ECO-LESSON
ZERO
WASTE

2 CAN WE LEARN HOW TO REDUCE WASTE?

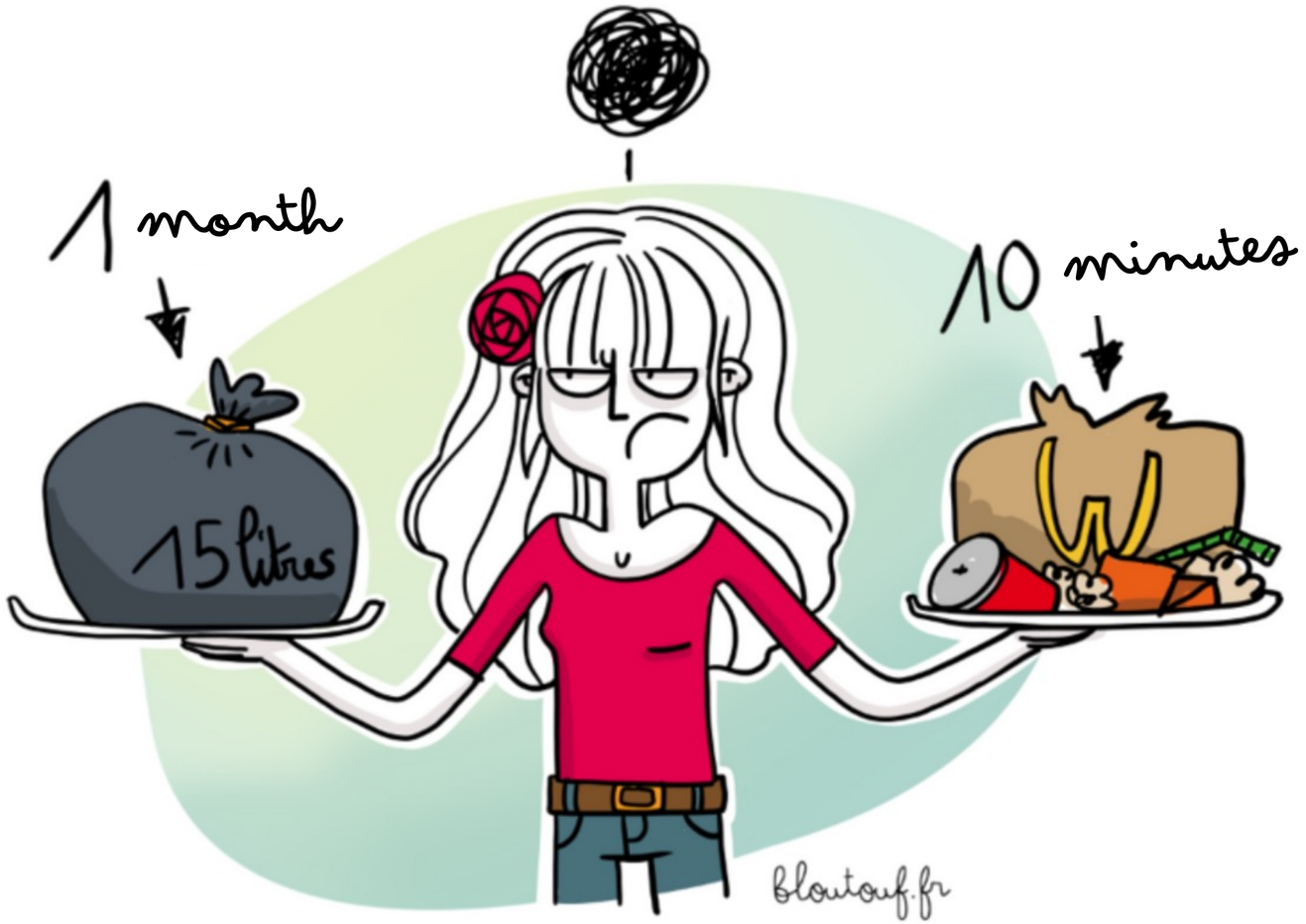
...THE GOOD NEWS IS:
CHANGING HABITS IS POSSIBLE!
YOU JUST HAVE TO SHOP DIFFERENTLY.

Don't worry, we'll tell you how to do it: just follow the 5 principles of zero waste, called the 5Rs

ECO-LESSON
ZERO
WASTE

WHAT IS ZERO WASTE?

