

125 Sustainability Tips

GA Sustainability and Citizenship Special Interest Group

Top Tips for teaching about biodiversity

Enquiry approach

1. Conduct an enquiry, using quadrats, into the number of plant species found in different sections of the school grounds. Students could compare their results to a local park, field, or beach.
2. Conduct an enquiry into the use of herbicides on plant species within an area. Students could treat different areas with herbicides and then compare number of species using quadrats.
3. Conduct an enquiry into the impact of acidification of the oceans on sea life. Students could use different concentrations of acid to measure the impact on shell density.
4. Conduct an enquiry into the number of species of animals found in a local river course or lake. Students could collect samples over different seasons.
5. Take students outside to field sketch a small-scale ecosystem, such as a wooded area or local lake. Students can produce a diagram showing the different components of the ecosystem and how they are interdependent.
6. Students can conduct an enquiry into whether their parents' consumer choices are influenced by knowledge of the environmental impact involved in the products' production. Students can use questionnaires to collect evidence, this can then be presented, and conclusions drawn.
7. Students could produce an enquiry into the availability of sustainably produced food products, such as soya, within their local supermarket.
8. Students could conduct an enquiry into the availability of organic products within their local supermarket.

Researching

9. Students can map the world's major biomes and research the potential human threats to their future.
10. Students could investigate one species at risk of extinction, a report could be produced outlining the reasons why the species is endangered.
11. Investigate the impact of one consumer product, such as soya, on the biodiversity within a known biome, such as the rainforest.
12. Investigate the impact of the use plastics on the environment. Students could produce a report about their findings.
13. Students can choose one large-scale biome and research the strategies that have been used to sustainably manage the area.
14. Students could investigate the different environmental impacts of organic and inorganic farming on the environment.

15. Students could investigate a food web within a named biome or ecosystem, students could produce a string model showing the connections between the different species.
16. Investigate a local, national, or international NGO, which aims to protect biodiversity. Students could produce a presentation or display about their work.

Taking action

17. Establish a school eco-committee. The group can identify different ways that the school environment could be developed to support and enhance biodiversity. The group could also investigate Green School Status.
18. Students could write to their local MP asking what governmental action is being taken to protect a local ecosystem or global biome.
19. Students could write to their local supermarkets asking them their policy on stocking products that are sustainably sourced, such as palm oil.
20. Contact the local park ranger, there might be an opportunity for students to involve themselves in the sustainable management of a local ecosystem.

Raising awareness

21. For a local ecosystem, students could devise a nature walk, highlighting the biodiversity within the area.
22. Develop a poster or leaflet aimed at people using the National Parks, it should show visitors how to use the park within disturbing or damaging the plants and animals within the area.
23. Students could produce a display of sustainably sourced food products from around the world.
24. Produce a leaflet aimed at informing the general public about the impact of plastics on the oceans.

Top Tips for teaching about water security

Supporting the curriculum

25. Make learning about water fun! There are a range of KS2 lesson plans and resources on the WaterAid website (<https://www.wateraid.org/uk/get-involved/teaching/ks2-resources>)
26. Introduce students to Goal 6 of the 2030 Sustainable Development Goals- 'Ensure access to water and sanitation for all'. Students produce a speech about why this goal is important and have to include facts and figures about why it matters (<http://www.un.org/sustainabledevelopment/water-and-sanitation/>). They should be encouraged to think about the likely impact of this goal in the short and long term, the impact on people's lives and on countries as a whole.
27. Watch a TED talk (<https://ed.ted.com/lessons/where-we-get-our-fresh-water-christiana-z-peppard>) about the issue of water security and write 3 questions that you would like to ask the speaker.
28. Keep up to date with the issue of water scarcity in the news. Use a photograph from a news article e.g. the lack of water security in Cape Town. Ask students to carry out an IDEAL Analysis using the photograph (Identify what they can see in the photo. Describe what problem exists

there and explain what has caused the problem. Apply learning by thinking of possible solutions to the problem. Link- where in the GCSE specification is this relevant to your learning?

29. Students calculate and compare their personal water consumption to that of others in the class. Global contrasts could be made and data can be plotted.
30. Carry out Flipped Learning. For homework students create 5 Top Trump cards for 5 countries covering water usage, wasted water etc. Map and locate Top Trumps individually and collaboratively to draw out patterns.

