Regionální geografie

- 1. přístup

Hettner – složkový přístup

- 2. přístup

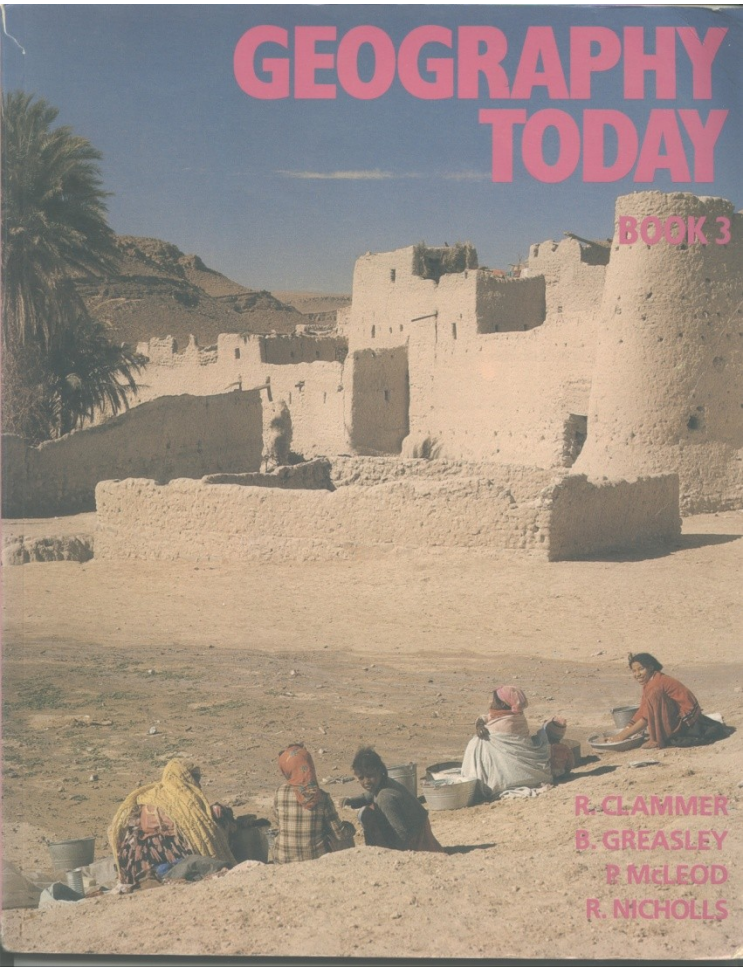
Snaha o vyjádření dominantních rysů regionálního komplexu.

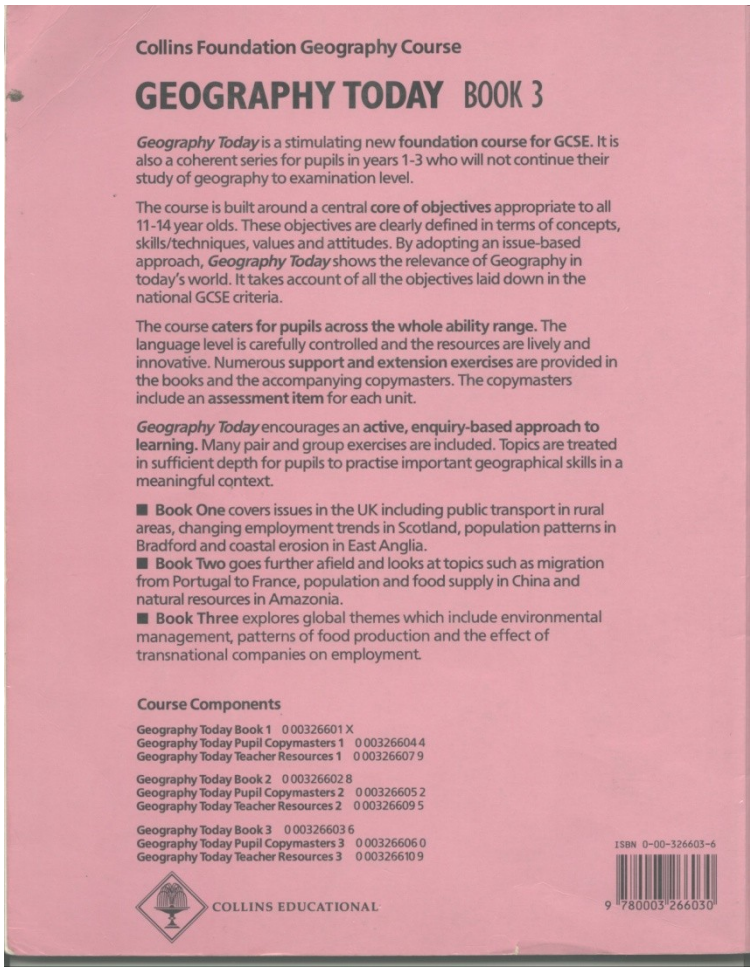
- 3. přístup

Vzájemné srovnání jednotlivých regionů, při kterém se dojde k poznání, že srovnávané geokomplexy vykazují i obecné rysy, což vede k obecně platným zákonitostem.

