



5th and 6th Year of Primary School

DIDACTIC GUIDE UNIT 4

Counterfeit products: Risks to the environment



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Index

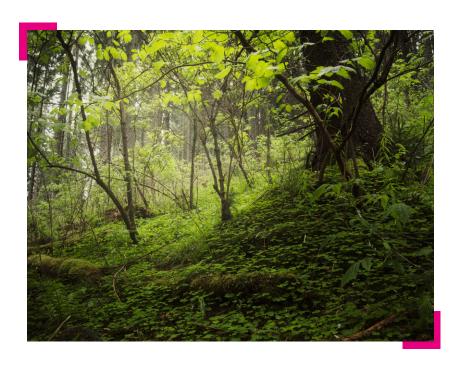
1. Rationale for the didactic guide	
2. Objectives of the didactic guide	
3. Contents, assessment criteria and competences	
4. Contents, assessment criteria and competences	5
Annexes	
Annex 1. Counterfeit products: risks to the environment	7
Annex 2. Counterfeit products: risks to the environment	13
Annex 3. Script to write the news	20
Annex 4. Thinking routine template	21
Annex 5. Image to be analysed by the students	22
Annex 6. Final proposal for the thinking routine "see, think and wonder"	23



1. Rationale for the didactic guide

Counterfeit toys may constitute a hazard to the safety and health of people, but also to the protection of the environment. When a counterfeit toy is designed or manufactured, there is generally no control of the risks and the impact that its manufacture may have on the environment.

The objective of this didactic guide is to give visibility and raise awareness among Primary School students (8–12 years old) of the environmental effects of acquiring counterfeit toys.



To this end, two educational activities are proposed to be carried out in Primary School classrooms:

- The Safe or Fake news.
- Thinking routine: SEE, THINK AND WONDER.

This document presents the objectives, contents, assessment criteria and competences which structure the didactic guide, and which are extracted from the Primary Education curriculum and focus on the third, fourth, fifth and sixth years of primary school. Finally, two educational resources that can be used to develop the aforementioned curricular elements are also specified.

2. Objectives of the didactic guide

Among the general objectives of the Primary Educational stage that are specified in the Spanish Royal Decree 126/2014, dated 28 February, which establishes the basic Primary Education curriculum, this didactic guide will contribute to developing the following objectives:

- Become aware of and appreciate the values and rules of coexistence, learn to act in accordance with them, prepare to exercise active citizenship and respect human rights, as well as the pluralism of a democratic society.
- Develop habits related to individual work and teamwork, effort and study responsibility, as well as attitudes of self-confidence, critical thinking, personal initiative, curiosity, interest and creativity in learning, and an entrepreneurial spirit.
- Acquire skills to prevent and peacefully solve conflicts in order to function autonomously at family and domestic level, as well as in the social groups with which they interact.
- Know the fundamental aspects of Natural Sciences, Social Sciences, Geography, History and Culture.

3. Contents, assessment criteria and competences

The contents, assessment criteria and competences that will be used as part of this didactic unit are detailed below. All of them use the curricular level of the second and third cycles of Primary Education as a reference (third, fourth, fifth and sixth years).

It is worth mentioning that this didactic unit will allow the development of contents in the areas of Natural Sciences, Social Sciences, Spanish Language and Literature and Social and Civic Values.

Before explaining the contents, assessment criteria and competences selected in each area, a list with the acronyms of the different competences of the curriculum is provided below:

LCC: linguistic communication competence.

MSTC: mathematical competence and basic competences in science and technology.

DC: digital competence.

LLC: learning to learn competence.

SCC: social and civic competences.

SIES: sense of initiative and entrepreneurial spirit.

ACE: awareness and cultural expressions.

The theory and resources of the **SAFEorFAKE? toolkit** necessary to develop this didactic unit are included in Annex 1 and 2.

