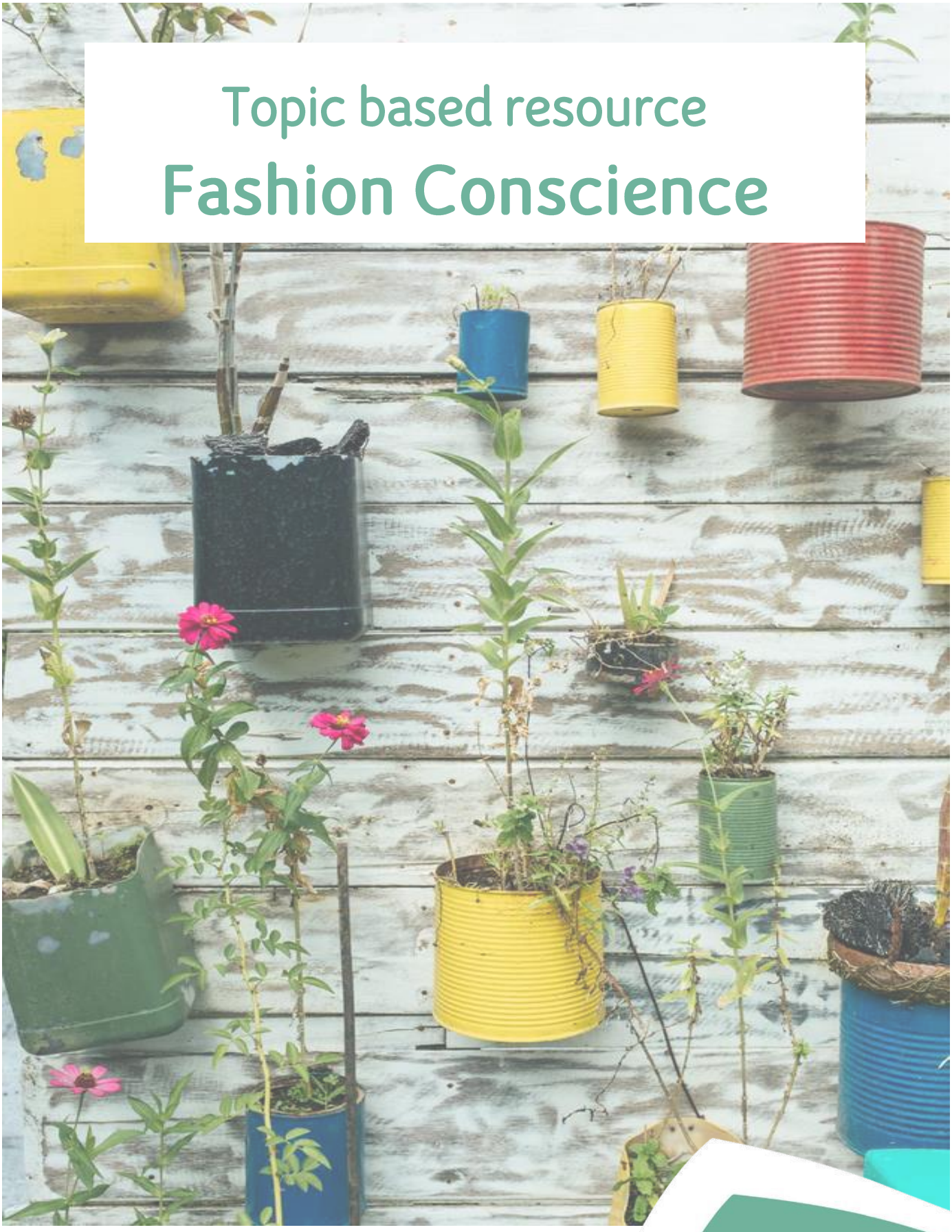
Topic based resource

Fashion Conscience



Eco-Schools
Eco-Sgolion

Ariennir gan Lywodraeth Cymru
Funded by Welsh Government

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

cadwch keep
gymru'n wales
daclus tidy

Background Information

As a country Wales is in the world's top rankings for recycling household waste; at present Wales recycles 64% of municipal solid waste, which includes household plastic and other packaging. There is a target set of 70% by 2025 but the Welsh Government want to do even better and are aiming for Wales to become a Zero Waste nation by 2050. If, as a nation we are going to achieve this all sectors have a role to play.

