**Dal y Gwynt - Eye of the Storm**

| **Theme: Climate Crisis** |
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| **AOLE** | **STRAND** | **Suggested learning experiences:** |
| **Humanities****science and technology** | What is the climate crisis? | * Children should learn about climate change and the causes. ([BBC Bitesize](https://www.bbc.co.uk/bitesize/articles/z4g3f82#z8csn9q))
* <https://www.bbc.co.uk/bitesize/subjects/z2r7nk7>
* You could research key events / causes of climate change and create a timeline to showcase things that have impacted our climate.
* You could look into human-caused (deforestation, fossil fuel burning) / natural events (volcanic eruptions) and how they’ve impacted our Earth (global warming, extreme weather, oceans)
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| **health and wellbeing****LLC** | Environment Ambassadors /Friday for the Future Day | * Following Greta Thunberg’s ‘Fridays for the Future’ movement, you could arrange your own in-class activities where you create your own pledges / promises to the environment to help save our planet. There is no Planet B day!
* **Debate question:** Should children go on climate strikes instead of attending school?
* Pupils could create their own pledge on how they can do their bit to save the world / environment.
* You could also look at class pledges and whole-school pledges in order to help save our planet. (recycling, switching lights / screen off when leaving class, no single use plastics)
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| **Humanities****Health and wellbeing** | Important and Influential People  | * Who has used their voice to help with our climate crisis?
* **Greta Thunberg** - Who is she? Why is she so influential? ([National Geographic kids](https://www.natgeokids.com/nz/kids-club/cool-kids/general-kids-club/greta-thunberg-facts/)) Children could create their own speeches to raise awareness about the climate crisis inspired by her **‘ How dare you speech’** in the UN.
* **Sir David Attenborough -** Watch his documentaries ‘Planet Earth / Blue Planet’ and notice how he uses his voice to highlight the changes to our environment. You could use these as a hook to encourage further research on how to save our planet / oceans. Use DeBono’s thinking hats ‘We are doing enough to save our Oceans’
* **Dr. Jane Goodall -** [Roots & Shoots programme](https://janegoodall.org.uk/roots-and-shoots/) to place the power and responsibility for creating community-based solutions that address conservation, environmental, and humanitarian issues in the hands of young people.
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| **Humanities****Ethical Citizens** | **Tackling the crisis at different levels** | It may seem like the climate crisis is a remote issue, being argued over by governments and global organisations but it is important for them to break it down to a local level so that they understand that we all have a part to play. there are suggestions in the direct action section for things that you may be able to do as a school or individual but here are some links/ suggestions:**International**:[Greenpeace UK](https://www.greenpeace.org.uk/)What do Greenpeace do? This is a great website but made for the adult market so will need supervision and checking first[The Earthshot Prize](https://earthshotprize.org/)Explore the 5 EarthshotsHow can you apply them to your school/area/home/daily life?<https://friendsoftheearth.uk/>One of their foci is to start with a plan. Perhaps you could draw up a plan for yourself/ home or schoolof small actions that will come together oer time to make a big impact<https://www.wwf.org.uk/>WWF ensure that climate, nature and people are at the heart of their work. How can you improve nature in your locality?**National**[Friends of the Earth Cymru](https://foe.cymru/)One of the key aims for Friends of the Earth in Wales is to improve air pollution near schools. How can you make the air cleaner around your school?[Climate Cymru](https://climate.cymru/)this collaborative group have lots of ideas to support climate change and sustainability[Green Season - Around Wales - Environmental Groups](https://www.bbc.co.uk/wales/green/sites/aroundwales/)[Cynnal Cymru](https://cynnalcymru.com/)For sustainability aims and actions**Local**[Environment Centre Swansea](https://www.environmentcentre.org.uk/)<http://swanseaenvironmentalforum.net/>[Nature conservation - Swansea](https://www.swansea.gov.uk/natureconservation)What are Swansea Council doing?[NPT Nature Partnership - Neath Port Talbot Council](https://www.npt.gov.uk/culture-and-tourism/countryside-and-wildlife/npt-wildlife/npt-nature-partnership/)[NPT Local Nature Partnership](https://www.naturenpt.cymru/)It may also be worth contacting your local community council and inviting a councillor in to talk about action in your area. Alternatively you could challenge them to make some changes. |
| **LLC** | **Literacy Tasks**  | **Letter Writing to Local Government:** Students will write persuasive letters to their local representatives about climate action, highlighting specific community issues related to climate change. They could also include their own ideas on how to help with climate change. **Casia Wiliam ‘Help’ :** Study the poem and look at the poetic and effective devices she has used. Children could write their own poem / soliloquy back to the Earth with promises on what they could do to help. **If the Earth by Joe Miller** (copy in resources) read the poem aloudpick out the geographical featureswhat features do you have in your locality?look at google earth, find the featureshow may some of these features be changed by the climate crisis**Eco-Podcast or Weather Forecast from 2050:** Pupils could write a script and record short podcasts or video segments as if they are reporting from a future climate scenario. They could include creative and factual content: “It’s 2050 and Cardiff Bay is underwater…”**Infographic:** After researching facts and statistics about the climate crisis. Children can focus on topics such as greenhouse gases, deforestation, and rising sea levels to write an infographic. Online platforms such as Canva, Adobe are great.  |
| **humanities****science and technology** | **Worldwide effects**  | [How does climate change affect living things?](https://www.bbc.co.uk/bitesize/articles/zkcgvwx)Investigate and explore how different countries are affected by climate change (e.g. floods in Bangladesh, droughts in Kenya, wildfires in Australia).* **Discuss**: Are the countries who are causing the most effects of climate changes the most affected by it? Why?
* **Ecosystems**: Arctic, coastal and our oceans - how are they affected? What has changed? What will happen if nothing is done?
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| **Science and Technology** | **Greenhouse Gas Experiment**  | Youtube link [Greenhouse Effect Experiment for Kids exploring Climate Change](https://youtu.be/j2pYsTIXMkA?si=9vyq7Y1QEam8CJbx)* [STEM website link](https://www.steampoweredfamily.com/the-greenhouse-effect-experiment/)
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| **LLC** | **Fake News**  | This task should be done after the children have a solid understanding about climate change.During this task, students will be able to differentiate between valid information on climate change and misinformation (fake news) by critically analysing sources of information, employing their communication skills to discuss findings, and collaborating to create a simple fact-checking guide.* Gather prior knowledge: What is climate change? What sources do you trust for information about climate? How do you define 'fake news'?
* **Hook:** Present the children with an infographic with myths about climate change and discuss their thoughts regarding the information - how does what they already know impact their thoughts now?
* **Main Activity:** In groups, children could be given different newspaper articles (with correct / misleading information)
* Each group will read their assigned article, extract key facts, and identify potential areas of misinformation.
* They will collaboratively discuss and vet the credibility of the source using guiding questions:
	+ Who wrote the article?
	+ What evidence is provided?
	+ Are there any biases present?