NATURAL SCIENCES AREA			
	CONTENTS	ASSESSMENT CRITERIA	СОМ
Unit 1. Introduction to scientific activity	Use of different materials taking into account safety standards. Individual work and teamwork.	4. Work cooperatively, respecting care for their personal safety and that of their partners, taking care of tools and making good use of materials.	MSTC SCC LLC
Unit 2. The human being and health	Healthy habits to prevent diseases. Responsible behaviour.	3. Relate certain life practices to the appropriate functioning of the body, adopting healthy lifestyles, being aware of the repercussions their lifestyle will have on their health.	MSTC SCC LLC
Unit 3. Living things	Characteristics and components of an ecosystem.	3. Know the characteristics and components of an ecosystem.	MSTC LLC

SOCIAL SCIENCES AREA			
	CONTENTS	ASSESSMENT CRITERIA	СОМ
Unit 3. Living in a society	The European Union.	5. Identify the structure and aims of the European Union, explaining some of the advantages of being part of the EU.	SCC LLC
	The company. Activity and functions.	14. Explain the main characteristics of a company, specifying the different activities and forms of organisation that can be developed distinguishing between the different types of companies.	SCC LLC



SPANISH LANGUAGE AND LITERATURE AREA			
	CONTENTS	ASSESSMENT CRITERIA	СОМ
Unit 1. Identity and dignity of the person	Communication situations, either spontaneous or directed, using organised and coherent speech.	1. Participate in communication situations, directed or spontaneous, respecting the rules of communication: speaking time, speech organisation, listening and incorporating the responses of others.	LCC SCC
	Strategies to use oral language as a communication and learning tool: listening, gathering data, asking. Participating in surveys and interviews. Oral comment and personal judgement.	10. Effectively use oral language to communicate and learn by being able to actively listen, gather the relevant data in relation to the communication objectives, ask and ask again, participate in surveys and interviews and orally express with clarity their own personal judgement, in accordance with their age.	LCC SCC
Unit 3. Written com- munication: writing	Text production to communicate knowledge, experience and needs.	1. Produce texts with different communicative intentions.	

SOCIAL AND CIVIC VALUES AREA			
	CONTENTS	ASSESSMENT CRITERIA	СОМ
Unit 1. Identity and dignity of the person	The person	6. Develop the necessary autonomy and entrepreneurial ability to achieve personal accomplishments, taking responsibility for the common good.	SCC LLC
Unit 2. Understanding and respect in interpersonal relationships	Interpersonal relationships	1. Express opinions, feelings and emotions jointly using spoken and non-verbal language.	SCC
		5. Discuss and create shared thoughts with other people in order to find the best argument.	SCC
Unit 3. Coexistence and social values	Responsibility of the people in society	1. Solve problems by collaborating, revealing an open attitude, and sharing points of view and feelings.	SCC SIES
		2. Work in teams, encouraging positive interdependence and showing supportive behaviours.	SCC SIES
		6. Understand the sense of social responsibility and social justice by using the ability to reflect, summarise and structure.	SCC

4. Worksheets

Finally, two educational resources designed for children aged 8 to 12 are presented:

- The first resource, aimed at children in the 3rd and 4th Year of Primary School (8–10 years old), consists in elaborating a news item which reflects the impact of counterfeit toys on companies, the society and/or the environment.
- The second resource is aimed at children in the 5th and 6th Year of Primary School (10–12 years old). Its objective is that children think about the life cycle of counterfeit toys through the thinking routine "see, think and wonder".

Below, each of the activities is detailed, focusing on aspects such as age, year, time, objectives, materials and on carrying out the workshops.

THE SAFE OR FAKE NEWS		
Age	8- 10 years old	
Years	3rd and 4th Year of Primary School.	
Time	2 sessions of 45 minutes (depending on the development of the activity)	
Objectives	 - Understand the effects of counterfeit toys on the environment and/or people. - Encourage cooperative work. - Develop the students' linguistic competence (spoken and written). 	
Materials	Script to write the news (Annex 3).	
Carrying out the workshop	Firstly, the class is divided into work groups of 4 or 5 children. Each group must create a news item related to the manufacturing of a counterfeit toy and the environmental harm produced by this process. They will have to work together to create the script of the news: title, date, location, main characters, development and conclusion. Depending on the time/technical availability, it will be possible to work with the different news items through: - An oral presentation in class of each of the news items. - An audio or video recording of the news, imitating television or radio journalists. - Carrying out a multi-level activity, so that children show their news to students from other years.	