Landfill for waste is no longer an option, space is running out and new ways of treating waste must be developed. Indeed, much of the residual waste we produce in Wales is now sent for incineration. To hit those zero waste targets priority must be given to reducing and reusing as much as we possibly can before recycling.

According to the BBC[1] in 2017 UK households produced nearly 27 million tonnes of waste – that equates to 409kg per person (around the weight of 4 adult giant pandas!). Waste comes from many sources with packaging waste, single use plastics and food waste among the most common. Food waste is a big problem at home and at school - Wrap Cymru estimate that £550m of edible food was thrown away from homes in Wales in 2015.

Waste Minimisation in School

Waste minimisation can be a very rewarding topic. As well as encouraging pupils to consider the wider impacts of their buying habits, they can discover the value in some types of waste. To work out how best to minimise the amount of waste your school produces you should consider ways of reducing what items enter your school in the first place. Reducing waste may involve reviewing the types of resources schools buy and considering ways of cutting down. If you cannot reduce it, can you reuse it? There will be many items you can almost certainly reuse like paper and packaging, envelopes and cardboard boxes. Lastly, if reuse is not an option, can the waste be recycled? Some types of waste contain valuable raw materials that can easily be recycled without

using too much energy. You may be able to make money for the school by selling these items or you could become a hub and collect some of those hard to recycle items from your whole community.

[1] https://www.bbc.co.uk/news/science-environment-49827945

Climate Perspective

It is really important that we consider the embedded energy use in all the things that we consume. Almost every product we use or consume in a day will have direct and indirect emissions of greenhouse gasses such as carbon dioxide and methane into our atmosphere that impact on our climate. Rubbish and waste sent to landfill represents a significant amount of greenhouse gasses already emitted to the atmosphere.

Take food as an example. WRAP estimate that each year in the UK we throw away 6.5 million tonnes of food, 4.3 million of which is still edible! All of that food, whether it's the extra pasta left on our plate at the end of our meal or the crusts we cut from our sandwiches, represents a waste of the energy and water it's taken to fertilise, grow, transport and package the food in the first place. Not only is that bad for our climate but any food waste sent to landfill will biodegrade (rot down) and produce methane – a greenhouse gas even worse than carbon dioxide! Almost one quarter (24%) of food emissions comes from food lost in the supply chain or wasted by us as consumers[2] .

[2] https://ourworldindata.org/food-waste-emissions (accessed 27/5/20)

Activity

Fashion Conscience

Key Stage 2

Global Goals:

11 – Sustainable Cities and Communities

12 – Responsible Consumption and Production

13 – Climate Action

Aim – To raise awareness of issues with waste in the clothing and fashion industry

Objectives:

- To explore some of the facts associated with fast fashion
- To understand where material for our clothes comes from and how they are made
- To develop an understanding of the importance of reducing, reusing, repairing and recycling.
- To generate Eco-actions on fashion to make a positive difference to the waste we create.

Resources:

- Desk top computers/Laptops/I-Pads
- Paper/Pens/pencils
- Worksheet 1 – Complete the sentence
- Worksheet 2 – Resource matching worksheet (this could be undertaken with real items rather than the item images)

Activity Background Information:

Whether you wear them to make a statement or just to keep warm, clothes are essential to everyone. The average household spends around £1,700 a year on purchasing clothes, second only to food and drink in terms of spending on consumable goods. This season's fashion and clothing is constantly changing, with designers coming up with new or revamped ideas for what we should be wearing to be 'in fashion'. As such we live in a 'Fast Fashion' society where wardrobes are constantly changing and clothes being thrown out to make way for new. Unfortunately, this Fast Fashion has an incredibly negative impact on our planet. It is estimated the nearly half of 'Fast Fashion' is disposed of in under a year and that a third of the clothes in the average household haven't been worn in the last year.

The environmental impact of clothing is very high, from the production of the fabrics to the transportation and then disposal at the end.

This activity looks at where the clothes we buy and wear come from and the environmental and social impact of this huge global trade; hopefully challenging our usual shopping habits.

