



Natural Disasters

Jahrgangsstufe	9
Fach	Wirtschaftsgeographie
Übergreifende Bildungs- und Erziehungsziele	Alltagskompetenz und Lebensökonomie Medienbildung Kulturelle Bildung
Zeitraumen	8 Wochenstunden
Benötigtes Material	Broschüre „Ratgeber für Notfallvorsorge und richtiges Handeln in Notsituationen“ (Bundesamt für Bevölkerungsschutz und Katastrophenhilfe), Computer/Tablet/Smartphone

Kompetenzerwartungen

Die Schülerinnen und Schüler

- informieren sich auf der Grundlage von Medienberichten über eine nationale oder internationale Naturkatastrophe, analysieren deren Ursachen und beurteilen dabei die Rolle menschlichen Handelns.
- entwerfen geeignete ökologische, soziale und wirtschaftliche Hilfs- und Vorsorgemaßnahmen und engagieren sich im Rahmen ihrer Möglichkeiten, um die Krise zu bewältigen sowie um künftigen Krisensituationen vorzubeugen.



Aufgabe

Situation:

You and your exchange student from England have recently been to your local tourist information center. There you found an interesting brochure with guidelines for emergency situations published by the Federal Office of Civil Protection and Disaster Assistance. The guide is designed to help you prepare for emergency situations caused by natural or other catastrophes.

Unfortunately, the brochure is only provided in German and your friend from England has difficulties understanding the information. After thinking about it for a while, you come to the conclusion that many tourists and also foreign citizens would probably have the same problems. As you are a member of the city's youth council, you suggest creating emergency preparedness flyers in English for those people. The members of your youth council decide to produce flyers about the disaster or emergency situations that are most likely to occur in your region:

- severe weather
- fire
- floods
- blackouts
- [avalanches]

Every flyer should contain the following:

- causes and effects of the specific catastrophe
- local history of the catastrophe
- check-list and recommendations for dealing with the disaster

Outcome:

Info flyers for foreign citizens and tourists about possible catastrophes in your home region and recommendations for correct behavior

Material A: Being aware of natural disasters

TASK 1: Natural disasters – short definitions

There is a great variety of natural disasters. Match the events with the definitions. Then think about which natural catastrophes could happen in your home country/region. Work together with your neighbor.

1	Flood	___	A	when the soil/ground shakes
2	Fire	___	B	very strong wind
3	Drought	___	C	when hills become too wet and the soil shifts out of place
4	Avalanche	___	D	too much water within a certain area
5	Storm	___	E	when fire destroys natural and man-made areas
6	Earthquake	___	F	a gigantic wave destroying everything in its path
7	Volcano	___	G	when there is no rain for a long period of time
8	Mudslide	___	H	when underground lava bursts through the surface spiting fire and ash onto the ground
9	Tsunami	___	I	any major event which disturbs the balance of an area (e.g. a highly contagious disease)
10	Plague	___	J	rock-like objects in outer space orbiting the sun
11	Asteroid	___	K	snow ice and rocks sliding down a mountain

TASK 2: Other catastrophes

1. How would you categorize an event such as a city-wide blackout?
2. Which other catastrophes can you think of?

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Solution TASK 1:

1D – 2E – 3G – 4L – 5B – 6A – 7H – 8C – 9F – 10I – 11K – 12J

TASK 3: Effects of natural disasters

Complete the following grid which describes the environmental effects caused by natural disasters. You either have to fill in the disaster or the environmental effect(s) of such an event. One example has already been done for you.

DISASTER	ENVIRONMENTAL EFFECT
Drought	fire, depletion of water resources, deterioration of soil, loss of plants and animal life, ...
	flooding, erosion, loss of life (humans, animals, plants, ...)
Volcano (eruption)	
	flooding, landslides, erosion, loss of life, ...
Earthquake	
	landslides, erosion, destruction of buildings, streets, ...
Fires	

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Solution:

Drought	fire, depletion of water resources, deterioration of soil, loss of plants and animal life, ...
Tsunami	flooding, erosion, loss of life (humans, animals, plants, ...)
Volcano (eruption)	pollution of air, soil and water – loss of life, ...
Storms	flooding, landslides, erosion, loss of life, ...
Earthquake	landslides, widespread destruction of infrastructure, ...
Avalanche	landslides, erosion, destruction of buildings, streets, ...
Fires	destruction of ground cover, landslides, smog, tainted soil



TASK 4 (optional): Extraterrestrial threats and chain reactions

1. There is also the possibility of natural disasters which have an extraterrestrial origin. Which extraterrestrial threats are mentioned in **Task 1** and which other threats from outer space do you consider to be realistic? *You can give your answer in German if you feel more comfortable using your mother tongue!*

2. Natural disasters sometimes trigger “chain reactions”, resulting in further consequences or environmental effects. Please describe one example of such a chain reaction, along with its effects, by imagining the deep impact of a meteor strike. Write your essay by completing the first sentences of each paragraph.