THINKI	NG ROUTINE: SEE, THINK AND WONDER
Age	10-12 years old
Years	5 th and 6 th Year of Primary School.
Time	45 minutes
Objectives	 Reflect on the life cycle of counterfeit toys. Share ideas and opinions regarding the design, manufacturing and consumption of counterfeit toys. Understand the risks of purchasing counterfeit toys. Encourage cooperative work.
Materials	Thinking routine template: see, think and wonder (Annex 4).
Carrying out the workshop	Once all the information attached to this document (Annex 2) has been presented, a cooperative activity will be carried out to reflect and express ideas or opinions which encourage the acquisition of the content.
	Specifically, a thinking routine in groups about the life cycle of counterfeit toys is proposed (Annex 5). Each team will be provided with a template for the routine "see, think, wonder", where they will have to complete the following:
	SEE column : What do I see in the picture? In this initial step, children only observe and take notes, they do not interpret.
	THINK column : What happens in the picture? What do you think about when you look at the picture? Do you agree with what is shown on the picture or not? Is what is happening in the picture important to your life? Etc. Children must be encouraged to support their ideas with reasons and to write them in the second column.
	WONDER column : What questions do you ask yourself after looking at the picture? Do you have any doubts? Are there are doubts that cannot be solved by the team which remain after analysing the picture. These must be included in the third column.
	Once all the groups have completed their template, a joint perspective will be made. Three columns will be shown on the board in the classroom and colourful post-it notes used to gather all the ideas and doubts from every single one of the groups (see Annex 6).



ANNEXS

Annex 1

LEVEL: 3rd and 4th Year of Primary School

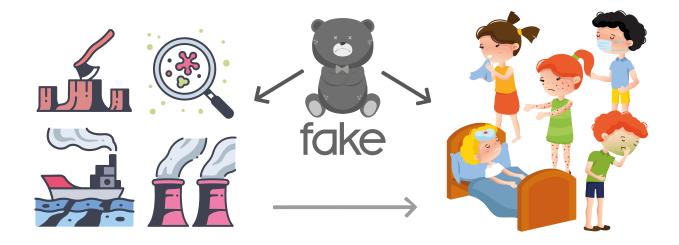
Counterfeit products: risks to the environment

1. Introduction

Counterfeit toys can jeopardise our health, safety and also the environment. When economic benefits prevail, taking care of the environment is not a priority for those who counterfeit.

When choosing a toy, the environmental liability of the product and the company that manufactures it should be a significant criterion to be considered.

Environmental harm has consequences for our health too, as we biologically depend on natural resources and ecosystems, not only to survive, but to achieve a certain quality of life.



Through a **life cycle analysis**, let's see how the manufacturing of counterfeit toys can impact the environment, from the materials used during the manufacturing process until they are not used anymore and are thrown away.

Environmental pressures have an influence on climate change, the air pollution index, resource depletion and acidification, and they have other effects on environmental health, attributable to the life cycle of products.



The **life cycle analysis** is a process that allows us to assess the environmental impact related to a product, from the extraction of raw materials to the use and end of lifespan of the product, once it has been thrown away.

2. Life cycle of toys

The beginning of the life cycle of toys starts with the extraction of raw materials which enable the manufacturing of the materials and components that toys are made of. Raw materials extracted from nature are limited resources on our planet. For example, a wooden toy is mainly made of a single material which comes from our forests, but a toy with electronic components can have more than 100 different materials.

Let's investigate a little bit about what the life cycle of toys actually is:



Once all the raw materials are ready 1, they are taken to the production facilities where the toy materials or components are manufactured and remain prepared to be assembled, and further processes that are necessary for some toys are carried out; for example, buffering, colouring or the fitting of eyes and hair 2.

Then, they are ready to be packaged and taken to the store 3, where they will be purchased and taken home to be used 4.

When toys break, some companies offer a service to repair or replace them, or if they are not useful anymore their parts and materials can be reused, turning them into a new toy or a new component of a toy 5.

Finally, when these parts cannot be reused any more, they can be recycled 6 to become new secondary raw materials, and the percentage that cannot be recovered is generally disposed of as waste and taken to landfills or incinerated 7.

Children's products companies are increasingly trying to use materials with lower environmental impacts that can decompose more easily and integrate into the cycles of nature, like biodegradable or compostable materials.





Thus, we can find dolls made of biodegradable materials that use ecological dyes or with dresses made of recycled fabric. Even your school bag may be made of plastic bottles, or your playground made of recycled tyres.