Raising awareness

31. Ensure students are aware about water consumption. Carry out a card sort activity whereby students have to match litres of water with a particular activity such as using a washing machine.
32. Encourage students to think about how Goal 6 of the 2030 Sustainable Development Goals- 'Ensure access to water and sanitation for all' can be transferable to school life. Ask the student council to consider how they can raise awareness of it in the community.
33. Deliver an assembly to help raise awareness about the necessity for water on a local and global scale.
34. Create an interactive display in the classroom/corridor that explores topics such as the water cycle to engage students.
35. Use social media to raise awareness of water scarcity in the world.

Taking action

36. Ask the student council to decide how best they can take action in the school and local community in order to ensure water sustainability. Why not direct them to a resource such as the Lazy Person's guide to saving the planet (<http://www.un.org/sustainabledevelopment/takeaction/>)
37. Carry out a water saving project around the school e.g. placing ice cream tubs underneath water fountains, use a refillable water bottle, install rainwater tanks.
38. Join in with conservation projects such as World Water Day (<https://www.wateraid.org/uk/get-involved/events/world-water-day>)
39. Students carry out a homework project that documents how they and their family/friends have saved water over the course of a week.
40. Campaign! Students to research their local MP and write a letter or an email to them which reflects why they think they should take action to save water in the community. There are more ideas on the PDF: (https://www.wateraid.org/uk/sites/g/files/jkxoof211/files/your_guide_to_campaigning_for_wateraid_0.pdf)
41. Students create a calendar highlight one water saving activity each day for a month.
42. Organise a sponsored walk for your class (or the whole school!) and experience what it is like to walk for water every day, while raising money for a charity such as Link Ethiopia (www.linkethiopia.org) so that they can provide children in Ethiopia with a water tap system in their school.

Top Tips for teaching about waste

Enquiry approach

43. **Waste in the classroom enquiry.** Empty the classroom bin at the end of the day. Ask students to classify the materials and decide whether they can be recycled. Students can present their findings to the school council and suggest ways to reduce classroom waste.
44. **School litter enquiry.** Ask students to map the location of litter on the school grounds compared to where the bins are located. Using their findings students could suggest whether the bins are currently in the most appropriate location and whether further bins are needed.
45. **Food waste enquiry.** Ask students to collect data on the food that is thrown away at home. Students can work out cost of the waste food and suggest strategies to reduce food waste at home.
46. **Plastic Everywhere.** Ask students to collect data on how many of the items brought in their weekly shop contain plastic. Students could present their findings and suggest strategies to reduce the amount of plastic purchased each week.
47. **Do we recycle enquiry?** Ask students to conduct an enquiry into the issue of recycling. Students could use questionnaires to find out whether members of their community recycle and the issues associated with reducing waste.
48. **How long to decompose?** Students can investigate the time taken for various pieces of household waste to decompose. Students can bury items in the school grounds, representing landfill, and return at a later date to judge the decomposition of the differing pieces of waste.
49. **Read about the Freiberg cup** - ask students to discuss whether this solution could work for us https://www.weforum.org/agenda/2017/12/germany-has-come-up-with-the-best-solution-to-single-use-coffee-cups?utm_content=buffer2a4d2&utm_medium=social&utm_source=facebook.com&utm_campaign=buffer

Researching

50. **E-waste.** Ask students to research the impact of electronic waste on the people and environment of China. Students can produce a PowerPoint presentation illustrating the impacts of e-waste on people and the environment.
51. **Where can I recycle?** Ask students to investigate local recycling schemes and facilities. Students can produce an information leaflet for local homes encouraging them to make greater use of the facilities.
52. **Should I donate my clothes?** Increasing people are using charity bags delivered to homes to donate old clothing. Ask students to research the advantages and disadvantages of such schemes for both people and the environment.
53. **Food waste and corporate policy.** Ask students to write to the leading supermarket chains asking them how they are reducing food waste, alternatively students could use the Internet. Students could offer suggestions on how the supermarket could further contribute to reducing food waste.
54. **Paper recycling.** Ask students to research the process of paper recycling. Students can produce an illustrated storyboard showing the process.

