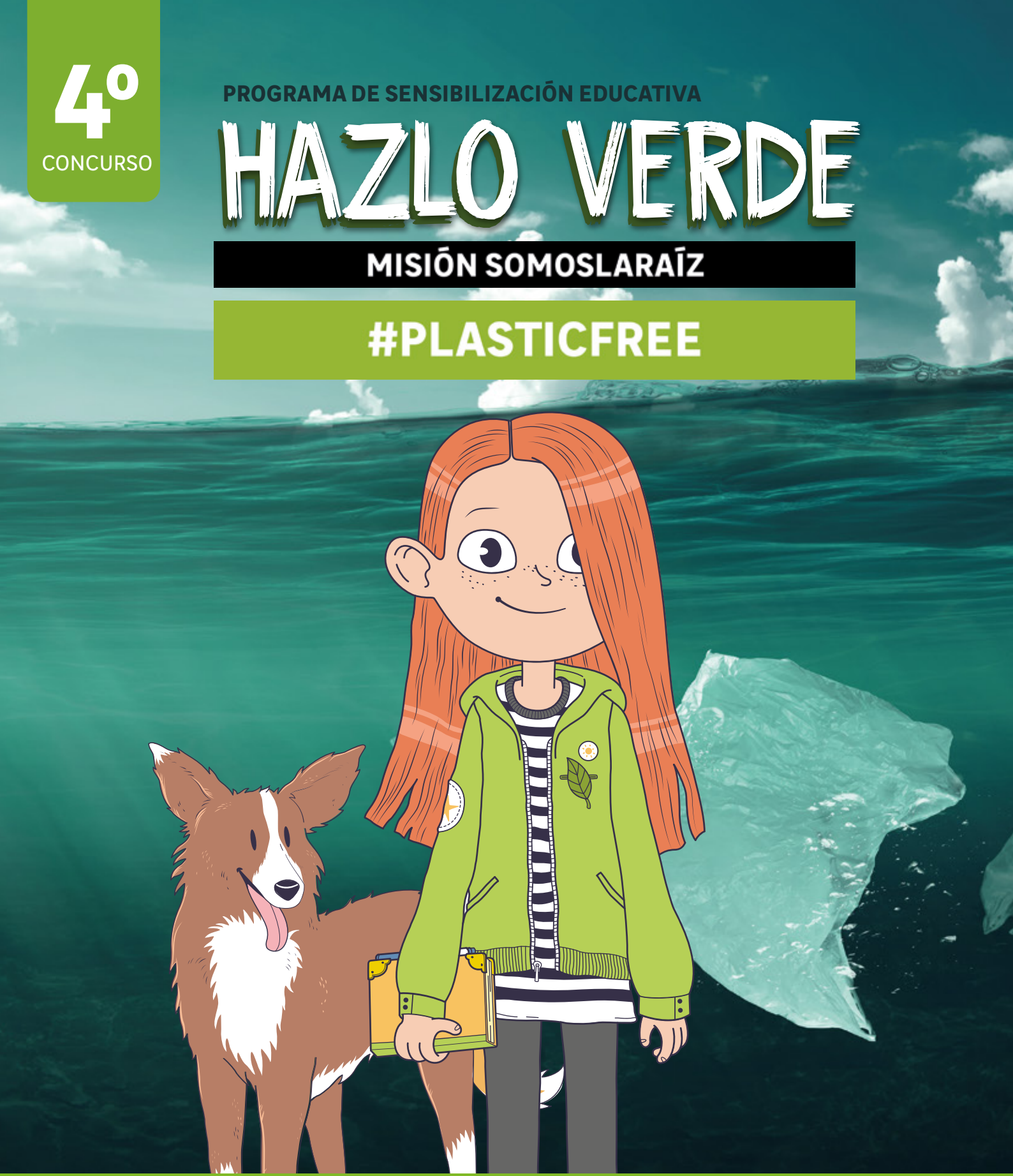
4º CONCURSO

PROGRAMA DE SENSIBILIZACIÓN EDUCATIVA

HAZLO VERDE

MISIÓN SOMOSLARAÍZ

#PLASTICFREE



UNIT 4 | THE LIFECYCLE

LEROY MERLIN
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CONTENTS

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1. THE PLASTIC PROBLEM

Although oceans that cover 70% of the planet are home to enormous biodiversity and vital resources, we treat them more like the world's rubbish tips, in fact every year, **eight million tons of plastic end up polluting the oceans.**

A total of **60% of the proteins consumed by human beings come from our oceans,** however, there is so much plastic trash in the water that it is being absorbed by fish, **which mistake it for food.** This is having devastating effects on biodiversity and humans alike.