These innovations require a lot of work and effort, both in terms of time and money, so that the manufacturing processes of our favourite toys have the least possible impact on the environment.

A company that counterfeits does not care about the environment, and its manufacturing processes can have a huge impact on it.

Let's see what happens during the manufacturing of a counterfeit toy and its potential harm to the environment.

3. Environmental impacts during each phase of the life cycle of a counterfeit toy



PHASE I: Uncontrolled extraction of raw materials

Raw materials are extracted from the environment and constitute the materials used to manufacture our toys.

In regulated situations, like the case of companies that work responsibly, these raw materials are controlled in order not to extract more than is necessary, allowing these resources to renew in nature and their extraction to have the minimum environmental impact possible.

Counterfeit toys may contain materials extracted without control from natu-

Raw material is usually controlled so it can be renewed again in nature or in order to reduce its impact.

CONTROLLED

UNCONTROLLED

OPPORTOR

OPPORTOR

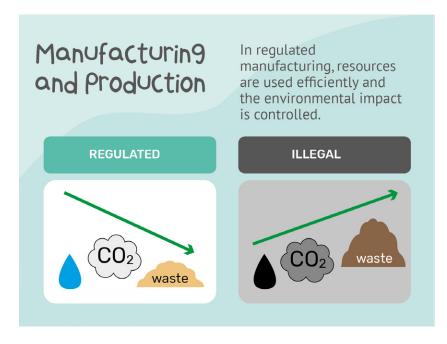
UNCONTROLLED

ral ecosystems that are not intended to be exploited. This means a threat to the continuity of natural ecosystems and the depletion of natural resources.

PHASE II: Illegal manufacturing and production

During this phase, all the materials and pieces that the toy is composed of are manufactured. By the end of this process, once all the pieces have been assembled, the toy is finished and ready to be packaged.

Companies that work responsibly have environmental management systems that help them reduce the consumption of resources and emissions into the atmosphere. In the case of counterfeit toys, it is very likely that no measures are applied to minimise the en-



vironmental risks. Furthermore, the factories that make these products do not guarantee the safety and protection of their workers.

Counterfeit toys often use toxic **dyes, adhesives and other elements that are released into the environment without control**. Some of these substances have the ability to travel long distances carried by the wind or water.

These toxic substances are harmful, both to us and animals, crops, seas or groundwater.



PHASE III: Illicit packaging and shipping

The containers and plastics used in counterfeit toys often do not comply with the safety requirements established in the European Union, as they are hazardous to health.

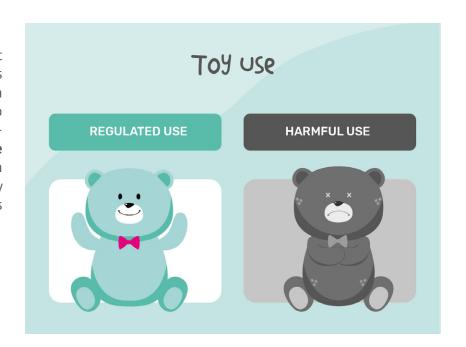
Counterfeit toys are often intercepted in the country of destination, where they are then destroyed or taken to landfills to prevent them from being recycled or reused.

In these cases, the greenhouse gas emissions resulting from their shipping, the main cause of climate change, have been in vain. The toy is disposed of before completing its lifespan.



PHASE IV: Harmful use

As you know, counterfeit toys can entail severe risks to children's health and can also break sooner, due to their low quality. This implies a reduction in the life cycle of that toy. Children will barely have time to play with the toy, as it breaks very soon.



PHASE V: Early end of lifespan and harmful waste management

The authorities are in charge of eliminating products that violate intellectual property rights. In order to do so, different methods can be used, such as incineration, recycling, grinding, chemical treatment, encapsulation or landfill, among others. These processes can harm the environment, due to the release of toxic fumes, and can lead to the pollution of soil, groundwater and inland/coastal waterways.

The high volume and wide diversity of products that infringe intellectual property turn the management of seizure operations, from the treatment of products to their destruction, into a complicated task for the bodies in charge of law enforcement.

Furthermore, although the ideal situation would be to recover the costs of these operations from the criminal organisations that market counterfeit toys, in reality the costs tend to be paid for by the copyright holders and citizens, as taxpayers.