[BBC Bitesize - Who do people call climate change fake news?](https://www.bbc.co.uk/bitesize/articles/zc3tvj6)[10 myths about climate change](https://www.wwf.org.uk/updates/here-are-10-myths-about-climate-change) [WWF -](https://www.wwf.org.uk/sites/default/files/2019-12/WWF_KS2_Lesson2_Teacher_Notes_Debate_Cards.pdf) SHAPING OUR FUTURE: THE CLIMATE CHALLENGE  |
| **Science and technology/ LLC** | **Story Gardens**  | [HWB resource](https://hwb.gov.wales/repository/resource/8a2800ab-8486-4de0-aab1-ac2cf2aabb55/overview)Imagining and creating our world for future generations 4 - The PlanetActivities based on creating a sustainable future planet Earth. Find out how nature can provide amazing solutions, how anyone can get involved in the smallest of spaces and how young people can innovate for our future.  |
| **Science and Technology** | **New energy**  | * After learning about the different types of energy and renewable energy. You could brief the children with a mission to create, build and test a model of a machine powered by waves / wind that could help create clean energy.

(see the section on new energy) |
| **Science and Technology** | **Sustainability** | <https://hwb.gov.wales/repository/resource/9827a7a8-f1ee-4114-9997-2168d89829ad/overview> |
| **Humanities****Health and Wellbeing** | **industrial legacy** | Leise at the Waterfront Museum has spoken in your workshop about how parts of Wales were changed during the Industrial Revolution from rural to highly industrialised communities.<https://www.bbc.co.uk/bitesize/articles/zghgtcw> She plants the idea that there is a longstanding legacy of this industrialisation:* rapidly increased population

[Is flooding in Wales getting worse? | Policy and insight](https://policy.friendsoftheearth.uk/insight/flooding-wales-getting-worse)This is an adult document but excerpts can be used to find out some of the changes that have happened in Wales that exacerbate flood risk such as draining boggy land and building on it. changing river courses* historically using river water for industrial purposes

[Natural Resources Wales / Metal mine water pollution](https://naturalresources.wales/about-us/what-we-do/our-roles-and-responsibilities/water/metal-mine-water-pollution/?lang=en) * building docks

<https://www.walesonline.co.uk/lifestyle/nostalgia/gallery/destitute-docks-tourist-hot-spot-15168057> [BBC - Wales History: The birth of Barry Docks](https://www.bbc.co.uk/blogs/waleshistory/2011/11/the_birth_of_barry_docks.html)* changing the shape of the coastline and the land

[The Industrial Shape of Wales - Oakeley Arms](https://oakeleyarms.co.uk/industrial-shape-wales/)[Climate change: The science of flood prediction in Wales - BBC News](https://www.bbc.co.uk/news/av/uk-wales-65341776)* mining

[Merthyr Tydfil: Welsh sinkhole grows as locals moved to safety - BBC Newsround](https://www.bbc.co.uk/newsround/articles/cgm9g9d04veo)Is this the result of a collapsed mine?spoil and waste heaps[Video of disused coal tip collapse in South Wales which forced dozens from their homes | UK News](https://news.sky.com/video/video-of-disused-coal-tip-collapse-in-south-wales-which-forced-dozens-from-their-homes-13304913)Storm Bert caused this collapse* building roads, canals and railways
* toxic soil from industrial waste

[Contaminated land - Neath Port Talbot Council](https://www.npt.gov.uk/environmental-health/pollution/contaminated-land/)[When Swansea's Kilvey Hill was a barren and toxic wasteland kids came home from with blackened knees | Wales Online](https://www.walesonline.co.uk/news/wales-news/how-famous-swansea-hill-went-16311482)[Industrial Wales | Cadw](https://cadw.gov.wales/learn/sites-through-centuries/industrial-wales)**Discuss:**Is this legacy exacerbating the effects of climate change?We have a long way to go to restore Wales to the green lands of the past and clean up all of the damage done to the environment by heavy industry. Is the changing climate making this a harder job? Or, is it pushing us to find solutions?What is the industrial legacy in your locality?Are there sea defences?Do you live in an old mining area?Were there factories near your school?Do you live near a river or canal? What is the environment like? How can it be improved?**Workshop** Dawn Thomas from Nature Days runs an excellent workshop at Crymlyn Bog which is an old industrial site.   |