Geography Today

R. Clammer,B Greasley,P. McLeod,
R. Nicholls




Collins Foundation Geography Course

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COLLINS EDUCATIONAL

ČÍSLO A NÁZEV LEKCE (UNIT)	OBSAH TÉMATU, REGION
1. MÍSTA SE MĚNÍ (PLACES CHANGE)	**-** růst, pokles a budoucnost průmyslové oblasti: Kelham Island, Sheffield
2. PLÁNOVÁNÍ SKUTEČNOSTI (PLANNING FOR REAL)	- opatření pro život lidí v obytné čtvrti
3. PŘISTĚHOVALECTVÍ (MOVING IN)	- stěhování do a uvnitř města: Bradford
4. ZMĚŠKÁNÍ AUTOBUSU (MISSING THE BUS)	- seznámení s potřebami veřejné dopravy na venkově: Oxfordshire, Cumbria a Grampian
5. JINÝ VENKOV (ANOTHER COUNTRYSIDE)	- vliv zemědělství na krajinu: Lincolnshire
6. SÍLA MOŘE (SEA PWER)	- jak může přírodní živel ovlivnit život lidí: Norfolk a Yorkshire
7. ZACHYCENÍ VZÁCNÉHO (CAUGHT SHORT)	- poptávka a nabídka vody: jihozápadní Anglie
8. VELKÝ ÚNIK (THE GREAT ESCAPE)	- zásoba, spotřeba a zdroje energie: Velká Británie
9. PUSTINY K BOHATSTVÍ (WASTELANDS TO WEALTH)	- dopady změny využití prostoru na místní společenství: Londýn
10. ŽIVOTNÍ PROSTOR NEBO OTEVŘENÁ KRAJINA? (LIVING SPACE OR OPEN SPACE?)	- nová města: minulost, současnost a budoucnost Harlow
11. ZMĚNA K LEPŠÍMU (A CHANGE FOR THE BETTER)	- měnící se model zaměstnanosti: East Kilbridge a Dundee
PŘEHLED UČEBNÍCH CÍLŮ (LEARNING OBJECTICVES CHECKLIST) SLOVNÍČEK	- cíle geografického vzdělávání, slovníček pojmů

LOCATION MAP

This location map uses the Peters projection, which was devised in 1973 by a German historian, Arno Peters. Like many other projections, it is designed to ensure that the map shows the correct *area* of each country or continent. However, it does not show their correct *shape*, as it is greatly distorted from north to south. The projection has been used by aid agencies because it emphasises the poorer tropical countries, particularly in Africa.

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Cíle geografického vzdělávání

LEARNING OBJECTIVES CHECKLIST

It is intended that the learning objectives summarised in these matrices should be used as the basis for assessment (see Teacher Resources). The content of the book provides a foundation for the development of language, numerical and oral skills.

	UNIT CONTENT – CROSS CURRICULAR DIMENSIONS	PREPARE FOR A SHOCK: economic, scientific	WISH YOU WERE HERE? economic, aesthetic, creative	ENERGY CHOICES: economic, scientific, political
UNDERSTANDING CONCEPTS	people/environment relationships	●	●	●
	systems			●
	conservation		●	●
	change	●	●	●
	conflict		●	
	planning	●	●	
	inequality - class/race			
	political power distribution			
	relative location	●	●	●
	migration			
	concentration/dispersal			
	networks		●	
	behaviourism	●	●	
	scale/distance		●	●
	similarity/difference		●	
	prediction	●		●
	economic development		●	●
	interdependence		●	●
MASTERING SKILLS AND TECHNIQUES — COLLECTING INFORMATION:	through fieldwork		●	
	from secondary sources	●	●	●
COMMUNICATING INFORMATION:	line graph			●
	bar graph/divided bar			●
	sketch maps/other maps/plans		●	
	choropleth maps		●	
	creative writing	●	●	
	art/design work	●	●	
	diagrams/landscape sketches	●		●
INTERPRETING INFORMATION:	line graph		●	●
	bar graph/divided bar		●	
	pie graph		●	
	time-line			●
	advertisement		●	●
	circular flow diagram		●	●
	ground level photos	●	●	●
	oblique air photos	●	●	●
	use of atlas	●	●	●
	reflective use of text	●	●	●
	timetable/numerical data	●	●	●
	cartoons	●	●	
	documentary evidence	●		●
	diagrams/landscape sketches		●	●
	choropleth maps			
	sketch maps/other maps/plans	●	●	
EVALUATING:	role play/games/simulations		●	
	decision-making exercises	●	●	●
	group/pair discussion	●	●	●
SYNTHESIS:	research/investigation	●	●	●
	empathising	●	●	●
CLARIFYING VALUES AND ATTITUDES ABOUT	inequalities within society			
	individual's quality of life	●	●	●
	justice/fairness			●
	quality of environment	●	●	●
	need to accommodate/question change		●	●
	how change affects individuals	●	●	●
	responsibility to society/future generations	●	●	●
	need to consider a range of opinions	●	●	●

Objectives

Objectives představují konkrétní cíle, jsou nejbližší cílům jednotlivých předmětů a dají se naplňovat prostřednictvím obsahu jednotlivých předmětů.

Pro vyučovací předmět geografie (zeměpis) jsou definovány v Mezinárodní chartě geografického vzdělávání IGU a v Geography Today

Objectives jsou rozděleny na:

- Vědomosti (znát)
- Dovednosti (aplikovat)
- Postoje (hodnotit)

Znalosti a porozumění

- Umět zařadit národní i mezinárodní události do regionálně geografického rámce a chápat základní územní vztahy.
- Znát nejdůležitější přírodní systémy na Zemi (reliéf, půdy, vodstvo, klima, vegetaci) a chápat vnitřní a vnější vztahy ekosystémů.
- Znát nejdůležitější socioekonomické systémy (zemědělství, sídla, dopravu, průmysl, obchod, energie, obyvatelstvo atd.) jednak za účelem pochopení vlivu přírodních podmínek na činnost člověka a jednak za účelem pochopení vzniku rozdílných kulturních, náboženských, technických, hospodářských, politických a rozmanitých ekologických systémů.
- Seznámit se se životem různých národů a společností žijících na Zemi a ocenit kulturní bohatství lidstva.
- Rozumět strukturám a procesům ve vlastní zemi a místním regionu jako prostoru denního života.
- Chápat výzvy i šance týkající se globálních problémů lidstva.

