

Natural disasters

Lesson Objectives

- foster lexical and grammar skills;
 - develop comparison-contrast strategies;
 - activate scanning and monologue skills;
 - mould environmental awareness.
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Agenda

- scanning and entitling the text about the nature in Belarus;
 - Chernobyl catastrophe facts and figures;
 - watching a video report;
 - the earthquake and tsunami in Japan;
 - nuclear power station in Fucusima explosions and their aftermaths;
 - watching a video report.
-



Read the text below. Entitle the slide.

We all love our native land, remarkably beautiful Belarusian nature with its blue lakes and ribbons of rivers, edged with thick forests. The forests are wonderful, we can find broad-leaved groves full of birches, oaks, aspens and limes, pine and fir forests.



Find the English equivalents in the text above to the following:

- обрамленные, окаймленные;
- ленты рек;
- широколистые деревья;
- рощи;
- сосны;
- ели;
- липы;
- березы;
- осины
- дубы.



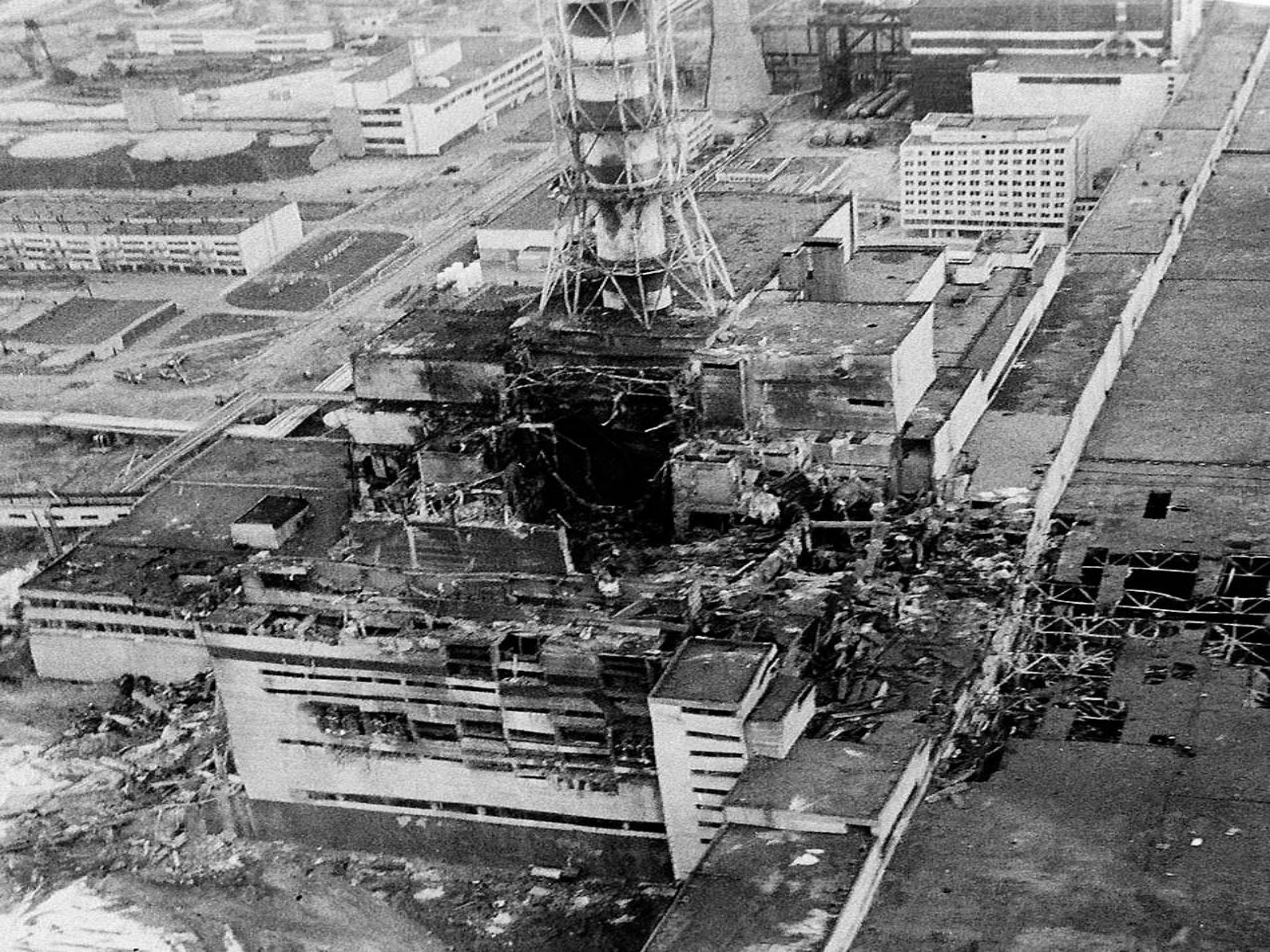
Scan the text below. Put 3 questions to it.

The Republic of Belarus has got over 10,000 lakes with their varied animal and plant kingdom. Everyone knows our famous lake Naroch, Braslav lakes. The republic has also got a great number of recreational areas with endless expanses of fields, meadows and swamps. Belavezhskaya Pushtcha is one of the last and largest remaining parts of the immense primeval forest which once spread across the European Plain.



