responsibly.

Take it further

You will find plenty of further activities which explore the issue of plastics pollution in the WWF resource: 'The oceans and plastic pollution' on the TES website.

wwf.org.uk/tesoceansandplasticresource

Share a photo of your models with us; we'd love to see it.

Send to **schools@wwf.org.uk**or tweet them @wwf_uk #EarthHourUK



ACTIVITY 4 TACKLE CLIMATE CHANGE: ROLE PLAY

In this role play activity, students will explore a range of perspectives on climate change. Role play helps students to engage with issues and develop new ways of understanding. This activity is best carried out once students have some understanding of climate change through earlier sessions.

LEARNING OUTCOMES

- Students will build on their own experiences and knowledge about climate change
- Students will develop their speaking and listening skills
- Students will explore the feelings and emotions of those who take different viewpoints
- · Students will develop their group work skills

RESOURCES NEEDED

• One copy of the 'Role play' resource sheet, cut up, for each group of five pupils

WHAT TO DO

In small groups, ask students to share what they already know about climate change. They are likely to remember some ideas from earlier activities but will also have seen climate change referred to in films, books and on TV. Ask them to write down all their ideas on Post-it notes and put them on a large sheet of paper. Share some ideas together as a class.

Now set the scene by explaining that, in their groups, students will be creating a short role play based on a scene in which a local council is holding a meeting to decide whether to stop investing its money in fossil fuels. A number of local people with an interest in the issue are attending the meeting. Students will each be given a role card, but they should also feel free to add further information and present their own interpretation of their character.

Give each group a set of the role cards and ask them to agree on who is going to play which character. Emphasise the informal nature of a role play – they should not over-prepare. Allow students to spend about 10 minutes developing their scenes and go round the class, offering support and ensuring that they are developing different points of view to present to the class.

Come together and ask each group to perform their role play. After the performances it is important to allow students to express their feelings about what took place. There are often strongly held opposing views on climate change and what should be done about it. Finish by reflecting on the fact that we all share one planet and, in the long term, it is in all of our interests to look after it.

Take it further

You will find plenty of further activities to challenge, inspire and empower your students to tackle climate change in the WWF 'Shaping our future' resource wwf.org.uk/climatechangeresources

ACTIVITY 5 A PROMISE FOR THE PLANET

This activity encourages students to make the links between their own actions and the future of our planet. After thinking about the ways in which they enjoy the 'great outdoors' they make a promise to take one step to protect the Earth.

LEARNING OUTCOMES

- Students will reflect on the enjoyment and opportunity that outdoor activities offer
- Students will understand that we can all take action to fight for nature
- Students will develop their group work skills

RESOURCES NEEDED

- Post-it notes
- 'Fight For Your World' video, you can find this at:
 (YouTube) wwf.org.uk/fightforyourworldfilm
 (Vimeo) wwf.org.uk/fightforyourworldfilmvimeo
 The film lasts 1.30 minutes
- · Copies of the 'Leaf' template
- Drawing or painting materials

WHAT TO DO

Ask students how many of them have spent time in nature during the past week. Explore whether they feel they would like to spend more time in nature? How does it affect them when they do? There is evidence that a connection with nature makes us healthier and happier people. Our planet gives us a huge number of things to enjoy and wonder at. Discuss how important it is that we protect the Earth so that future generations can enjoy the same things that we do.

Show students the video and give students the opportunity to discuss their immediate reactions to the film. What do they think the main message of the film is? Now tell students that they are going to be watching the film again but this time they need to think about what the film tells us about the four areas:

Wildlife The food we eat Plastic pollution Climate change Take feedback from students on the four areas and again, give them the opportunity to discuss their feelings about what they have seen.

As the video says, we can win the biggest battles in the smallest moments. What do students think that this statement means? Do they agree? How can they fight for our world? Ideas might include: walking or cycling to school, using less water, saying no to plastic drinking straws, planting wildlife friendly areas in school, eating foods that are in season or locally grown (or even growing your own food), saving on electricity by not leaving the TV or computer on standby, recycling more, or learning more about nature and the natural world.

Now ask students to decorate a leaf, using the 'leaf' template provided. They should then make a promise for the planet, writing down one thing that they will do to fight for our world, for example, walking to school or using a reusable water bottle rather than plastic disposable ones. Display these leaves on a tree in the school grounds, or on branches brought into the school hall to create an Earth Hour display.



TELL US ABOUT IT!

Share your Earth Hour stories with us; we'd love to hear them. Send them to **schools@wwf.org.uk** or tweet them @wwf_uk #EarthHourUK



[School name] we're taking part in @wwf_uk #EarthHourUK 2019, are you?

Share your Earth Hour promises with us:

In England, @wwf_uk and #EarthHourUK
In Scotland, @WWFScotland and #EarthHourScotland
In Wales, @WWFCymru and #EarthHourWales

wwf.org.uk/earthhour