Poloha a rozšíření - lidé žijí na Zemi v místech s rozdílnou absolutní a relativní geografickou polohou…
Místo a prostor - každý prostor má vlastní přírodní a kulturní charakter…
Vztahy mezi člověkem a prostředím - lidé využívají prostředí v němž žijí různými způsoby...
Prostorové interakce- zdroje jsou na Zemi rozloženy nerovnoměrně…
Region - regiony jsou území vymezená pomocí různých kritérií…
Systémy – interakce mezi různými složkami prostředí…
Ochrana ŽP - nezbytnost chránit životní prostředí…
Změna - přítomnost má své kořeny v minulosti…
Konflikt - žijeme ve světě plném konfliktů, které se lidé snaží řešit různými způsoby…
Plánování - v úvahu je nutné brát i dopad plánované změny na životní prostředí…
Nerovnost – třídní, rasová - existuje všude ve světě spolu s nerovnoměrným rozmístěním moci a bohatství…
Politická moc - člověk a skupiny lidí jsou schopni ovlivňovat dění doma i ve světě…
Migrace - lidé se pohybují mezi státy i uvnitř státu…
Soustředění / rozptyl - každá oblast má svoji určitou atraktivitu…
Sítě, uzly - příklad dopravního spojení mezi místy v určité oblasti…
Chování - přístupy, hodnoty a chování lidí, kteří dělají určitá rozhodnutí…
Měřítko / vzdálenost - různé situace mohou být sledovány z různých hledisek…
Podobnost / rozdílnost - rozdíly - etnické, sociální, kulturní…/ podobnost - potřeba lásky, přátelství…
Předvídání - je možné a dokonce nutné předvídat určité prostorové změny a procesy…
Ekonomický rozvoj - všude jsou patrné rozdíly v ekonomickém rozvoji…

Dovednosti

- Využívat slovních, obrazových, kvantitativních a symbolických zdrojů geografických informací (texty,obrázky, grafy, tabulky, schémata, mapy).
- Umět aplikovat metody pozorování, mapování v terénu, rozhovor, interpretace druhotných zdrojů a statistických podkladů.
- Využívat vlastních komunikativních, intelektuálních, praktických a sociálních dovedností k zodpovězení různých geografických otázek místního, národního i mezinárodního charakteru.

- Tyto aktivní způsoby poznávání umožňují: klást si otázky a objevovat problémy, sbírat a třídit informace, zpracovávat, interpretovat a hodnotit data, generalizovat, dopracovat se k určitým pravidelnostem, pravidelnosti aplikovat, vytvářet si vlastní názory, formulovat vlastní hodnocení, řešit problémy, umět spolupracovat při skupinové práci, v jednání uplatňovat vlastní názory a postoje.

Dovednosti - stručně

SBĚR INFORMACÍ	**sběr dat z terénního výzkumu**
	sběr dat ze sekundárních zdrojů (knihy, časopisy, stat. ročenky, internet atd...)
ZPRACOVÁNÍ INFORMACÍ	**převedení získaných údajů do grafů, náčrtů, map, plánů..; práce s textem, tvořivé psaní; umělecká a návrhářská práce, prostorový design....**
INTERPRETACE INFORMACÍ	**interpretace údajů pomocí grafů, diagramů, kartogramů, náčrtů, map, atlasů, plánů, fotografií, leteckých a družicových snímků atd.**
HODNOCENÍ	**vžívání se do určitých životních rolí, používání her, navození různých situací, rozhodování, diskuse ve dvojicích, ve skupině…**

Postoje, hodnoty a chování

- k zájmu o prostředí v němž žijí i o mnohotvárnosti přírodních a kulturních jevů na Zemi,
- k schopnosti ocenit krásu přírody i rozmanitost podmínek života lidí na Zemi,
- k pocitu odpovědnosti za zachování životního prostředí pro budoucí generace,
- k chápání významu hodnot a postojů člověka v procesu rozhodování,
- k ochotě přiměřeně uplatňovat své geografické vědomosti a dovednosti v zaměstnání a osobním i ve veřejném životě.
- k respektování rovnoprávnosti všech lidí,
- k angažování při řešení místních, regionálních, národních i mezinárodních problémů podle Všeobecné deklarace lidských práv.

Výuka geografie má také velký význam pro výchovu k mezinárodním porozumění, environmentální výchovu a prolíná s občanskou výchovou.

1 PREPARE FOR A SHOCK

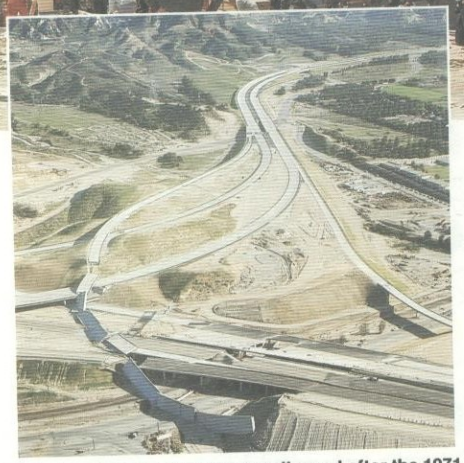
Parts of the world are likely to suffer earthquakes which can cause enormous damage and loss of life. Can an earthquake be predicted and prepared for? How useful would the prediction be?

Teams clearing away rubble and searching for survivors in Mexico City, 1985

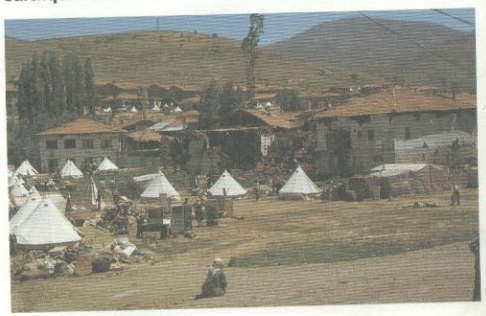
The magnitude of an earthquake is recorded by a SEISMOMETER. It measures the height of the shock waves on the RICHTER SCALE. Each point on the Richter Scale is ten times greater than the one below. Therefore a magnitude of 8 on the scale indicates shock waves one hundred times greater than a magnitude of 6.