In case of a meteor strike on Earth, there could be a chain reaction of disasters...

First, _____

The consequences would be disastrous. There would be... _____

Material B: Emergency Preparedness

After you have told your fellow members of the city's youth council about your plans of creating emergency preparedness flyers in English for people from foreign countries, you show them the brochure of the Federal Office of Civil Protection and Disaster Assistance which you picked up at the tourist information center. This brochure contains guidelines for emergency situations caused by natural or other catastrophes.¹ The youth council and you decide to use the information of this brochure as one of your main sources for your own emergency preparedness flyers.

TASK:

Have a look at the emergency brochure and answer the following questions to get a first overview of the topic. Compare your findings with your neighbor before you share them in class.

1) Which catastrophes does the brochure mention?

2) What is important for you personally in case of emergency?

3) Which apps can help you in emergency situations and which services does it offer?

¹ Die Broschüre „Ratgeber für Notfallvorsorge und richtiges Handeln in Notsituationen“ ist kostenlos zu beziehen über das Bundesamt für Bevölkerungsschutz und Katastrophenhilfe und steht zusätzlich als PDF-Download auf der Homepage des Bundesamtes zur Verfügung.

Material C: Preparing your flyer

Now it's your turn! – (Natural) disasters in your home region

1. Choose one of the following (natural) catastrophes and create a flyer for your emergency preparedness project. Use the information from the brochure but also do some own research.
 - severe weather
 - fire
 - floods
 - blackouts
 - [avalanches]
 - [If there are large industrial companies, such as a chemical plant, located in your area, you might also think of the possible consequences of a catastrophe at one of them.]
2. Include the following information in your flyer:
 - Possible causes and effects of a hypothetical catastrophe
 - Local history: Have there been any major incidents in your home region?
 - Check-list and recommendations for dealing with a possible disaster
3. Be prepared to present your flyer, including your guidelines and checklist for your specific disaster/emergency situation.



Quellen- und Literaturangaben

Material A	
Titel:	Being aware of natural disasters
Autor:	ISB
Erscheinungsjahr:	2019
Art:	Lernaufgabe
Copyright	ISB

Material B	
Titel:	Emergency Preparedness
Autor:	ISB
Erscheinungsjahr:	2019
Art:	Lernaufgabe
Copyright	ISB

Material C	
Titel:	Preparing your flyer
Autor:	ISB
Erscheinungsjahr:	2019
Art:	Lernaufgabe
Copyright	ISB

Hinweise zum Unterricht

Phase	Inhalt/Handlung/mögliche Handlungsprodukte	Sozialform/ Methode	Material	Bemerkung
Stunde 1+2: Orientieren	Natural Disasters ➤ Impulsfrage: Erfahrungen mit Naturkatastrophen? Brainstorming ➤ Natural disasters – short definitions ➤ Other catastrophes ➤ Effects of natural disasters ➤ optional: Extraterrestrial threats	L-S-Gespräch Partnerarbeit Einzelarbeit	Material A	Ideensammlung, Erfahrungen, Auswirkungen und Definitionen von Naturkatastrophen.
Stunde 3: Informieren	Besprechung der Broschüre „Ratgeber für Notfallvorsorge und richtiges Handeln in Notsituationen“ des Bundesamts für Bevölkerungsschutz und Katastrophenhilfe	L-S-Gespräch Einzelarbeit	Material B	Broschüre beziehbar über die Homepage des Bundesamts für Bevölkerungsschutz und Katastrophenhilfe (auch als PDF auf Homepage downloadbar)
Stunde 4-6: Planen und Durchführen	Erstellung der Info-Flyer (je Gruppe eine Katastrophensituation samt Checkliste und historischem Rückblick)	Gruppenarbeit	Material C	
Stunde 7: Präsentieren	Präsentation der Info-Flyer	Gruppen-Präsentation		
Stunde 8: Bewerten, Reflektieren	Zusammenführen, Verbesserungsvorschläge, etc.	L-S-Gespräch		
Handlungsprodukt: Info-Flyer zu (Natur)Katastrophen in der eigenen Heimatregion und richtiges Verhalten				