Activity:

1. In pairs use worksheet 1 to match the socks and complete the sentences relating to fashion and the environment. Check your answers against the answer sheet. As a class discuss your findings, are there any fashion facts that surprise you? (this worksheet could be projected to a screen and answers written in workbooks instead of printed worksheets)
2. Ask each member of the class to pick one item of clothing, either one they are wearing or something brought from home. Look at the label and identify the material used to make the item. Create a class chart of materials and highlight the most common material used.
3. Look at the list, can you identify which items are man-made and which items are naturally sourced? Use worksheet 2 to match the raw material to the finished product.
4. Share the following fact with your class: 'Growing cotton is incredibly water intensive and is causing inland seas to dry up (e.g Aral Sea). Making 1 cotton t-shirt uses the same water that a person would drink in 3 years (2720 litres)'. How much water has been used to make all the t-shirts in the class/school/in your wardrobe at home?
5. With textiles responsible for more greenhouse gasses than all the flights and maritime shipping, we need to look at our pattern of consumption. Using the information you now know about fashion and the environment, can you create an advertisement campaign encouraging more people to reduce, reuse and repair their clothes instead of always buying new ones. Perhaps you can convince everyone in your school to make something from recycled items for your next fancy dress day.

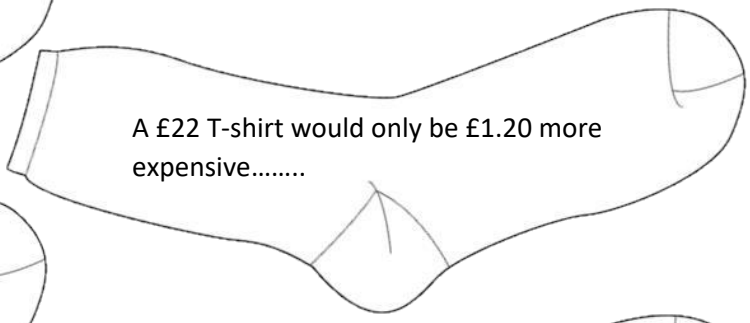
Extension Ideas:

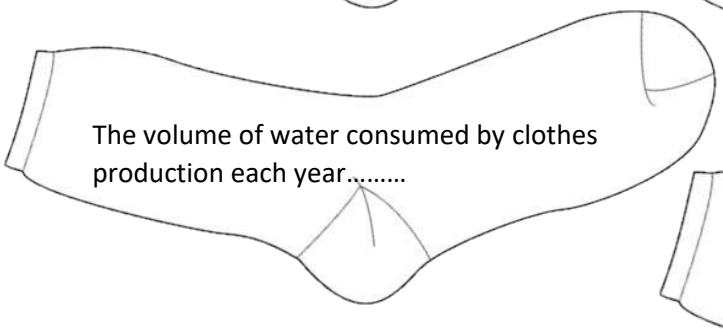
Are some materials better than others? Using your list of materials can you find out things that are good and bad about each material and decide what material you think is best for the environment?

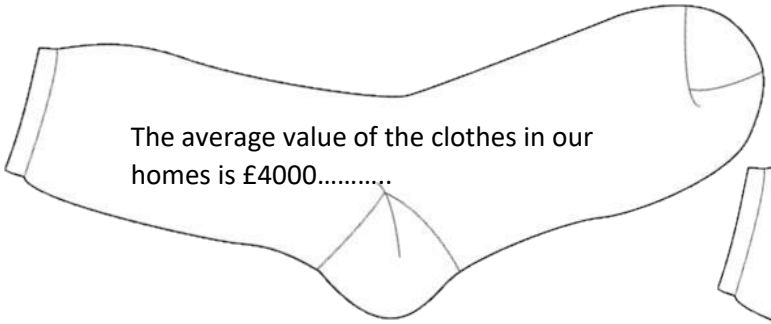
Can you find out what a cotton grower farm or factory is like in one of the countries that your clothes came from? How many cotton products that are fair trade can you find in your local shops?