Details of some selected earthquakes

Year	Place	Magnitude	Number of deaths	Lat.	Long.
1906	San Francisco (USA)	8.2	700	38°N	122°W
1923	Tokyo (Japan)	8.3	143 000	36°N	140°E
1960	Agadir (Morocco)	5.9	12 000	30°N	10°W
1964	Anchorage (USA)	8.6	131	61°N	150°W
1966	E. Turkey	6.8	2 500	40°N	40°E
1968	Khorasan (Iran)	7.3	12 000	35°N	58°E
1970	Chimbote (Peru)	7.8	66 800	9°S	78°W
1972	Managua (Nicaragua)	6.2	10 000	12°N	86°W
1976	Guatemala City	7.9	22 000	15°N	90°W
1976	Tangshan (China)	7.6	655 000	40°N	118°E
1976	Udine (Italy)	6.9	900	46°N	13°E
1977	Bucharest (Romania)	7.2	1 200	44°N	26°E
1985	Valparaiso (Chile)	–	–	33°S	72°W
1985	Mexico City	7.8	4 000	20°N	100°W

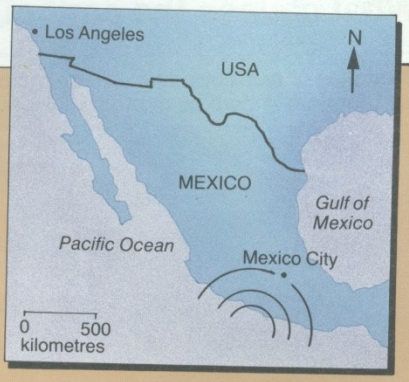


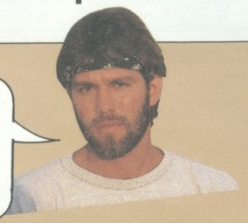
Giant motorway overpasses collapsed after the 1971 earthquake in San Fernando, California



Damaged houses after an earthquake in Turkey

Mexico City 1985 ... the experience

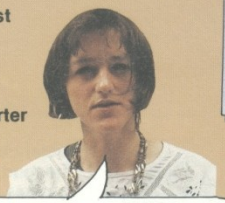




It was like a rippling effect, up and down. If you make a fist and run it under the blanket of your bed, the earth looked like the rippling of the blanket.

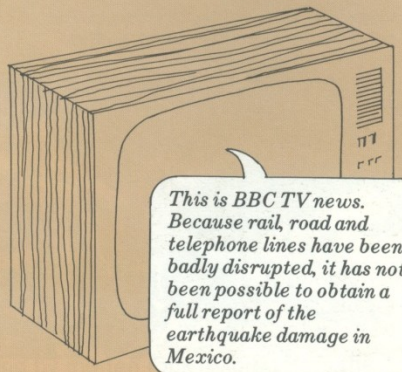
American tourist

t least 1000 people were issing under the rubble. Some ere reached while still trapped. Rescue workers sent down food nd water, and air through lastic pipes. During the frantic moving of rubble there were intervals of complete stillness in order to listen for faint cries below the debris.



British reporter working in Mexico City

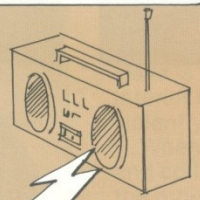
Some say the Mexico City earthquake went on for only 55 seconds; others say as many as six or seven minutes. The point is that when you are on the upper floor of a block of flats with the walls grinding loudly, cracks opening in the ceiling, and glass and bricks crashing into the street, even minutes can seem like a lifetime.



This is BBC TV news. Because rail, road and telephone lines have been badly disrupted, it has not been possible to obtain a full report of the earthquake damage in Mexico.

Mexican observer

Buildings collapsed, houses fell, schools disintegrated, and the people shouted, cried, begged for help ...



This is Radio Bogota. Reports are reaching us that many ships, including 30 Colombian fishing boats and a British container ship, have been lost in huge 30-metre waves, 400 km off the Mexican coast. That area may lie above the site of the earthquake that has devastated parts of Mexico City.

The few minutes of terror caused by the earthquake were followed by explosions as petrol stations blew up and fires were started by broken electricity and gas lines.

The authorities are also worried by the shortage of food and by the danger of disease caused by an impure water supply.

❶ Work in groups of three or four. Study the table "Details of some selected earthquakes".

ⓐ On an outline map of the world, plot the place where each earthquake occurred.

ⓑ Copy and complete: "Earthquakes occur around the _____ Ocean and in southern _____ and north _____."

ⓒ Make a list, in rank order, of the six earthquakes which were of the greatest magnitudes.

ⓓ Make another list, in rank order, of the six earthquakes which caused most deaths.

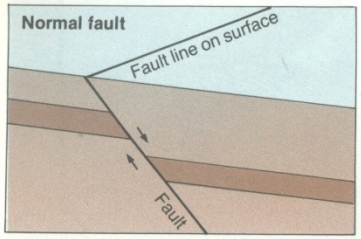
ⓔ Suggest reasons why the strongest earthquakes do not necessarily cause the most deaths.

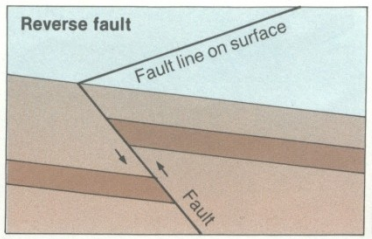
❷ Write an account of the Mexican earthquake as if you were *either* in bed in a block of flats when the shock occurred *or* a rescue worker.