Raising awareness

55. **Reusable bottles.** Ask students to design and deliver an assembly about the positive impact on the environment of using reusable water bottles in school.
56. **Oceanic Plastic.** Ask students to design a display for a prominent area of the school showing the impact of plastic on the oceans, and strategies that can be used to reduce plastic use and waste.
57. **Bag for life.** Ask students to write an information leaflet about the benefits to the environment of using a bag for life whilst shopping. Students could ask the local supermarket whether they could distribute their leaflet at the tills.
58. **Best before or use by.** Ask students to produce a display showing the difference between best before and use by dates, and how knowledge of these can reduce food waste.
59. **Leftover recipes.** In collaboration with food technology, students could produce a leftovers cookbook as a strategy for reducing food waste. This could be distributed in electronic form via the school website.
60. **E-waste amnesty.** Ask students to devise a school campaign for students to bring in old mobile phones. These can they be donated to a development charity such Water Aid, through their recycling for aid scheme.

Top Tips for teaching about energy

Researching

61. Students can record the level of renewable energy in their homes and local area. For example, if students have solar panels they can read the meter to see how much power these panels are making. Where does the energy go? Are there wind turbines on their way to school? If so, where are they placed? A class activity can then be carried out whereby students compare their findings.
62. Ask students to collect data on how showers are used in their home. How long do family members stand in the shower? What is their shower head like? If it is powerful that could be using more energy.
63. Students can check how much energy is being used and how much it is costing each week. Many power companies will provide them for free and some will calculate exactly how much each appliance is costing each minute.

Taking action

64. Ask students to monitor the level of water being boiled in a kettle at home and inform family members to fill the kettle only as necessary.
65. Ask students to turn off the TV if it is in standby mode to save electricity or ensure that chargers for mobile devices are unplugged if they are not in use.
66. Students can ensure that water coming out of taps is not too hot and inform their parents/carers to take action if they think that it is. Most heaters in homes have a temperature control and this can save energy and money.

67. Ask students to find out the cost of electricity used by the school. Students can investigate the amount of energy used by various appliances and produce signs encouraging the school community to save energy.
68. Set a team challenge! Ask students to design a sustainable city - you could run this as a competition as part of a school-wide 'Green Week'. The focus could be to save energy.
69. Set students a Scavenger Hunt challenge - this could work well as a homework with older students. Students have to identify evidence of sustainable energy usage and get scores for different things e.g. 1 point for a bus stop, 2 points for a bike rack, 3 points for a bike share scheme, and then the points increase for harder-to-find things like an electric car charger, an electric bus and so on.

Supporting the curriculum

70. [The E.ON Energy Experience](#) has free activities, teachers notes, classroom guides and curriculum links for energy topics including fossil fuels, nuclear and renewables for key stages 1-4.
71. [The Ashden Awards for Sustainable Energy](#) has free resources for primary school teachers including free PowerPoints, lesson notes and short videos.

Top Tips for teaching about transport

72. Carry out some local fieldwork around your school - conduct traffic counts to find out how congested the roads around your school are at different times of day? Were there peak times? Which types of vehicles?
73. Conduct a class survey - how does everyone travel to school? Calculate how far the class travel by foot, bike, car, bus and coach each day, week and year. Which class at your school has the most sustainable travelers?

Raising awareness

74. Conduct an enquiry into sustainable transport solutions in the area around your school; what options are available? Map these to identify how connected your area is to other transport networks.
75. Calculate the carbon footprint of your class' journeys to school for a day, week and year.

Researching

76. Read about this interesting new initiative - Brussels plan to introduce free public transport on days when air pollution levels are high. Discuss whether the UK could adopt a similar scheme: <https://www.theguardian.com/environment/2018/feb/26/brussels-to-make-public-transport-free-on-high-air-pollution-days>
77. Find out about the nearest cycle hire scheme to your school - for example, Bristol, London and Brighton all have cycle hire schemes.
78. Research why Hong Kong has the world's most sustainable transport - what strategies could the UK adopt?: <https://www.statista.com/chart/11658/the-worlds-top-cities-for-sustainable->

[transport/](#) and <https://www.consultancy.uk/news/15191/six-uk-cities-make-top-100-sustainable-mobility-cities>