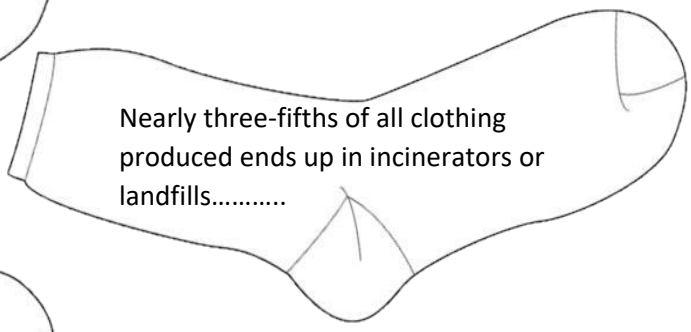
Worksheet 1 - Sentence matching

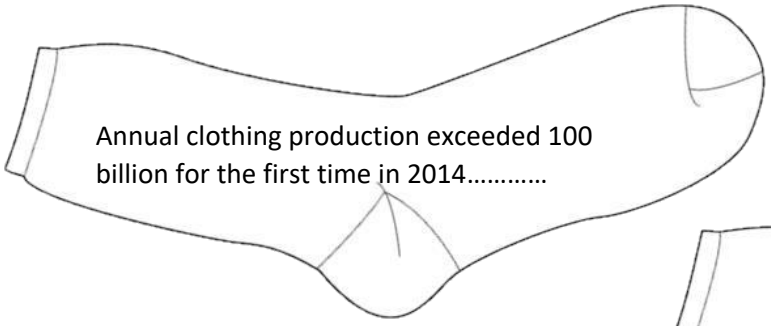
Can you match the start of the sentence with the correct ending and identify some important facts about fashion?