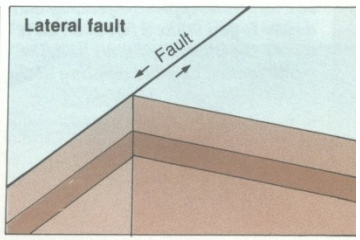
❸ *Prepare a report for the Mexican government, stating what action must be taken to relieve the effects of the earthquake. Suggest which actions would be most urgent.*

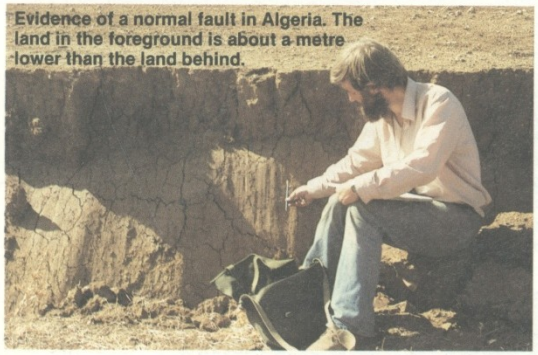
What causes the earthquakes?

Earthquakes occur along tears in the rocks of the earth's crust. These tears are known by geologists as FAULTS.

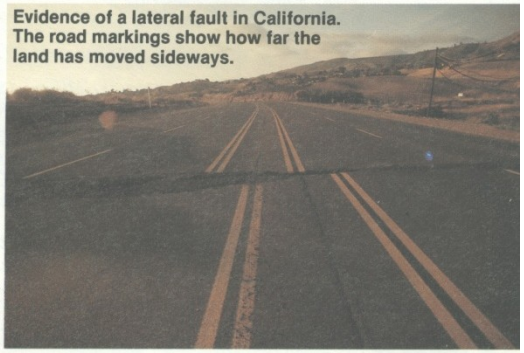








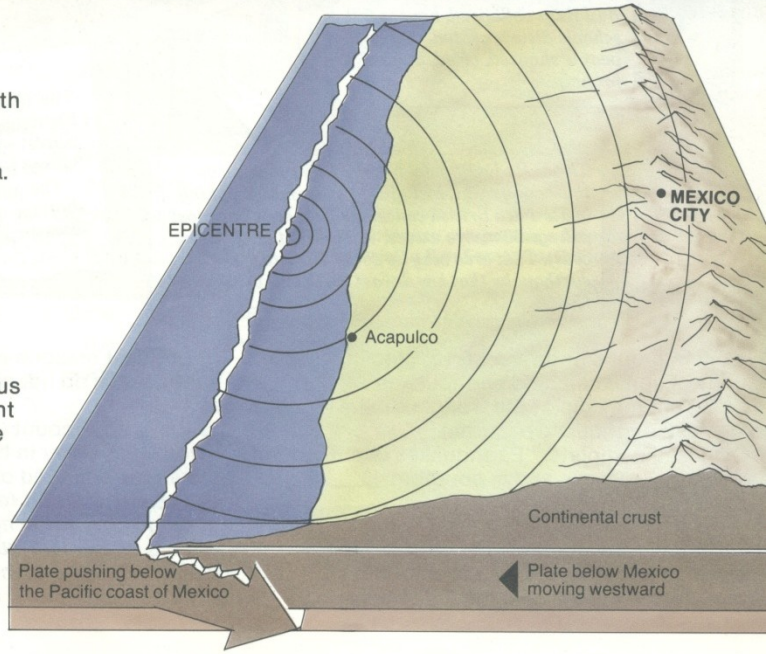
Evidence of a normal fault in Algeria. The land in the foreground is about a metre lower than the land behind.

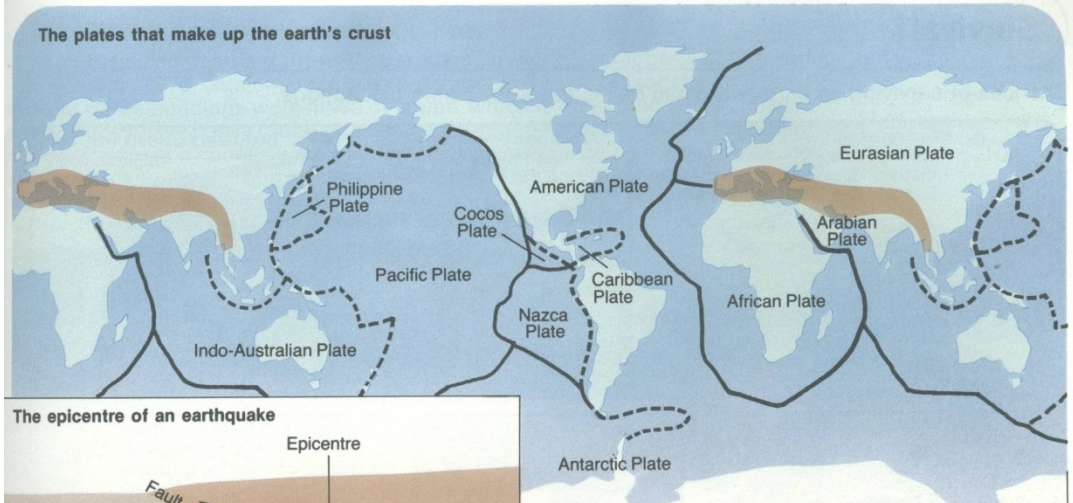


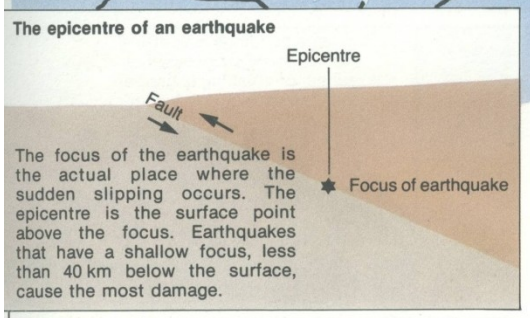
Evidence of a lateral fault in California. The road markings show how far the land has moved sideways.

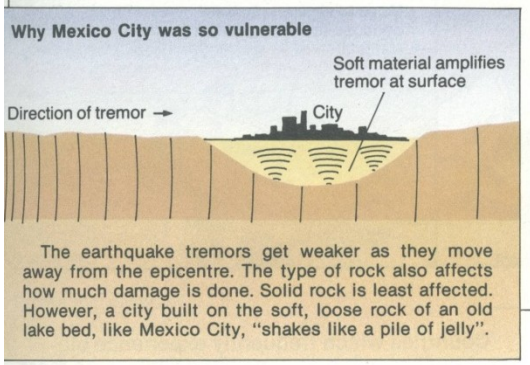
There is a huge fault in the earth's crust to the west of Mexico. There the rocks beneath the Pacific Ocean are pushing below the continental rocks of Mexico and the Caribbean area.