ZERO WASTE IS A LIFESTYLE WHEREBY PEOPLE MAKE A CONSCIOUS EFFORT NOT TO WASTE RESOURCES AND TO PRODUCE AS LITTLE WASTE AS POSSIBLE, THEREBY NOT POLLUTING THE ENVIRONMENT



ECO-LESSON
ZERO
WASTE

ECO-LESSON
ZERO
WASTE

ZERO WASTE PRINCIPLE

OUR SUPERPOWERS ARE THE "5R" PRINCIPLE - IN THE FOLLOWING ORDER:

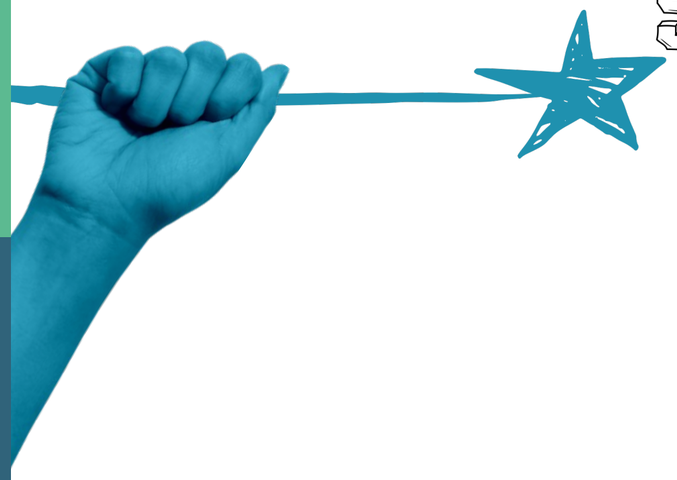
1 REFUSE
Refuse things you you don't need.

2 REDUCE
Limit the number of items you own

3 REUSE
reuse what you already have instead of immediately throwing it away

4 REPAIR
repair and bring back into use that which could not be refused, reduced or reused

5 RECYCLE
Recycle what could not be refused, reduced, reused, repaired. Compost, i.e. turn food scraps into precious fertiliser, i.e. compost to feed plants



ECO-LESSON
ZERO
WASTE

ZERO WASTE ESSENTIALS

WE MAGICALLY TURN DISPOSABLE ITEMS INTO REUSABLE ONES!

The essentials should include reusable items to replace the most common disposable ones, especially those made of plastic.

Every disposable item has its reusable counterpart.

BEESWAX WRAPS

They are light and protect food from drying out or leaking. They adapt to the shape and size.

SPORK

A combination of a spoon and fork, it is also sufficient for cutting food (spoon + fork).

STRONG BAG

Instead of disposable plastic bags.

CLOTH NAPKIN

It will serve to protect your knees or as a plate. You can wet it and use it to wipe your hands or cup.

BINDER CLIP

This little clip can replace a lot of things. You can find tips on how to use it on YouTube.

FABRIC BAGS

You can pack any dry snacks, such dried fruit and nuts in them.

SNACK BOX

You can also put wet products, such as salad, in it.

WATER BOTTLE

Hydrate without becoming dependent on plastic bottles. Refill your bottle with tap water throughout the day.

HANDKERCHIEF

Reusable, made of fabric. Simply throw it in the wash when dirty.

The items shown here are just examples. Adapt the set to suit your needs.

You don't need to rush into buying them. Make necessary replacements from what you already have, E.g. instead of a spork, use a fork and a spoon from your home drawer. Bags can be sewn. Beeswax bags are also easy to make. A bandana or kitchen cloth can be used instead of a napkin.

ECO-LESSON
ZERO
WASTE

”R” no. 1 - REFUSE

ASK YOURSELF: CAN I AVOID IT, REFUSE IT, TURN IT INTO SOMETHING BETTER FOR THE ENVIRONMENT?

i can change for

PLASTIC BAG	⇢	FABRIC BAG
PLASTIC CUP	⇢	GLASS, (INOX) STEEL CUP
GIFT WRAP	⇢	FABRIC GIFT WRAP
FRUIT MOUSSES	⇢	HOME-MADE SMOOTHIE
PRE-PACKED BISCUITS	⇢	HOME-MADE MUFFIN
SHOWER GEL	⇢	BAR OF SOAP

etc

.

pair up

REFUSING = SAYING NO TO WHAT YOU DON'T NEED.

ECO-LESSON
ZERO
WASTE

”R” no. 2 - REDUCE

ASK YOURSELF: DO I REALLY NEED THIS?

By buying less, we reduce our waste!

We buy too much, but it is not our fault. It is the manufacturers who shower us with more and more new goods. They have no regard for the planet's depleting natural resources, they are concerned only with their profit.