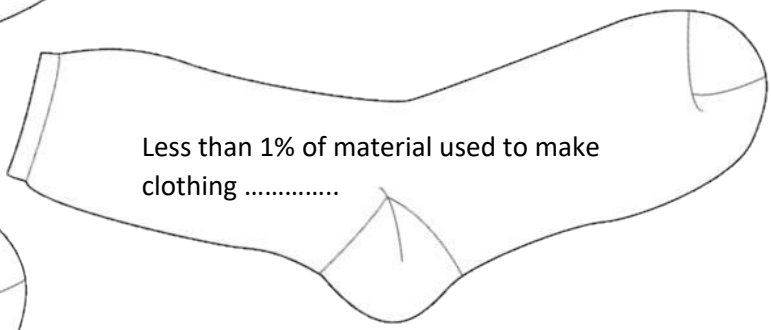


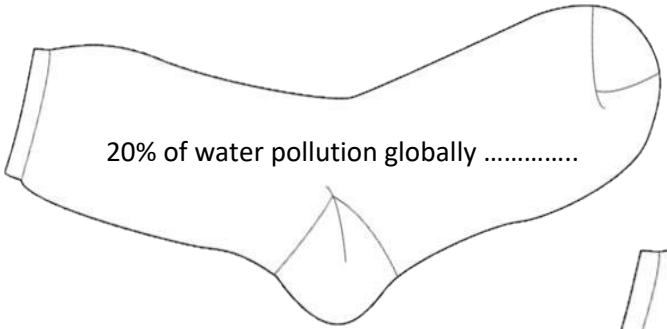


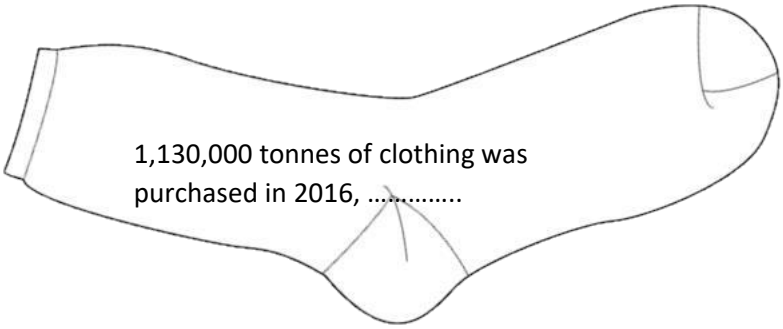


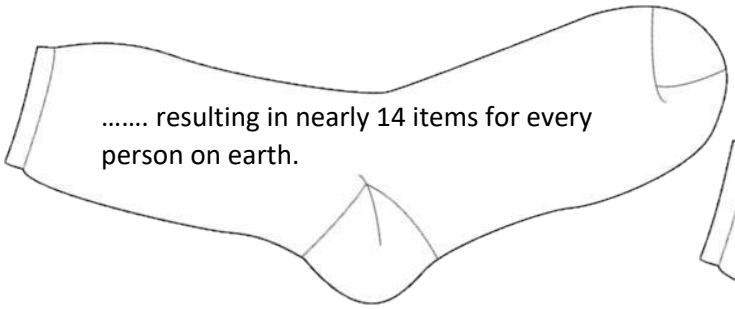




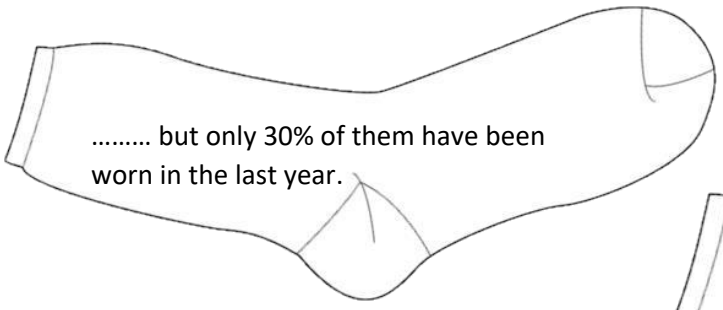




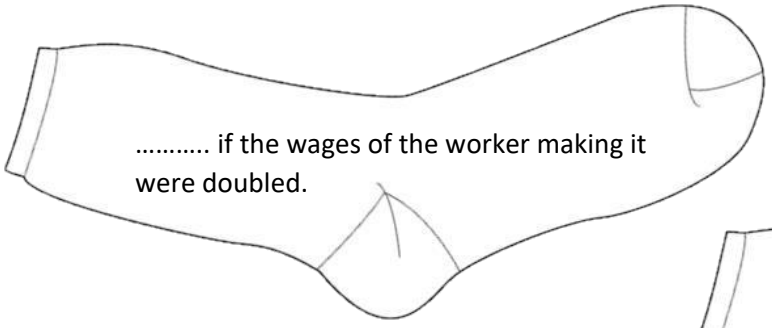


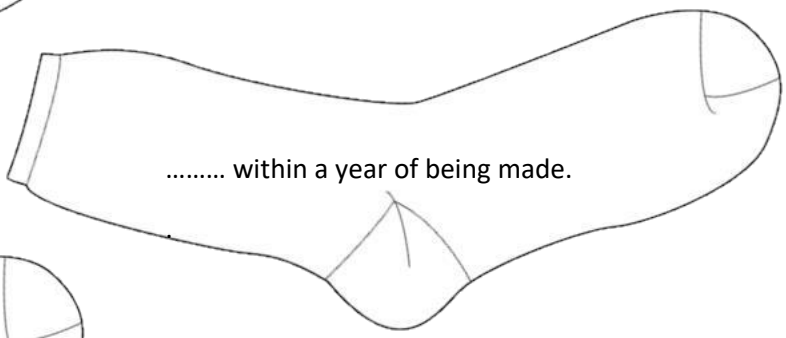

……. resulting in nearly 14 items for every person on earth.

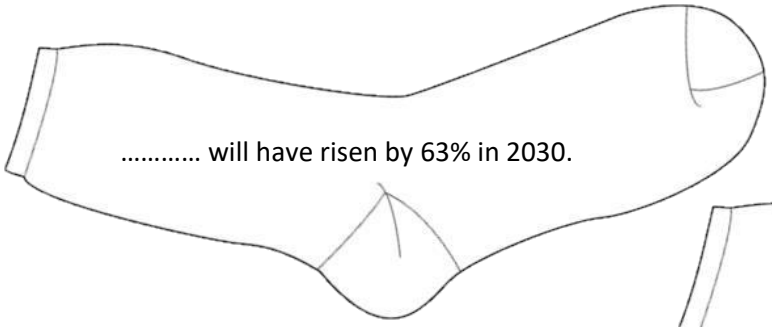

…….. only 1% of cotton clothes are Fair Trade.

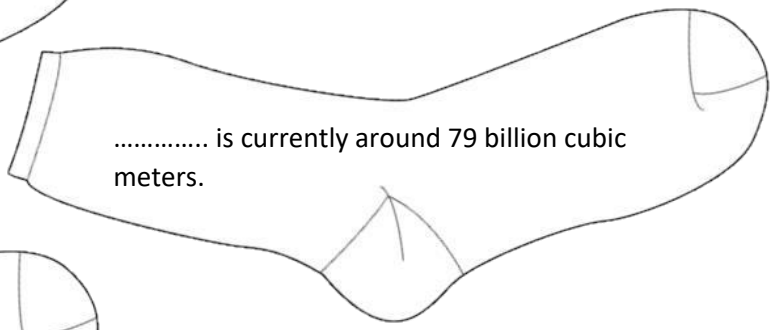

…… but only 30% of them have been worn in the last year.