Add to that the fact that we don't recycle 80% of the plastic produce and use and if nothing changes, **by 2050 there will be more plastic than fish in the sea.**

Sources

https://www.un.org/sustainabledevelopment/es/oceans/

http://www.wwf.org.co/?uNewsID=329156

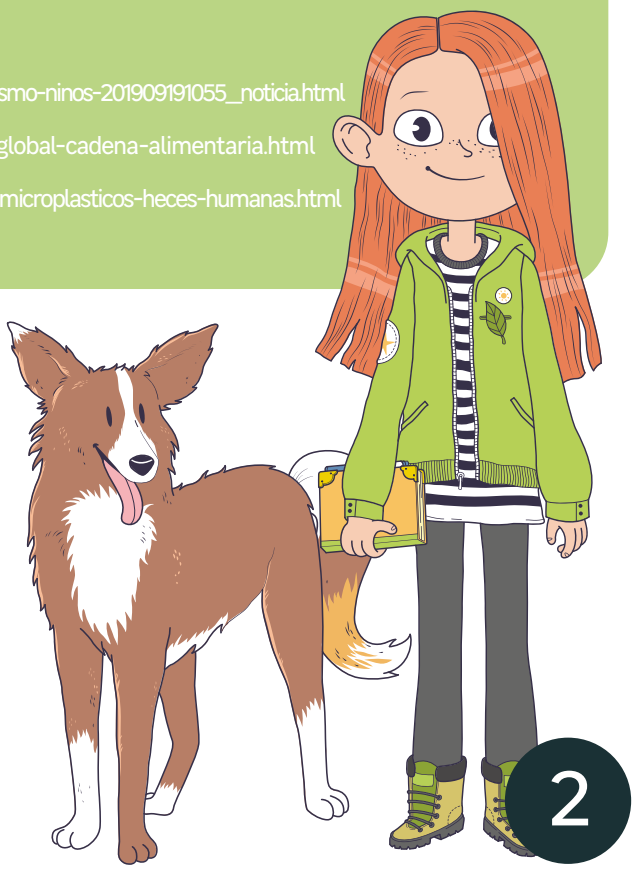
Here is a list of stories that appeared recently in the news that you can talk about in classroom. Encouraging all students to express their opinions:

https://www.bbc.com/mundo/noticias-43411826

https://www.abc.es/salud/abci-alemania-detecta-presencia-plasticos-organismo-ninos-201909191055_noticia.html

https://www.publico.es/ciencias/plasticos-sopa-plasticos-amenaza-global-cadena-alimentaria.html

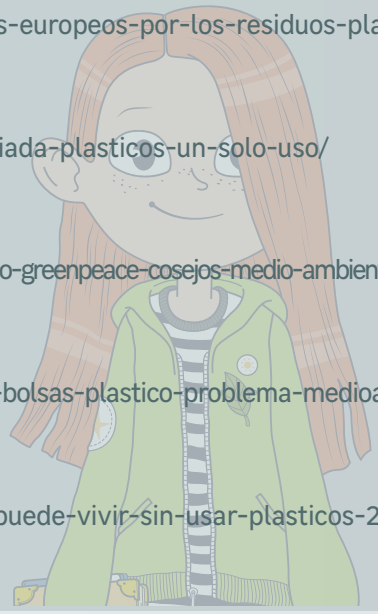
https://www.publico.es/ciencias/microplasticos-encuentran-primera-vez-microplasticos-heces-humanas.html



We suggest that you use these news stories and articles as a starting point for a classroom debate to raise awareness of environmental topics.

Remember that the idea is not to demonise plastic but to find alternatives that will minimise its impact and to change attitudes so that we stop abusing it.