REDUCING = LIMITING WHAT YOU NEED.

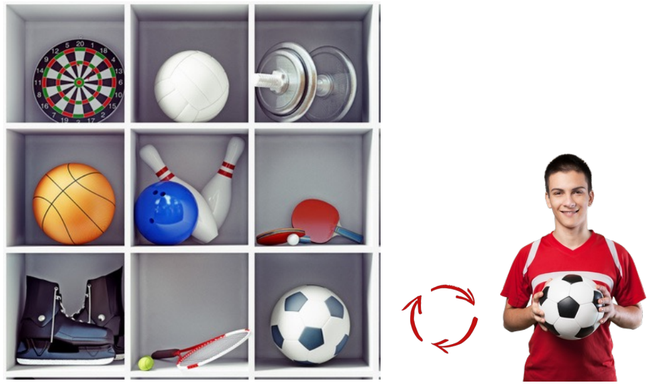
ECO-LESSON
ZERO
WASTE

”R” no. 3 - REUSE

ASK YOURSELF: CAN I RENT IT OR FIND IT USED?

IT'S AMAZING HOW MANY THINGS WE HAVE IN OUR WARDROBES! GAMES, TOYS, SPORTS EQUIPMENT, BOOKS, AND CLOTHES, WHICH WE HARDLY EVER USE.

If they are in good condition, you can sell them or give them away, you will make another child happy. Above all, this avoids producing new things and wasting raw materials and energy on making them.



Let’s get the clothes out of our wardrobes and don't hesitate to buy second-hand!

This way, dangerous chemicals are avoided because such clothes have already been washed many times. Manufacturers use a lot of chemicals to make the clothes look nice and colourful and to transport them by ship. A large proportion of these chemicals end up in the water during the production process and during the first washes in the washing machine. In doing so, they contaminate plants and animals.

Choose second-hand clothes!

Selling and buying second-hand protects the planet!

Put your wardrobe in order

We don’t wear 80% of our clothes because we no longer like them or they do not fit. However, if they are in good condition they may be perfect for someone else.

Exchange clothes

Most often we exchange clothes with family members, but this can also be done with neighbours and friends.

Visit second-hand shops

Second-hand shops sell clothes for every occasion and every season, for everyday wear and crazy parties. There are also shoes, accessories, bags and backpacks, pretty much everything you need. What you won't find is packaging, labels, bags and boxes. Of course, bring your own bag to pack your shopping in.

BUYING RECYCLED PRODUCTS CANNOT JUSTIFY EXCESSIVE CONSUMPTION.

ECO-LESSON
ZERO
WASTE

”R” no. 4 – REPAIR

ASK YOURSELF: CAN IT BE REPAIRED?

Before throwing something away and buying it again, try to fix it.

Maybe you can do it, maybe your parents, friends, a handyman, a craftsman, a warranty service, a repair cafe. Examples: bicycle, pencil case, toys, clothes, shoes, furniture, bags and backpacks, etc.

Caring and repairing

It's worth going through your things regularly and refreshing or repairing them rather than buying new ones. You can keep using a repaired item, or give it to someone who needs it and will be happy to receive it.

USE YOUR CREATIVITY - SOMETIMES ALL IT TAKES IS A SLIGHT MAKEOVER AND AN OBJECT CAN FIND ANOTHER USE.

REPAIRING = FIXING, I.E. BRINGING BACK INTO USE THAT WHICH COULD NOT BE REFUSED, REDUCED, REUSED.

ECO-LESSON ZERO WASTE

”R” no. 5 - RECYCLE

RECYCLING IS ANY PROCESS BY WHICH A MATERIAL IS RETURNED TO THE STATE FROM WHICH IT WAS CREATED.

RECYCLING DONE BY NATURE ITSELF (PERFECT)

Composting

It is 100% recycling: organic waste (e.g. kitchen scraps, peelings, leaves) goes back into the soil and becomes food again.

As much as 1/3 of our waste is kitchen scraps! Composting is the simplest, cheapest and most effective way to stop a climate catastrophe. It's also one of the fastest ways to reduce the contents of your bin by 1/3 - straight away!

MAN-MADE RECYCLING (IMPERFECT)

Downcycling

This is almost all industrial recycling, as it usually results in products with a lower value than the raw materials used.

E.g. plastic can only be recycled 2 - 3 times, each time yielding an inferior raw material that is processed into lower and lower-quality products (PET bottles can be used to make flowerpots, pots can be used to make benches). Recycled plastic can transfer toxic additives into recycled materials.