3. What can you do as a consumer?



Three reasons not to purchase counterfeit toys:

- 1. They are hazardous to your health and the environment.
- 2. The environmental impact is not taken care of during manufacturing.
- 3. Their repair, recycling or reuse of materials is not facilitated.

As a consumer, you play a very important role. With your purchase decisions, choosing toys that are original, safe and more respectful towards the environment, you are helping taking care of our environment and our health.

More educational resources are available on: www.safeorfake.eu





Annex 2

LEVEL: 5th and 6th Year of Primary School

Counterfeit products: risks to the environment

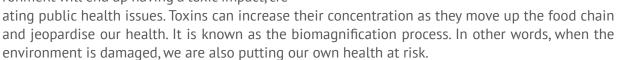
1. Introduction

Counterfeit toys can jeopardise our health, safety and also the environment. When economic benefits prevail, taking care of the environment is not a priority for those who counterfeit.

When choosing a toy, the environmental liability of the product and the company that manufactures it should be a significant criterion to be considered.

Environmental harm has consequences for our health too, as we biologically depend on natural resources and ecosystems, not only to survive, but to achieve a certain quality of life.

Much of the damage that occurs in the environment will end up having a toxic impact, cre-



Environmental pressures have an influence on climate change, the air pollution index, resource depletion and acidification, and they have other effects on environmental health, attributable to the life cycle of products.





The life cycle analysis is a process that allows us to assess the environmental impact related to a product, from the extraction of raw materials to the use and end of lifespan of the product, once it has been thrown away.

Let's see how the manufacturing of counterfeit toys can impact the environment. To do this, we will perform what is known as a life cycle analysis, from the materials used during the manufacturing process until they are not used anymore and are thrown away.

2. Life cycle of toys

Where do the materials used to manufacture toys come from?

Raw materials allow the manufacturing of the materials and components that toys are made of. Raw materials extracted from nature are limited resources on our planet. For example, a wooden toy is mainly made of a single material which comes from our forests, but a toy with electronic components can have more than 100 different materials.

Any toy we can imagine, including those we have at home, are all part of a story going back further in time in the geological history of the Earth.

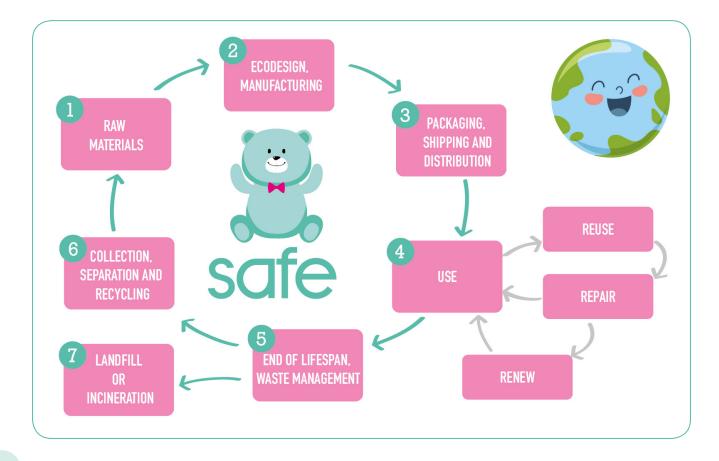
Let's investigate a little bit about what the life cycle of toys actually is:

Once all the raw materials are ready 1, they are taken to the production facilities where the toy materials or components are manufactured and remain prepared to be assembled, and further processes that are necessary for some toys are carried out; for example, buffering, colouring or the fitting of eyes and hair 2.

Then, they are ready to be packaged and taken to the store 3, where they will be purchased and taken home to be used by children 4. When toys break or are thrown away, some companies offer a service to repair or replace them, or if they are not useful anymore, their parts and materials can be reused, turning them into a new toy or a new component of a toy 5.

Finally, when the toys or parts of toys cannot be reused any more, they can be recycled 6 to become new secondary raw materials, and the percentage that cannot be recovered is generally disposed of as waste and taken to landfills or incinerated 7.

Companies that manufacture children's products such as toys, school materials or children's clothing are increasingly trying to use materials with a lower environmental impact, like biodegradable or compostable materials.