79. Find out what we can do to plan cities that have sustainable transport at their heart:
<https://www.carbontrust.com/news/2015/01/sustainable-transport-cities/>
80. Learn about Brazil's greenest city, Curitiba - what lessons could we learn from its world-class public transport system?
http://www.bbc.co.uk/schools/gcsebitesize/geography/sustainability/sustainable_living_rev4.shtml
81. Investigate how the use of electric cars is growing across Europe and ask students to discuss whether they or anyone they know has one:
<https://www.theguardian.com/environment/2018/feb/27/lack-of-models-not-charging-points-holding-back-electric-car-market>
82. How can we make travel and tourism more sustainable? Discuss the ideas mentioned here:
<https://www.theguardian.com/lifeandstyle/2018/feb/24/reusable-bags-and-no-elephants-travel-the-world-without-trashing-it>
83. Research why London's Garden Bridge proposal failed, and ask students to discuss what could be done to make it work in future.

Taking action

84. Identify a 'Green Week' for your school and invite students to pledge to travel to school more sustainably.
85. Sign your school up for the Living Streets' 'Walk to School' challenge! Find out more here:
<https://www.livingstreets.org.uk/what-we-do/projects?r=&q=schools>
86. Watch this clip about Kings Heath in Birmingham - ask students to write a letter to their local MP about whether a similar approach could be adopted in their local town:
<http://www.bbc.co.uk/news/av/uk-england-birmingham-42641439/the-birmingham-high-street-that-cut-air-pollution>
87. Encourage students to get out and about! For schools near to London, this website suggests London walks that start and end at tube stations (and if you're not, can your students use the OS map to plan their own?): <http://www.bbc.co.uk/news/av/uk-england-birmingham-42641439/the-birmingham-high-street-that-cut-air-pollution>

Top Tips for teaching about food and farming

Researching

88. Why not investigate what your local shops and supermarkets offer schools focusing on sustainability? Many of them welcome groups of geography students for trips or talks, or offer learning resources to support geography teachers.
89. Primary geographers will get a kick out of a visit to their local supermarket to hunt out where their food comes from, how far it's travelled, or find Fairtrade products. Free, inspiring and fun.
90. [Tesco's](#) have 500 community champions – why not ask them to visit the school to talk about how Tesco is addressing the Sustainable Development Goals?

91. [Waitrose](#) runs a scheme called Grow and Sell Seed Kits, “encouraging 7-11 year olds ... to grow their own produce ...The scheme will help children identify where food comes from, the importance of seasonality and the fragility of producing food”.
92. [Co-op](#) has a lot of information about food sourcing and sustainability, [teaching resources](#) about Fairtrade and community champions who can visit schools.
93. [Morrisons’ Academy of Food](#) for KS2 and KS3 has learning resources on farming and fishing exploring where food comes from, and teachers can arrange to visit the store with their class.
94. [Marks and Spencer’s](#) online interactive map is an interesting research resource showing where their products come from and who’s involved in bringing them to consumers – from nearly 70 countries!
95. All these supermarkets – and others – have commitments and plans to improve their supply chains, reduce their carbon footprint, promote local business, support farmers thousands of miles away. From Marks’ and Spencers Plan A, to Sainsbury’s Making a Difference, they’re all making changes to their businesses to promote sustainability. But which ones do young people think might have the greatest impact, for whom, and why? Analysing them from a social, environmental and economic point of view would make a fascinating real-world project helping young people develop their systems-thinking and justified reasoning skills.

Taking action

96. Food and farming charity Sustain runs lots of projects across the UK supporting young people, schools and communities to source, cook and eat healthy, locally grown, sustainable food. Check out <https://www.sustainweb.org/projectsandcampaigns/> to find one that your school might be interested in.
97. <https://www.foodforlife.org.uk/> from the Soil Association supports schools to take action on improving school food – making it more sustainable – and can help schools arrange to visit a farm, get rewarded for their efforts or provide learning resources.
98. <https://www.consumerclassroom.eu/> is an international community of teachers and educators interested in consumer choice, particularly around food sustainability.
99. Find sustainable food near you, organisations involved locally, learning resources and more at <http://www.solidarityeconomy.eu/> an international project focusing on sustainable supply chains. Check out the map <http://www.solidarityeconomy.eu/susy-map/>
100. <https://ypte.org.uk> The Young People’s Trust for the Environment has learning resources and actions for young people on sustainability

Supporting the curriculum

101. Fairtrade Foundation www.fairtrade.org.uk/schools films, lesson plans and assemblies about Fairtrade products, focusing on areas of food sustainability such as supply chains, climate change and livelihoods
102. Global Dimension <https://globaldimension.org.uk/> a huge directory of global learning resources: search by topic, for instance food, sustainable development goals or farming, or by age group, subject or publisher
103. Rainforest Alliance <https://www.rainforest-alliance.org/curricula> a US site focusing on rainforests from the organisation that certifies tea, coffee and other products.