Recycling

Glass and aluminium can be recycled virtually indefinitely without losing the quality and properties of the raw material (but there is a condition: proper sorting). This is why putting waste in the right containers is so important.

And plastic? It’s true, that 14% is recycled, but only 2% is effective, meaning that the waste is turned into a product that is just as useful as the original product (a PET bottle becomes an equally good PET bottle). There are many types of plastic, and not all of them are recyclable (e.g. thin plastic bags are not)

Upcycling

Upcycling, like recycling, is the secondary treatment of waste. However, it results in products with a higher value than the raw materials used.

An interesting example is the fashionable and very expensive handbags sewn from cement bags piled up in a landfill in Cambodia.

WE SHOULD RECYCLE LESS, NOT MORE!

RECYCLING = BRINGING BACK INTO CIRCULATION WHAT COULD NOT BE REFUSED, REDUCED, RE-USED, REPAIRED.

ECO-LESSON
ZERO
WASTE

UNIVERSAL SEGREGATION PRINCIPLES

ASK YOURSELF: IS IT RECYCLABLE OR COMPOSTABLE? IF SO, WHICH WASTE BIN SHOULD IT GO IN?

Choose packaging consisting of as few different materials as possible.

Multi-material packages are difficult to recycle again.

Do not wash the containers,

but empty them thoroughly.

Before you throw it away, reuse it

e.g. make a notebook out of unused sheets of paper and a pad with a clip

Waste which can't be allocated to any of the coloured bins, is a resource lost forever.

So try to ensure that as little as possible goes into the black bin for mixed waste, as its contents are not recyclable!

Divide the materials

e.g. remove the shrink film from a plastic bottle.

Plan your shopping

Buy only as much as you need, not because there is a promotion. Always have a shopping list, even if you are looking in a secondhand store.

Crush or otherwise reduce the volume

e.g. by putting one item inside another.

Share the excess.

What is unnecessary for you may be a treasure for someone else.

Problematic waste

should be taken to a separate collection point for municipal waste (PSZOK), handed in at a suitable shop (white goods), garage (tyres), or pharmacy (medicines, thermometers).

If in doubt, use the waste search engine:

https://segregujna5.um.warszawa.pl/

ECO-LESSON ZERO WASTE

FOR TEACHERS
ECO-LESSON 2: WE LEARN HOW TO REDUCE WASTE

Zero waste is a lifestyle according to which we consciously try not to waste resources and generate as little waste as possible, therefore not polluting the environment. Zero waste is now a globally recognised movement. Its members advocate eco-friendly alternatives and are aware of their own impact on the environment. They deliberately use the word waste rather than rubbish. Rubbish is associated with something worthless. Waste is a valuable resource and raw materials that can be recovered from it.

How can we minimise the impact of our consumption on the depletion of natural resources? By reducing waste generation and not wasting resources - in other words, zero waste activities. **This is the so-called 5Rs: refuse - reduce - reuse - repair - recycle. It is important to apply them in a fixed order:**

1.REFUSE Refusing what you don't need. Learn to say: NO! E.g. do not accept or give small advertising handouts, which most often end up in the bin. Become an informed consumer resistant to the persuasive influence of advertising and materialistic culture.
2.REDUCE Limit what you need. Use less of everything. Most products are designed to encourage you to use much more than you actually need (e.g. toothpaste). Don't waste food, energy and water. Get rid of unwanted excess from your home. Support the sharing economy instead of buying new things.
3.REUSE Every disposable item has a reusable counterpart. Engage in creativity-enhancing activities such as DYI (do it yourself) and/or upcycling.
4.REPAIR Repairing what you failed to refuse - reduce - reuse before.
5.RECYCLE Recycling or composting recycles what you have not been able to refuse early on - reduce - reuse or repair. The only 100% recycling is composting.