There is usually some movement along the fault line, but it is only very slow. One scientist has described the speed as "slightly faster than your fingernails grow". Sometimes, though, the movement stops because the friction is too great. Tremendous pressures build up. If movement restarts gradually, there is little problem. If the movement is sudden, the release of energy produces the earthquake, and this causes a number of shock waves.









The map shows that the earth's crust consists of a number of large solid plates. These are constantly moving about. In some cases they move away from each other. The gap they leave is filled by molten rock (MAGMA) from the interior of the earth. Sometimes magma rises violently in the form of a volcano.

When two plates move towards each other and collide, one plate is then forced beneath the other along a huge fault. This is where earthquakes occur. Molten rock may also be pushed to the surface and cause a volcanic eruption.

The collision of the plates also causes rocks to be upfolded. This is how the high mountains such as the Andes were formed.

❶ Study the diagrams and then answer the following questions:
ⓐ What is a fault?
ⓑ What is the difference between a normal fault and a lateral fault?
ⓒ On the diagram opposite, what type of fault is shown off the coast of Mexico?

❷ Explain what caused the 1985 Mexican earthquake.

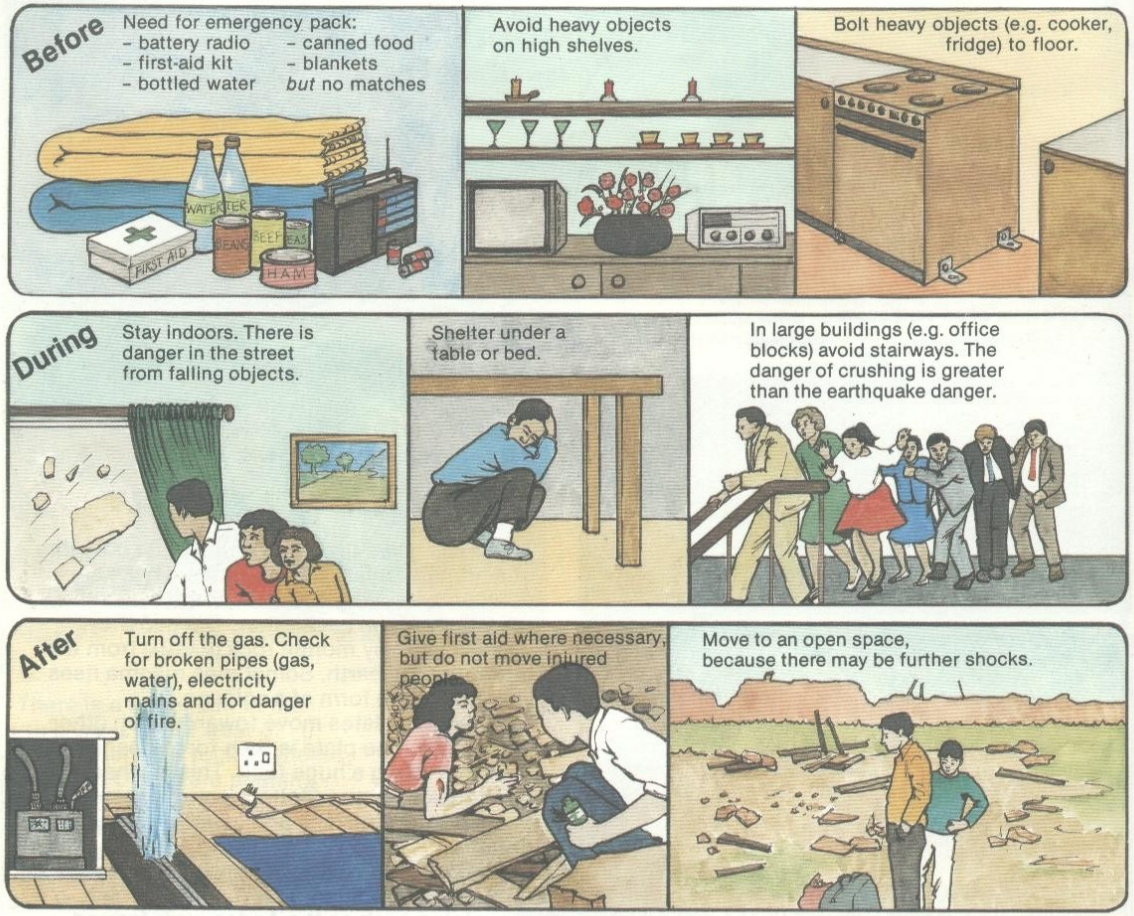
❸ Refer to the map of plates that make up the earth's crust.
ⓐ Which plates meet off the Mexican coast?
ⓑ Which country with a Pacific coast is not likely to suffer from earthquakes?

❹ ⓐ Why would you expect Acapulco to suffer greater damage than Mexico City in an earthquake?
ⓑ Why did Mexico City suffer badly in 1985?

❺ *Using information from this page, explain whether or not you think earthquakes can be predicted with 100% accuracy.*

Survival?

Chances of surviving an earthquake can be increased by taking precautions.



The quality of the building can help survival ...

It is impossible to design a building which will resist *any* earthquake. A great deal depends on the magnitude of the earthquake, the length of time it lasts, and the ground under the building. Houses on solid rock are safer than those on soft sediments.

Nevertheless, if large earthquakes happened to a city every year, the buildings would be designed to withstand the shocks. As it is, most buildings are designed mainly to provide shelter from rain and cold. Damaged houses are rebuilt as quickly as possible. People simply hope that there will not be another earthquake.