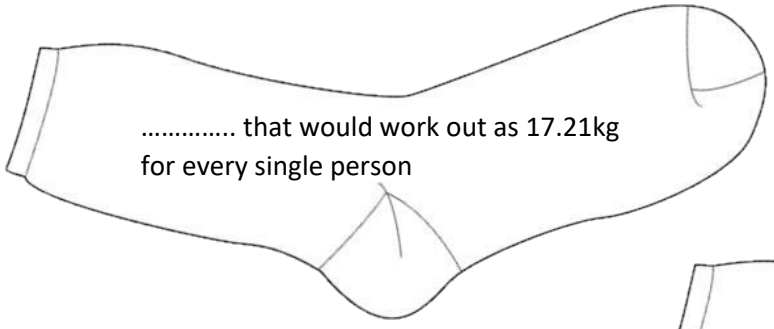

……is recycled into new clothing

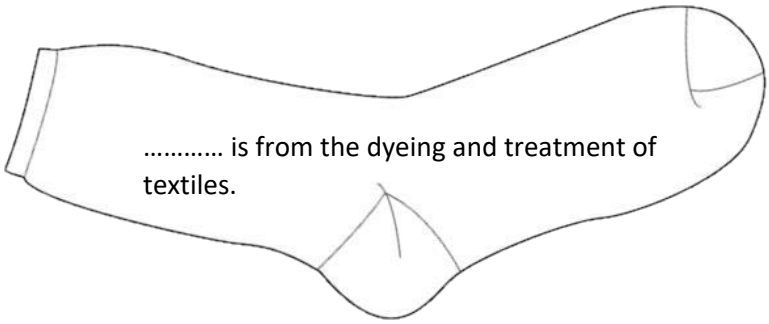

……. if the wages of the worker making it were doubled.


…… within a year of being made.


…… will have risen by 63% in 2030.


…….. is currently around 79 billion cubic meters.


…….. that would work out as 17.21kg for every single person


…… is from the dyeing and treatment of textiles.

Worksheet 1 – Answer sheet

1. Less than 1% of clothing used to make clothing is recycled into new clothing
   Partly because it is very difficult to extract fibres, especially from mixed fabrics

2. It is predicted that overall clothes consumption will have risen by 63% in 2030.
   That's the equivalent to 500 billion more T-shirts. Five hundred billion T-shirts!

3. The volume of water consumed by clothes production each year is currently around 79 billion cubic meters.
   Or 32 million Olympic swimming pools.

4. A £22 T-shirt would only be £1.20 more expensive if the wages of the worker making it were doubled.
   Who wouldn't want to pay that?

5. Where 70% of all clothes are made with cotton only 1% of cotton clothes are Fair Trade.

6. The average value of the clothes in our homes is £4000 but only 30% of them have been worn in the last year.
   The cost of this unused clothing in the UK is estimated to be around £30 billion

7. Nearly three-fifths of all clothing produced ends up in incinerators or landfills within a year of being made.
   Germany outperforms most countries by collecting almost three-quarters of all used clothing, reusing half and recycling one-quarter. Elsewhere, collection rates are far lower: 15% in the United States, 12% in Japan, and 10% in China. One rubbish truck of textiles is landfilled or incinerated every second.

8. Annual clothing production exceeded 100 billion for the first time in 2014 resulting in nearly 14 items for every person on earth.

9. 20% of industrial water pollution globally is from the dyeing and treatment of textiles

10. 1,130,000 tonnes of clothing was purchased in the UK in 2016. That would work out as 17.21kg for every single person (Can you find things around the room and weigh them to make 17.2 kg?)

Worksheet 2

Natural or synthetic. Can you match the raw material with the final product?

Cotton Polo shirt

Silk tie

leather bag

Polyester jacket

Wool jumper

Nylon tights

Bamboo sock

Curriculum Links

Purposes:

- Ethical, informed citizens of Wales and the world.

AOLE's:

- Humanities

What matters statements:

- Informed, self-aware citizens engage with the challenges and opportunities that face humanity and are able to take considered and ethical action.
- Our natural world is diverse and dynamic, influenced by processes and human actions.

AOLE's

- Science and Technology

What matters statements:

- The world around us is full of living things which depend on each other for survival.

AOLE's

- Mathematics and Numeracy

What matters statements:

- Statistics represent data, probability models chance and both support informed inferences and decisions.

AOLE's

- Languages, Literacy and Communication

What matters statements:

- Expressing ourselves through languages is key to communication

33-35 Heol yr Eglwys Gadeiriol, Caerdydd, CF11 9HB | 33-35 Cathedral Rd, Cardiff, CF11 9HB
029 2025 6767 keepwalestidy.cymru info@keepwalestidy.cymru