

GALWAD

FUTURE FASHION

EXPLORE THE IMPACT OF FASHION
IN TODAY'S WORLD AND BECOME
FUTURE SUSTAINABLE CLOTHING
DESIGNERS



Eco-Schools



Eco-Sgollion



cadwch keep
gymru'n wales
daclus tidy

Background information

The harm caused to the environment by the fashion and textile industry has been well documented over recent years. Listed as the 2nd largest polluter in the world, behind the oil industry, and contributing about 10% of Global Greenhouse Gas emissions, our clothing choices have a lot to answer for in 2022.

Luckily, producers and designers have been coming up with innovative ways to reduce the environmental impact of our clothing and society is now becoming more in tune with reusing before buying new. There is still a long way to go but what will our clothing footprint be in 2052?

To find out a little more about the impact of fashion and textiles and some of the alternatives, have a look at the [Fibre Eco-review \(sustainyourstyle.org\)](https://sustainyourstyle.org/) and this [guide to what's wrong with the Fashion Industry \(sustainyourstyle.org\)](https://sustainyourstyle.org/)



400% more clothes
are produced now
compared to 20 years ago



30% of Patagonia is
affected by
Desertification due to
sheep grazing (for wool)



It is possible to make
clothing from waste
orange skin and from
pineapple leaves

Activity

1. In 2022 the clothing industry has had a significant impact on our planet and environment and this has rarely been a positive impact. Have a look at the facts on worksheet 1 and see if you can match them to the correct image.

2. We could be on the verge of a fashion revolution! There has been a lot of progress into more sustainable fibres to make our clothes from.

The cards on worksheet 2 contain some information about different fabrics that are available or being developed. See if you can diamond rank them in preference of which would be most sustainable and suitable for creating your future clothing.

You can find out more about these and other fabrics at [guide on the most sustainable and ethical materials \(sustainyourstyle.org\)](https://sustainyourstyle.org)

3. Now it's time to get creative! What will you be wearing in 2052?

Design your future outfit, including as much detail as possible. You could do some further research into types of fabric available or being developed. Think about:

- What will it be made from and how will it be coloured?
- How functional will your outfit be?
- Will it last a long time and be easy to repair if needed?
- Will it be designed for a particular gender or be more gender-neutral?
- Will it be for a certain occasion or multi-functional?
- What will happen to it at the end of its life?



Will fashion be influenced by recycling and nature?



Will fashion be synthetic materials with embedded technology?



Will it be practical and help people deal with the changeable weather?

4. Share your designs with peers and discuss which items of clothing you would choose to wear and why.

Reflection

Moving from 'fast fashion' to 'slow and sustainable fashion' could be a big solution to some of the challenges facing our planet today. As well as looking at current or future choices for clothing design, what else could we do to change the way we choose, use and purchase clothing now so that we can head towards the future that we'd like to see?

Curriculum links

Purposes

- Ethical, informed citizens of Wales and the world.
- Enterprising, creative contributors

AOLEs and what matters statements

Humanities

- Informed, self-aware citizens engage with the challenges and opportunities that face humanity and are able to take considered and ethical action.

Science and Technology

- Our natural world is diverse and dynamic, influenced by processes and human action.

Global Goals



[Goal 14: Life Below Water](#)

[Goal 12: Responsible Consumption & Production](#)

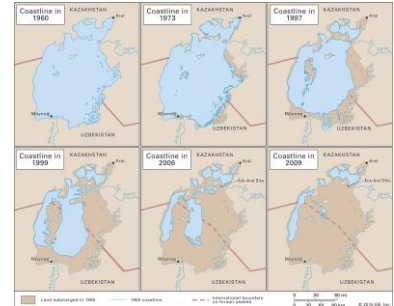
[Goal 13: Climate Action](#)

Worksheet 1

Currently the textile industry has some major impacts on our planet. See if you can match the information to the fact and the relevant picture to find out more. Information taken from [How Fast Fashion Hurts the Planet Through Pollution and Waste \(businessinsider.com\)](https://www.businessinsider.com/how-fast-fashion-hurts-the-planet-through-pollution-and-waste)

In many countries that produce clothes, toxic waste from making and dyeing the fabric is dumped straight into the rivers. This results in rivers that are deadly for wildlife to live in and dangerous for humans.

Cotton uses about 1/6 of the world's insecticide (used to kill insects that might damage the crop), more than any other major crop.



Cotton is a really thirsty crop. In the Aral Sea region of Asia, the diverting of rivers to water cotton plantations has resulted in the sea going from being bigger than Wales to about 1/10 of its original size.

Washing clothes releases microplastics that would equal 50 billion plastic bottles into our oceans EVERY YEAR



Many of our clothes are made from a form of plastic that comes from oil. This includes polyester and elastane. Unfortunately, this causes a lot of greenhouse gases to be produced and also releases lots of microplastics into the rivers and oceans when we wash them.

Clothing and textiles are causing approximately 10% (1/10) of all greenhouse gas emissions. That is more than all the international ships and flights added together.



Cotton growing (unless done organically) normally uses a lot of pesticides (chemicals which kill insects and pests), which has a devastating effect on local wildlife and also on the health of cotton farmers.

It takes 2700 litres of water to produce the cotton for a t-shirt. The same amount that a person would drink in 3 years!



It uses a huge amount of energy to produce textiles and clothing, including through turning oil into polyester, producing chemicals to grow cotton, making dyes, running factories, transporting goods.

1/5 of industrial water pollution around the world comes from fabric treatment and dyes.



Worksheet 2

Cotton:

- Natural fibre
- Uses a lot of land and water
- If not organic, uses lots of pesticides to grow
- Will biodegrade
- Often uses child or forced labour to produce

Organic cotton uses no chemicals, traditional farming methods and significantly less water

Hemp:

- Very fast-growing crop
- Uses 50% less water than cotton
- Good for the soil and doesn't need pesticides.
- Not allowed to be grown in all countries due to it being in the same family as cannabis.
- Natural fibre so biodegradable

Recycled polyester:

- Can be made from recycled plastic bottles
- 70% less energy is used to make recycled polyester than new polyester.
- Cheap to produce
- Does not biodegrade
- Releases microplastics when washed

Polyester:

- Uses a lot of energy to produce
- Does not biodegrade
- Releases microplastics when washed
- Cheap to buy
- Easy to care for and lasts a long time

Leather:

- Made from a by-product of the meat industry
- Uses a toxic chemical to make the skins wearable that causes health issues for workers.
- Water pollution from chemicals.
- Can be made more eco-friendly without toxic chemicals but not many places do this yet.

Bamboo:

- Very fast growing
- Doesn't need pesticides or fertilisers to grow
- Uses very strong chemicals to turn the bamboo into fibre
- Water pollution is linked to the chemicals used
- Natural fibre

Orange fibre:

- Made from the orange skins that are left over from the citrus juice industry.
- Natural fibre
- Biodegradable
- Expensive at present
- Not widely available

Wool:

- Renewable natural fibre
- 1 billion sheep are reared for wool across the world
- Overgrazing of sheep causes erosion and loss of soil or desertification.
- Sheep release methane

Wool can be easily recycled and products are now being sold from recycled wool.

Pineapple fibre:

- Pineapple leaf fibres are combined with bio-plastic to create fabric
- Similar fabric to leather
- Uses a waste product (pineapple leaves) so very small environmental footprint
- Coated in a petroleum-based resin
- Not biodegradable

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CREATIVITY IN THE UK



Cymru Greadigol
Creative Wales

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