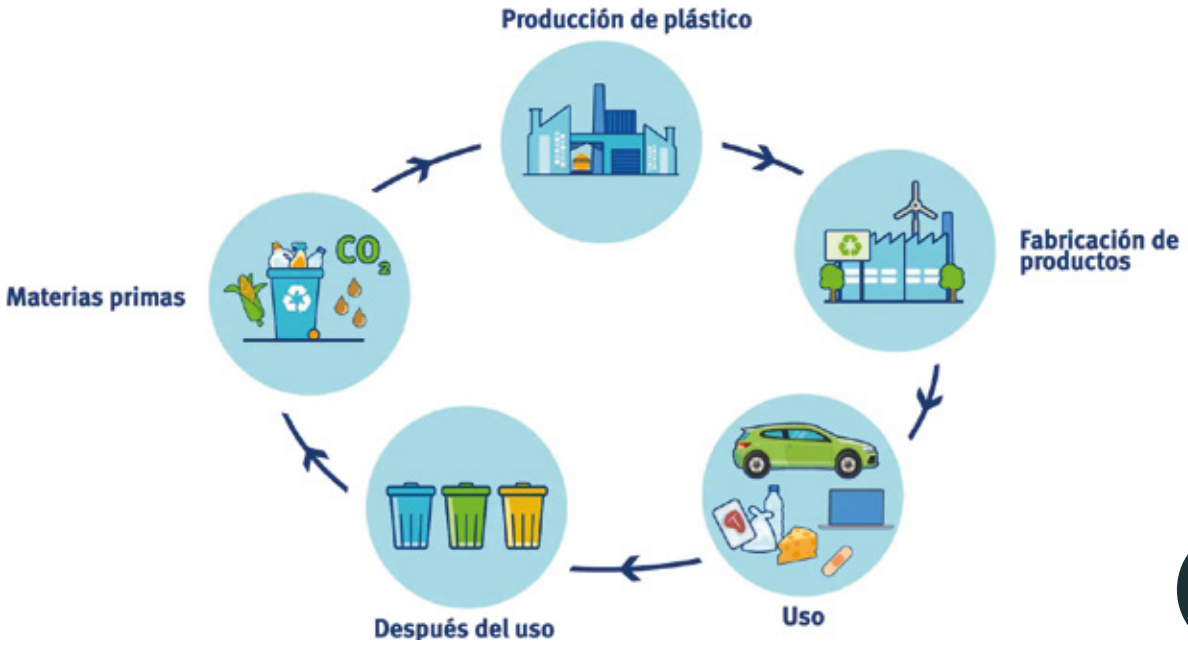
- https://www.lasexta.com/el-muro/miguel-aguado/plastico-malo-favor-siga-leyendo_201907305d4018ea0cf2ba8e0519fa05.html
- https://www.tiempo.com/ram/que-estan-haciendo-los-paises-europeos-por-los-residuos-plasticos.html
- https://www.residuosprofesional.com/cronica-muerte-anunciada-plasticos-un-solo-uso/
- https://www.lavanguardia.com/natural/20190703/463279339822/plastico-greenpeace-cosejos-medio-ambiente-video-seo-ext.html
- https://www.elconfidencial.com/tecnologia/2019-07-26/prohibir-bolsas-plastico-problema-medioambiental_2147291/
- https://www.cope.es/programas/el-no-ya-lo-tienes/noticias/puede-vivir-sin-usar-plasticos-20190801_471277
- https://es.euronews.com/2019/07/30/seria-capaz-de-vivir-sin-plasticos-en-verano-consumimos-un-40-mas
- http://www.telemadrid.es/programas/madrid-directo-om/Vivir-plasticos-9-2143375658--20190725090825.html
- https://magnet.xataka.com/en-diez-minutos/guerra-plastico-botecitos-champu-hoteles-siguiente-victima
- https://www.deia.eus/2019/08/01/sociedad/estado/las-bolsas-de-plastico-de-nuevo-en-entredicho
- https://www.lasexta.com/tribus-ocultas/cine-series/puede-vivir-plastico-como-cuales-son-alternativas_201907295d3f5a3e0cf28aa87771ab08.html
- https://www.laopiniondemurcia.es/cambio-climatico/2019/07/17/espanol-reciclo-12-kilos-plastico/1038724.html



2. THE PRODUCT LIFECYCLE

After analysing all phases of product development and the aspects considered in the **sustainable or eco-design product** development process, it is time to look at the product life cycle as another way of identifying specific design needs to **reduce the product's environmental impact:**

1. EXTRACTION OF RAW MATERIALS	How much energy and resources are needed to extract them? How much energy is needed to take the product to the next development stage? How can the waste produced be recycled?
2. PROCESSING THE MATERIALS	The amount of energy and resources used in the materials processing phase. The amount of energy used in storage and for transfer to the next stage of the product's life. How can the waste produced be recycled?
3. COMPONENTS MANUFACTURING	The amount of resources and energy required to manufacture additional components needed to assemble the product. How can the waste produced be recycled?
4. ASSEMBLY AND PACKAGING	Amount of energy, resources and other materials needed to assemble the finished product. Amount of energy and materials needed to package the product. How can the waste produced be recycled?.
5. DISTRIBUTION AND ACQUISITION	The amount of energy used, and contamination produced during the logistics phase to deliver the product to points of sale. Packaging waste produced, at the retailer's premises and at the users' home post-purchase.
6. INSTALLATION, USE AND CONSUMPTION	The amount of energy consumed throughout the product's useful life, and waste generated during use or consumption.
7. MAINTENANCE AND UPGRADES	The amount of energy needed to maintain and upgrade the product. Waste produced and environmental impact.



3. END OF THE PRODUCT'S USEFUL LIFE

When a product expires, it's time to think about how it can be recycled to reduce its impact as waste and how to transform these materials and give them a new purpose.

The amount of energy used to take the waste to a recycling plant or landfill. Waste generated. The amount of energy necessary to cover all recycling and storage, transformation and elimination phases.	**RECYCLING MATERIALS** 
When the modular parts system is included in the product development phase, it facilitates selective recycling of certain product components or parts. The amount of energy and waste generated during this phase.	**REUSING COMPONENTS** 
Optimal product recycling entails reusing parts and materials and facilitates transformations and processing that lengthens their useful life or gives them a new function.	**PRODUCT REUSE** 
The amount of energy and waste generated in the product elimination phase.	**INCINERATION**