Thus, we can find dolls made of biodegradable materials that use ecological dyes or with dresses made of recycled fabric. Even your school bag may be made of plastic bottles, or your playground made of recycled tyres. These innovations require a lot of work and effort, both in terms of time and money, so that the manufacturing processes of our favourite toys have the least possible impact on the environment.

The toy industry is progressing towards an eco-sustainable model that covers the entire value chain: from the design and the supply chain to a culture and facilities that are more respectful to the environment.

The sustainable toy industry model focuses on three aspects:

- **1.** The **search for materials as an alternative** to those coming from fossil sources, for example, the use of recycled materials coming from obsolete toys or recycled sea plastics in order to manufacture dolls.
- **2.** A more sustainable supply chain, with a reduction of the toy packaging materials or use of card-board instead of plastic.
 - Other proposals include a reduction of the carbon footprint by using materials produced in Europe and manufacturing the toy in Europe as well, with less environmental impact in terms of shipping.
- **3. Environmental culture of the company**, to involve companies, their staff and consumers in respecting the practices and products that are respectful towards the environment.

A company that counterfeits does not care about the environment, and its manufacturing processes can have a huge impact on it. Let's see what happens during the manufacturing of a counterfeit toy and its potential harm to the environment.

3. How does the production and sale of counterfeit toys impact the environment?

Let's see what the environmental impact is during each phase of the life cycle of a counterfeit toy.



PHASE I: UNCONTROLLED extraction of raw materials

Raw materials are extracted from the environment and constitute the materials used to manufacture our toys.

In regulated situations, like the case of companies that work responsibly, these raw materials are controlled in order not to extract more than is necessary, allowing these resources to renew in nature and their extraction to have the minimum environmental impact possible.



CONTROLLED

Controlled raw material to be renewed in nature or minimise its environmental impact.



UNCONTROLLED

Counterfeit toys may contain materials extracted without control from natural ecosystems that are not intended

to be exploited. For this reason they are a threat to the continuity of natural ecosystems and play a very important role in the problems caused by the depletion of natural resources.

PHASE II: ILLEGAL manufacturing

During this phase, all the materials and pieces that the toy is composed of are manufactured. By the end of this process, once all the pieces have been assembled, the toy is finished and ready to be packaged.

Companies that work responsibly have environmental management systems that help them reduce the consumption of resources and emissions into the atmosphere. In the case of counterfeit toys, it is very likely that no measures are applied to minimise the environmental risks. Furthermore, the factories that make these products do not guarantee the safety and protection of their workers.



ECODESIGN

Environmental management systems. Ecodesign criteria.



FORBIDDEN

There are no environmental measures.
Unsafe conditions and exploitation of workers.



Counterfeit toys often use toxic dyes, adhesives and other elements that are released into the environment without control. Some of these substances have the ability to travel long distances carried by the wind or water.

These toxic substances are harmful, both to us and animals, crops, seas or groundwater.

PHASE III: ILLICIT packaging and shipping



REGULATED

Toy containers and plastics comply with the safety and environment protection regulations.

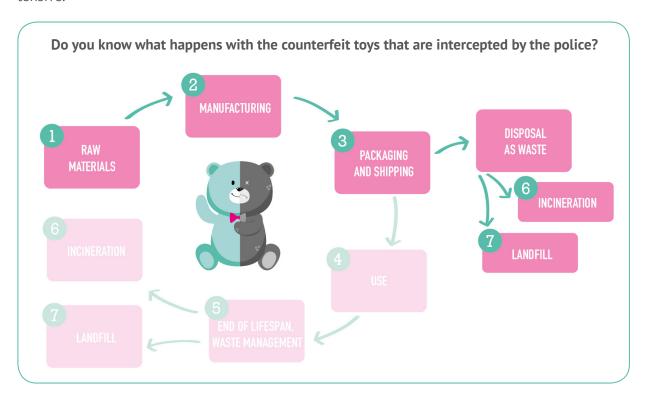


ILLICIT

Toy containers do not comply with the safety and environment protection regulations. It implies more shipping and land and forest exploitation.

The containers and plastics used in counterfeit toys often do not comply with the safety requirements established in the European Union, as they are hazardous to health.

In the case of counterfeit toys, there is more shipping and the land and forest exploitation is extensive.



