

St. Bernadette's Catholic Primary School,

Hobmoor Road,

Yardley,

Birmingham,

B25 8QL

Earth Ambassadors evidence for Ocean-Friendly Schools Award

Section 2 Evaluate

The Earth Ambassadors have taken time to shop for virtual outfits on online fashion sites. They have used the survey grids provided in your resources to note the fabrics used to make the clothes.

Virtual outfit survey form		
Choose an outfit and record the type of fabric used to make it. The type of material is listed in the item description.		Name: Matt
		Class: 6LL
Item of clothing	Type of fabric	Synthetic (Yes/No)
Av kit Shirt Junior	Polyester	Yes
Av kit Shorts Junior	Polyester	Yes
Astro Turfs Shoes Junior	Rubber and mesh	Yes
Av socks Junior	Polyester	No Yes
Athletic tape	1 Polyester Cotton	No
	Polyester: 4 *rubber: 1 mesh: 1 Cotton: 1	

Virtual outfit survey form

Choose an outfit and record the type of fabric used to make it. The type of material is listed in the item description.

Class: BLC

Item of clothing	Type of fabric	Synthetic (Yes/No)
Winnie the pooh Baby outfit Primark £11.00	100% cotton	No
Winnie the pooh Tiger Primark £8.00	100% cotton	No
Print Tank Dress women's Temu £5.27	95% polyester 5% spandex	Yes
Honey Bee women's Block Neck Butterfly Sensations women's Tree Temu £9.74	92% polyester 8% Elastane	Yes
Rolanke boots Jeans Bootcut Ripped Elasticated Amazon £19.99	55% cotton 45% Polyester	Yes
Toddler's short-sleeve T-shirt Amazon £5.06	95% polyester 5% Elastane	Yes

Virtual outfit survey form

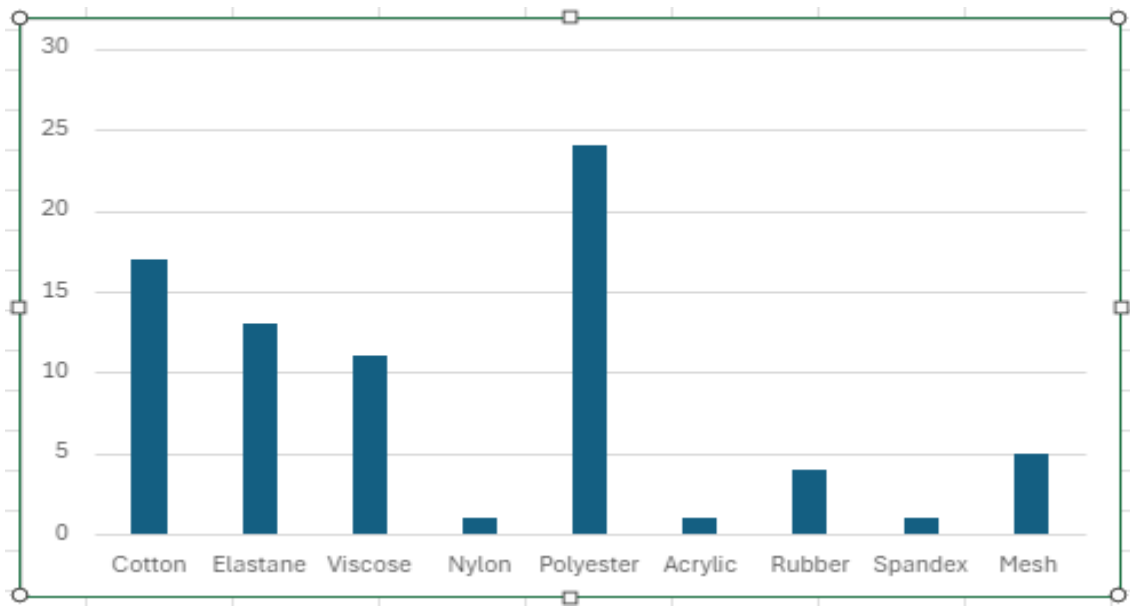
Choose an outfit and record the type of fabric used to make it. The type of material is listed in the item description.