Countries which frequently experience big earthquakes, such as Japan and Chile, take more care. They have learnt that simple box-like buildings are safest. Steel-framed buildings are better than brick, because they are strong, light and flexible. Concrete is likely to survive well, as long as all the pieces are very securely tied together.

Architects and engineers in Chile were pleased to see that their new buildings survived the 1985 earthquake.

Standard 3: Jak analyzovat prostorové rozmístění lidí, míst a životního prostředí Země:

-Použitím pozorování, map a dalších prostředků

- Budou vymýšlet a testovat hypotézy zaměřené na to, jak ovlivňují přírodní hazardy (zemětřesení, záplavy atd.), rozmístění a vzhled staveb

... but a lot depends on where you live.

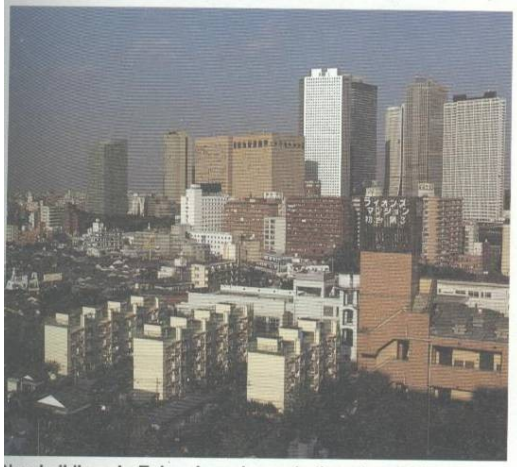
Most damage and deaths from earthquakes occur in the poorer parts of the world.

In February 1976, Guatemala City was vulnerable for two reasons:

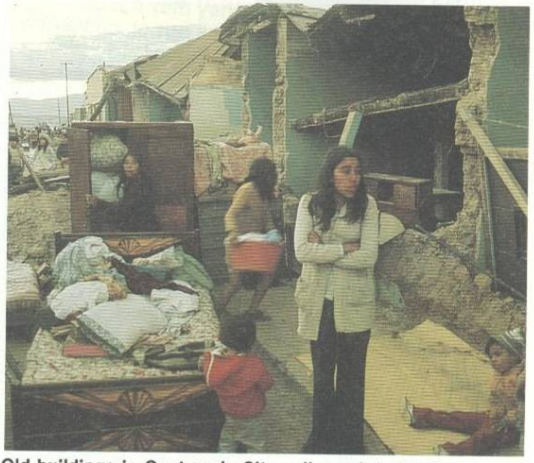
a) Most of the buildings were made of adobe, which is dried mud. They collapse easily. If they have heavy roofs, this can be very dangerous for the people underneath.

b) Poorer people's houses were built on steep slopes of ravines. Thousands died as landslides took their homes down the slopes. This can often happen to poorer people in cities in the ECONOMICALLY DEVELOPING world.

Even if houses are made of concrete, they may be of poor quality and give way easily.

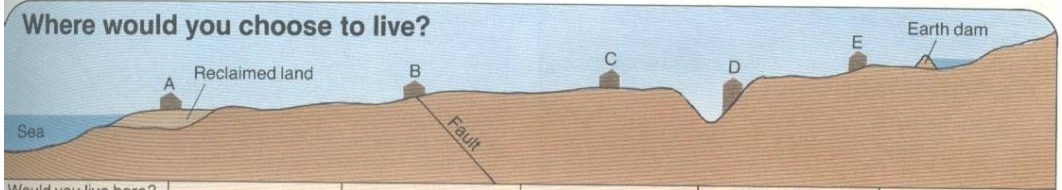


New buildings in Tokyo have been designed to withstand earthquakes



Old buildings in Guatemala City collapsed during the earthquake of 1976

Where would you choose to live?



Would you live here? (Yes or No)	A	B	C	D	E
Explain your decision					

❶ Design a leaflet, to be given out to people in an area where an earthquake may occur. It is to tell them what precautions they should take.

❷ ⓐ In Japan and Chile, most of the new buildings will withstand a severe earthquake. Why do you think such buildings are not found in many other areas which are in earthquake zones?

ⓑ What do you think would be the main features of buildings which can withstand earthquakes? Make a list of features.

❸ Draw a larger version of the diagram above, "Where would you choose to live?" It is a cross-section of an area in an earthquake zone. Complete it to show where you would live. Give reasons for your choice.

❹ ⓐ *Explain why earthquake-proof buildings are likely to become more common in countries that lie on fault lines.*

ⓑ *Why do you think people continue to live in cities prone to earthquakes?*

Can an earthquake be predicted?

A great deal is known about the causes of earthquakes and where they are likely to occur. Scientists are now trying to predict *when* an earthquake may be felt in particular areas.

When is an earthquake most likely?

Scientists record very carefully all the shocks which occur, however slight they may be. By studying these shocks, they pick out places along a fault where no shocks have been recorded for some time. This means that the fault is locked. Stress is building up. When this stress is released, an earthquake is possible.

Chinese success ...

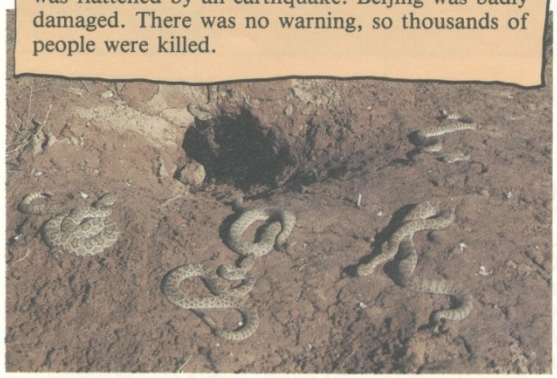
In 1974, Chinese scientists reported that their instruments were recording an unusual pattern of earthquake shocks in Liaoning Province. As a result, thousands of local people were asked to look for unusual natural features. These included: sudden changes in the level of water in wells, the peculiar behaviour of fish in the sea and fresh water pools, the frenzied activity of rats, and the restlessness of birds, dogs and horses.