104. Traidcraft <http://www.traidcraftschools.co.uk/> a huge range of learning resources about how fairly traded products support livelihoods and more sustainable trade.
105. The Marine Stewardship Council <https://20.msc.org/learn-about-ocean-sustainability> has a new film and resources focusing on sustainable seafood and fishing.
106. Global Goals <http://worldslargestlesson.globalgoals.org/global-goals/responsible-consumption/> lots of teaching resources on food and consumption supporting Sustainable Development Goal 12
107. Practical Action <https://practicalaction.org/geography-food-and-agriculture> has film and activity ideas for Geography teachers about food and agriculture
108. PaPaPaa! www.papapaa.org from Trading Visions and Comic Relief, focuses on chocolate and has Geography resources for KS2 ad KS3 as well as videos from Ghanaian schools through PaPaPaa! Live <http://www.papapaalive.org/>
109. <https://www.gapminder.org/dollar-street/> see how people really live with a bank of photos from around the world including tables of food showing how different communities eat

Top Tips for encouraging young people to engage with sustainable policy

Sustainable citizens are aware of the wider world and seek ways to make fairer, more environmentally conscious decisions which help change the wider world. Changing policy can be done in two ways – directly (by being more political as an activist) or indirectly (by making various simple changes to lifestyle which can have a positive wider impact). Here are some top tips on how to be a more sustainable citizen.

Taking action

110. Join a CAG (community action group) to take the power back to the local people. <http://cagoxfordshire.org.uk/> CAGs can organise events, waste collections, food waste, meetings, link to schools and senior citizens groups. Look for one near you.
111. Use social media to communicate with others e.g. twitter https://twitter.com/The_GA
112. Form/join a protest group <http://www.youthcentral.vic.gov.au/government-info-assistance/do-it-yourself-democracy/finding-the-people/join-or-organise-a-protest>
113. Follow or be a blogger *example* – George Monbiot <http://www.monbiot.com/>
114. Research your local MP's voting habits <https://www.theyworkforyou.com/> All votes are collected so you can discover their environmental approach. If you're not happy write to them or join a petition more broadly.
115. Join an eco-petition <https://www.thepetitionsite.com/en-gb/environment/#hottest>

Small steps begin journeys - Think local and act

116. Think about your waste and act <http://goodfoodoxford.org/network/> *In Oxford there is a collective approach by a growing number of people to control sustainable food waste. If you don't have this in your area – be the first!*
117. Get your employer to help you buy a bike <https://www.cyclescheme.co.uk/> *cycling helps your fitness, minimises vehicle use & helps the environment. Some government supported schemes allow you to reallocate your tax and buy a bike or bike equipment*

118. Get an allotment <https://www.nsalg.org.uk/allotment-info/how-to-get-an-allotment/> *growing your own food is a healthy, active, economic sustainable act. OR join a local food co-op*
<https://www.sustainweb.org/foodcoops/> OR (if your serious) get into permaculture
<https://www.permaculture.org.uk/>
119. Go to farmer's markets <http://www.farma.org.uk/farmers-market/>
120. Support local shops – 'think global: act local'
<https://www.theguardian.com/money/2013/dec/07/support-local-shops-small-business-saturday>

Practical easy first steps:

121. Give up bottled water
122. Stop receiving junk mail <https://www.citizensadvice.org.uk/consumer/post/stop-getting-junk-mail/>
123. Reduce plastics in packaging
124. Educate yourself – there's loads of books all about how to live a more green lifestyle – here's some <http://www.sustainablebabysteps.com/going-green-books.html>
125. **Lastly** and most importantly - tell others. Get five other people to follow what you do. Teach your children the importance of living more sustainably. Tell colleagues at work. Get your friends to try stuff too; small steps can change the world!