Zero waste essentials: It is a good idea to prepare yourself a simple starter kit, which should include reusable items to replace the most common disposable ones, especially those made of plastic. It is easy to decipher which disposable items are involved. To begin with, a reusable bottle, a cloth bag, a reusable food container will be enough. Let the use of durable reusable items instead of disposable plastic ones become a habit. Shopping bags, a tea cup, cutlery, a napkin can all be included. Making even one small change will have a great impact on reducing waste.
The kits will vary slightly and can be tailored to your needs and abilities - the photo is only an example, not a template. The important thing is that you don't have to - shouldn't! - buy anything, but instead use what you already have. And the necessary replacements are sure to be at home and there is no need to rush to buy anything. Every zerowaster starts by carrying a fork and spoon from his or her home drawer (and not a spork from the shop), sews his or her first bags himself or with someone else's help, makes his or her first beeswax wrap in a workshop, uses a bandana instead of a napkin and repeatedly fills a glass juice bottle with tap water. If you have to buy a new product, choose a recyclable one: metal, aluminium, stainless steel (inox), wood, cardboard, glass.
The golden rule of zero waste is: ,,Health always takes precedence over zero waste", so if in doubt, please ask your doctor or specialist. However, we are sure they will applaud educating children about the toxic effects of plastics on the body. Plastic is extremely durable, but at the same time we use it once. Manufacturers shower us with billions of disposable products packed in single-use plastic that has poisoned the environment for centuries. For the sake of future generations, let us demand the implementation of reusable and refillable systems that do not damage the earth or harm human health. The topic of plastic pollution will come up frequently in eco-lessons and zero waste inspirations. For example, it will appear when discussing the topic of healthy snacks as an alternative to plasticised food.

RECYCLING Recycling is the process of returning a raw material to the state from which it was created. Recycling is the worst good option available. In the first instance, refuse, reduce, reuse and repair.

COMPOSTING is the only 100% effective type of recycling . Organic waste (e.g. kitchen scraps, peelings, leaves) is returned to the soil and becomes food again. As much as 1/3 of our waste is kitchen waste! Composting is the simplest, cheapest and most effective way to stop a climate catastrophe. It is also one of the fastest ways to reduce the contents of your bin - by 1/3 straight away! A composter doesn't have to be in the garden; even in the smallest flat, you can put up an aesthetically pleasing and odourless composter - at school, too!

In contrast, MAN-MADE INDUSTRIAL RECYCLING is always imperfect - it is basically **DOWNCYCLING**, as it usually results in products of lower value than the raw materials used for it. Some materials, e.g. glass and aluminium, can be recycled virtually indefinitely without losing the quality and properties of the raw material - but there is a condition: proper sorting. Unfortunately, as many as 40% of Poles do not sort their waste. Only 30% of Polish waste is recycled.

A positive exception is the **COLLECTION SYSTEM**, which enables up to 90% of single- and reusable packaging, mainly beverage packaging, to be recovered. It also has additional benefits: increased levels of separate waste collection; reduced environmental pollution; increased recycling levels required by EU law.

PROBLEMATIC RECOVERY OF PLASTICS There are very many types of plastic, not all of them recyclable (e.g. thin plastic bags are not). Although 14% is recycled, only 2% is effectively recycled, meaning that the waste is turned into a product that is just as useful as the original product (a PET bottle makes an equally good PET bottle).
Plastic can only be recycled 2 or 3 times, each time yielding an inferior raw material that is processed into lower and lower quality products (PET bottles can be used to make flowerpots, pots can be used to make benches). In addition, recycled plastic can carry toxic additives into recycled materials. Recycling also means passing the problem on to consumers from producers. Mass production of plastic began in the 1950s. Since then, only 9% of the globally produced plastic has been recycled to date. The rest ends up in landfills or in incinerators, polluting the soil, water and air and contributing to worsening the climate change. Recycling most plastics is too expensive. We burn 6 times more plastic than we recycle. The petrochemical industry is planning to increase its revenue - it is estimated that plastic production will increase by 40% by 2030. Currently, around 400 billion tonnes of plastic are produced annually.

ORGANISER:

POLSKIE STOWARZYSZENIE ZERO WASTE

PARTNERS:

CRÉDIT AGRICOLE

szkoła w porządku

ubrania do oddania

UWAGA ŚMIECIARKA JEDZIE

WP LAW

AUTHORS:

THE PROJECT'S CONTENT EXPERT: MAŁGORZATA GĘCA

EXPERT ON EDUCATION: MARZENA BOROWSKA

PROJECT LEADER: KATARZYNA MIRKIEWICZ

Famille presque ZERO DECHET for ever

The beautiful illustrations used in the materials are by Bloutouf (www.bloutouf.fr). We took our inspiration from the children's book ,'Les Zenfants presque Zero Dechet'. Its authors are Benedicte Moret (that's Bloutouf!) and Jeremie Pichon, authors of the book and blog ,'Famille presque Zero Dechet'.

The Polish Zero Waste Association as the organiser of the action Less Means More! grants a licence (CC BY-NC-ND 4.0) to educators from institutions registered for the action to use these materials for educational and non-commercial purposes.