Name: _____

Class: _____

Item of clothing	Type of fabric	Synthetic (Yes/No)
Primark Top £8.00	95% Cotton, 5% Elastane	E-Yes C-No
Primark Leggings £5.00	64% Polyester 34% Viscose 2% Elastane	E-Yes V-Yes P-Yes
Primark Jacket £18	Polyester-100% Polyester 99% Elastane 1%	E-Yes P-Yes

The children entered the data onto an Excel spreadsheet and with some support produced the following graph. It clearly shows the reliance on polyester in our clothes these days.



A graph to show the frequency of fabrics used to make our Virtual outfits.

How do different materials damage our world?

All of the children researched how the process of making the raw materials for clothing affects the environment during one of our rainy sessions. Ruby P was able to find the following information about the damage during an internet search. She shared with the group and we had a BIG discussion about reliance on so many chemicals and that these chemicals end up in nature. That was the best way to explain it. But we covered the water cycle, habitat destruction and how the damaged caused could be reduced by people buying less of these materials.

Cotton: uses 6% of the world's pesticides and 16% of all insecticides—which is more than any other crop. These are harmful to the soil, release greenhouse gases, and pollute drinking water.

Polyester: Since polyester is made of plastic it is not biodegradable, it takes hundreds of years for the fibre to dissolve. When sent to land-fill, the toxic materials used during the production process leach into the soil and could contaminate the water of the local population.

Nylon: Made from petrochemicals, this synthetic is non-biodegradable as well, so they are inherently unsustainable on two counts. Nylon manufacture creates nitrous oxide, a greenhouse gas 310 times more potent than carbon dioxide.

Viscose: The wood pulp that viscose is made from is manufactured by treating it with chemicals, which is then filtered and spun into a fine thread. This is a highly polluting process and releases many toxic chemicals into the air and waterways surrounding production plants.

Acrylic: as with many synthetic fibers, the production, use, and degradation of acrylics can have a significant impact on people and the environment. Acrylic clothing is one of the main sources of microplastics in the ocean, even higher than polyester and polyester blends

As part of the follow-up session we researched the possible impact on the ocean of these fabrics. Here are some of our findings.

After thought

We were very interested in finding out about the other ways to reduce damage to the environment. The children researched alternatives to materials we could use. We found a really informative website:

<https://www.sustainyourstyle.org> and had a really good discussion about the cost implications of choosing alternatives. We said they can be expensive when they are novel materials but sometimes as more and more people use them the price could be reduced. Below is a collection of the sources we found this information from.

Alternatives to these materials.

Cupro is made from cotton waste.

Shylah discovered an alternative to polyester would be linen, bamboo, wool, hemp, Tencel, soy, organic cotton, recycled polyester, Modal, Ramie, Lyocell, recycled cotton Econil, jute, Pinatex, silk, cork, oranges fibres, pineapple, Qmonos – fibre made out of spider silk, banana fabric, cactus leather, Rayon,

Alternatives for viscose: Bamboo, Lyocell, REFIBRA, Eastman naia

Alternative for cotton: Hemp, flax, Tencell and bamboo

Cactus Leather: Lower carbon footprint and more sustainable fashion solution as it uses less water to be produced and it is free of toxic chemicals. The cactus growth stops erosion. They absorb Carbon. The tanning process could be criticised for its environmental but the leather tanning process is

Rayon: Artificial textile material made from purified cellulose from plant sources.

Banana leather: Makes a silk-like material. Comfortable to wear and hypoallergenic.

And as an **after, after thought** we discussed how good it is to shop for things second hand. The children nearly all said they go to charity shops or at least know they existed and are a good way to upcycle and reuse objects and clothing. Miss Corkery is a big charity shop bargain hunter!