Counterfeit toys are often intercepted in the country of destination, where they are then destroyed or taken to landfills to prevent them from being recycled or reused. In these cases, the greenhouse gas emissions resulting from their shipping, the main cause of climate change, have been in vain. The toy is not used after being manufactured. This is known as the disruption of the lifespan of the product.

PHASE IV: HARMFUL Use

As you know, counterfeit toys can entail severe risks to children's health and can also break sooner, due to their low quality. This implies a **reduction in the life cycle of that toy**. Children will barely have time to play with the toy, as it breaks very soon.



REGULATED

Toy complying with the safety regulations.



HARMFUL

Severe risks to the health of children. Environmental impact that affects the health of children.

PHASE V: EARLY end of lifespan and HARMFUL waste management

The authorities are in charge of eliminating the products that violate intellectual property rights. In order to do so, different methods can be used, such as incineration, recycling, grinding, chemical treatment, encapsulation or landfill, among others.

These processes can harm the environment, due to the release of toxic fumes, and can lead to the pollution of soil, groundwater and inland/coastal waterways.

The high volume and wide diversity of products that infringe intellectual property turn the management of seizure operations, from the treatment of products to their destruction, into a complicated task for the bodies in charge of law enforcement. Furthermore, although the ideal situation would be to recover the costs of these operations from the criminal organisations that market counterfeit toys, in reality the costs tend to be paid for by the copyright holders and citizens, as taxpayers.



REGULATED

The lifespan comes to an end and waste is managed according to regulations. Toys complying with the safety regulations.



HAZARDOUS

They have a shorter lifespan, even if they reach the consumer.

If intercepted by the authorities, toys are destroyed without completing their life cycle and waste management is left out of the circular economy model. The toys are destroyed.



5 REASONS not to purchase counterfeit toys:

- **1.** They are hazardous to your health.
- 2. The environmental impact is not considered during manufacturing.
- **3.** Short life cycles, lower quality toys that break easily.
- **4.** Their repair and recycling or the reuse of materials is not facilitated.
- **5.** A toy seized due to it being counterfeit is destroyed almost immediately, so that there is no possibility of recycling, reusing or recovering it.

4. What can you do as a consumer?

As a consumer, you play a very important role. With your purchase decisions, choosing toys that are original and respectful towards the environment, you are helping taking care of our environment and our health.





More educational resources are available on: www.safeorfake.eu





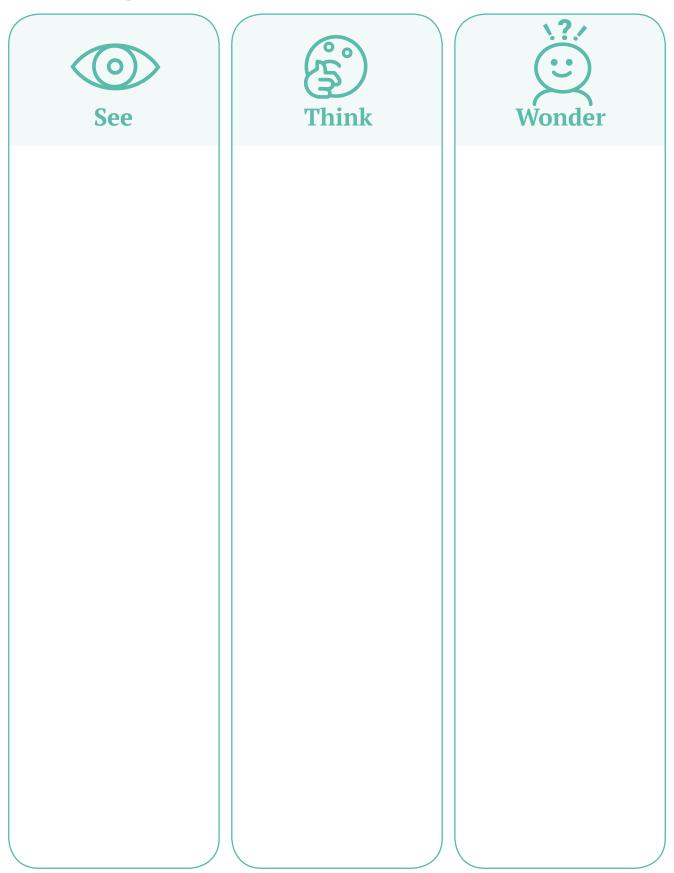
Annex 3. Script to write the news

News title:	
What day is it today?	/
Where did the news take place?	Park House Mountain School Company Town Add other:
What happened?	For example: A large amount of raw materials has been extracted from a natural environment near my town. It is now empty! The best-selling toy over Christmas is fake!.
How does it affect the environment?	For example: Natural resources are exhausted and cannot be regenerated. Many adults who work in a well-known toy company have lost their jobs.
How does it affect people?	People are very happy / sad / angry because
Conclusion	What action will be taken? What are people going to do? How can the problem be solved? Does it have a solution?