Animals did behave strangely, so built-up areas were evacuated at the beginning of February 1975: people were told to leave. They constructed simple outdoor shelters. Medical and rescue squads were organised. Patients were moved from unsafe hospitals.

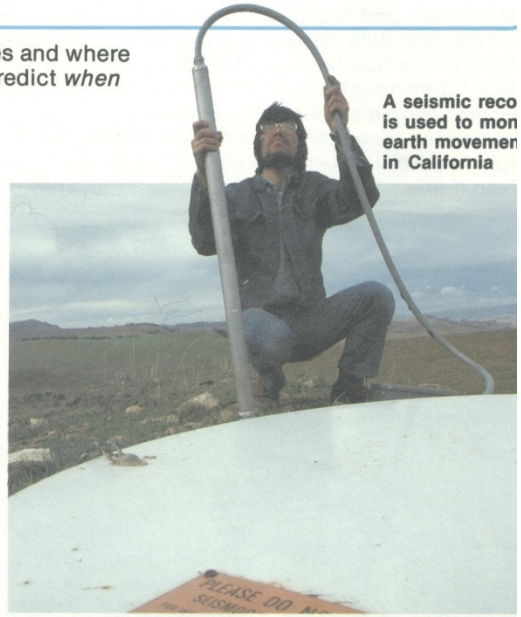
The earthquake occurred on 4 February. Not very many lives were lost.

... and failure

On 28 July 1976, the industrial city of Tangshan was flattened by an earthquake. Beijing was badly damaged. There was no warning, so thousands of people were killed.



The unusual behaviour of rattlesnakes was used to predict an earthquake in Haicheng, China, in 1975



A seismic reco is used to mon earth movemen in California

California relies on experts

In California, people are worried about the chance of a major earthquake. The San Andreas fault passes through the state. The cities of Los Angeles and San Francisco are built on it. An earthquake as big as that which occurred in 1906 would be much more disastrous now, because more people live in the area.

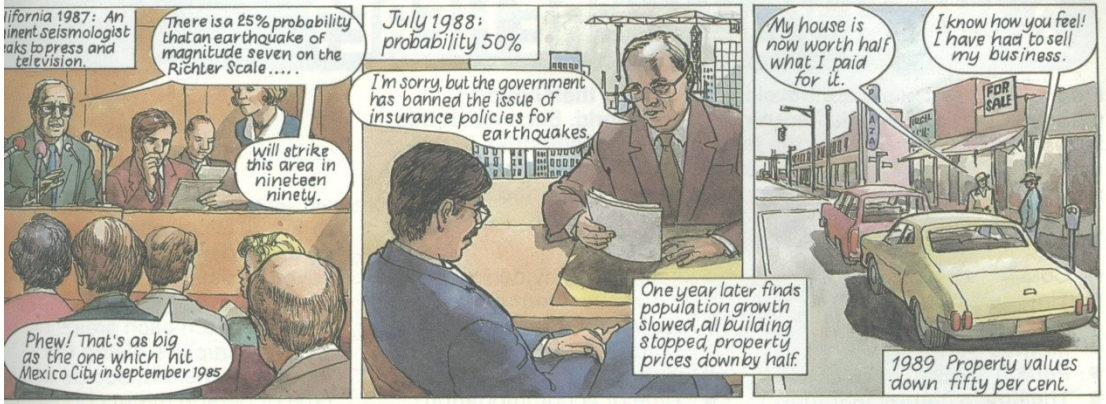
American experts have a lot of very modern equipment. They can record the ground shaking and movement along faults at many places. They use laser beams to measure very small changes in ground level.

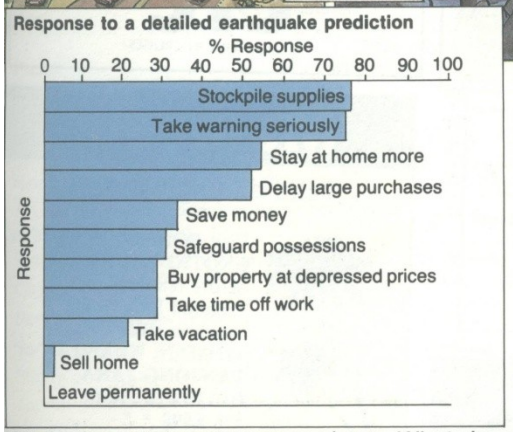
In May 1985, two American geologists predicted that an earthquake would occur on the San Andreas fault near Stone Canyon within a year. They thought it would happen because there had been very few small shocks and the fault was moving more slowly.

A shock of strength 4.6 occurred in May 1986 at the specified part of the fault.

❶ ⓐ Explain how the Chinese were successful in predicting an earthquake.
ⓑ What action did they take before the earthquake happened?

❷ What do the Americans try to measure in order to predict earthquakes? Explain why these measurements are important.





Study the cartoon sequence above. What do u think would be the advantages and awbacks of the prediction?

Imagine *either* that the prediction was correct that no earthquake occurred. Write a story (or em, or short play) to convey what happened d people's reactions to it.

Work in pairs. Study the graph of "Response a detailed earthquake prediction".

ⓐ What responses were given by over half those people interviewed?

ⓑ Would they be your responses? Explain your answer.

ⓒ Which responses would you *not* give? Why?

❻ ⓐ Should people be told about an earthquake as soon as it is predicted, or only a few hours before the predicted time? Or should they not be told at all? Explain your answer.

ⓑ *Suppose the prediction was a false alarm. What losses might individuals and businesses suffer? Should they be able to claim compensation? If so, from whom?*

Why not investigate?

Working in groups, study a natural hazard other than an earthquake, such as volcanoes, floods, hurricanes, tsunamis or avalanches. Find out where and how the hazard occurs. Are there any reasons for the pattern? Is it possible to predict when the hazard is likely to happen? What can people do to protect their lives?