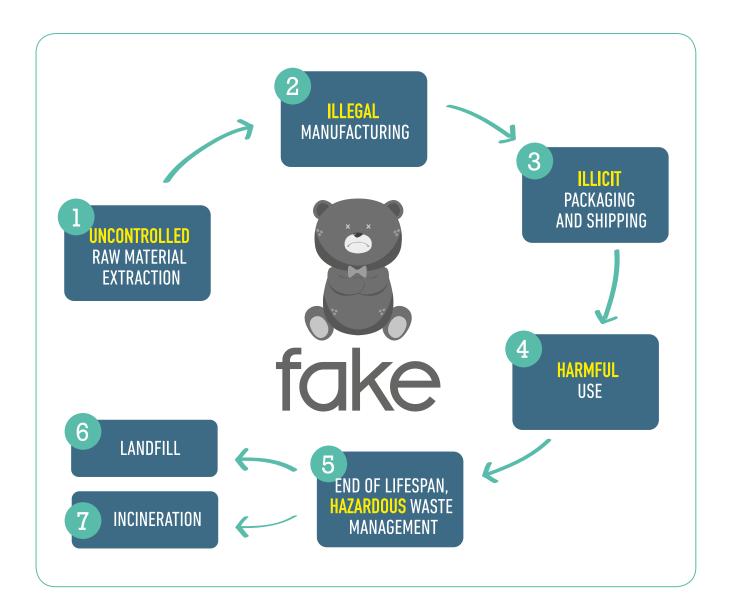


Annex 4.

Thinking routine template

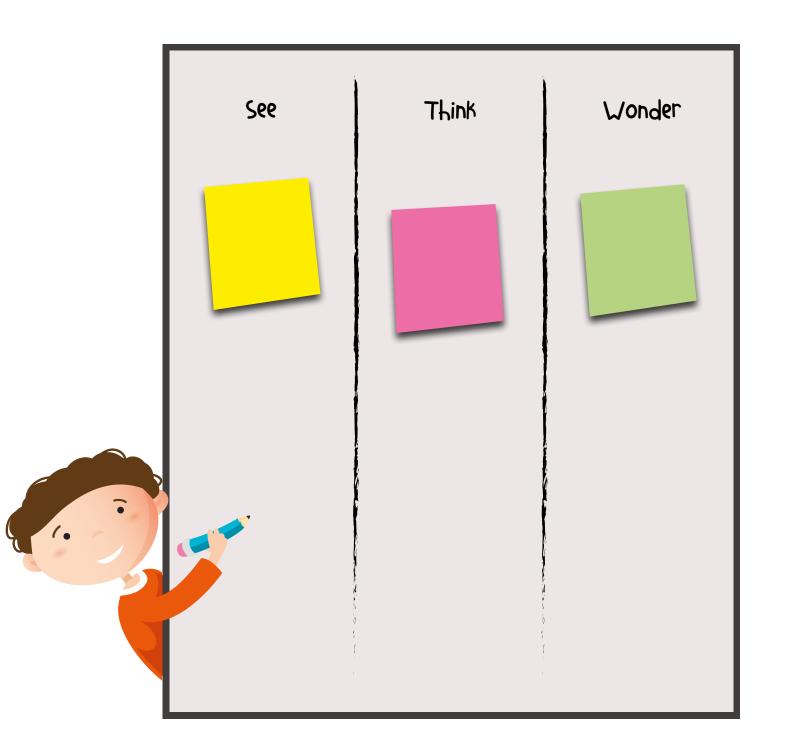


Annex 5. Image to be analysed by the students





Annex 6. Final proposal for the thinking routine "see, think and wonder"





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