Use a good dictionary to learn how we should pronounce the following words:

- Holocaust
- Leukemia
- Cancer
- Earthquake
- Aftermaths
- Contamination
- Tsunami
- Devastation
- Elimination



What happened on April, 26 1986 in Chernobyl?

Chernobyl Nuclear reactor № 4 crashed. As a result of it great area of the Belarusian territory became contaminated with radioactive particles. The contamination caused a rapid raise of such incurable illnesses as cancer. A lot of people died from leukemia. Nowadays 15% of the Belarusian territory isn't valid for consumption. The harmful effect of the tragedy according to some estimations amounts to \$ 30 billion.



After the accident at the Chernobyl nuclear power station, a fund was set up to undertake measures to eliminate the aftermath of the Chernobyl catastrophe and provide social protection for the population affected.

The fund finances assistance to citizens who suffered during the accident or while its aftermath was being eliminated, housing construction for citizens who were evacuated from contaminated areas, and the implementation of particular projects in the contaminated zones in Gomel and other regions.



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STOP

Match the English word combinations from the texts with the Russian equivalents:

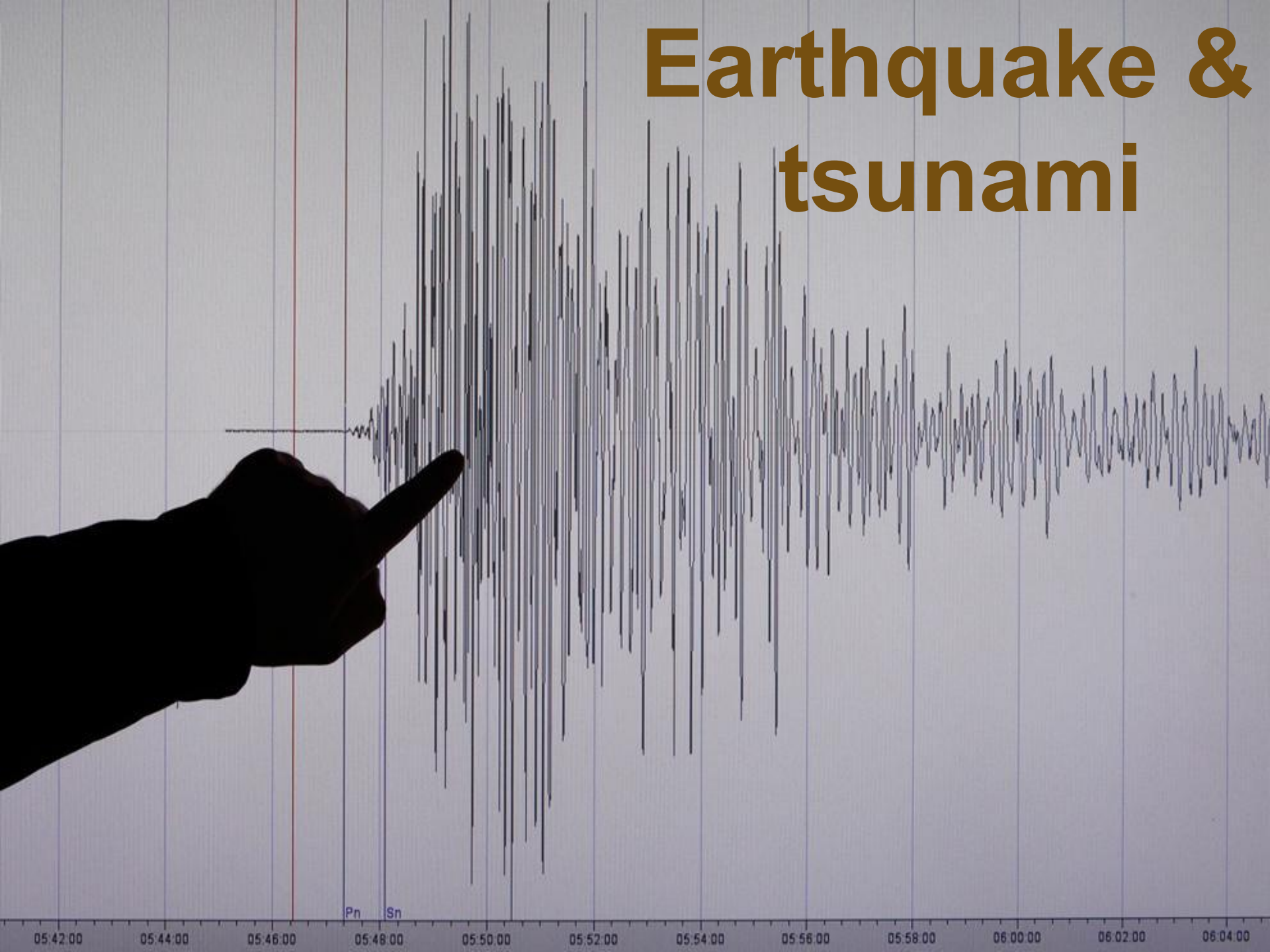
- произошла авария в 4-м реакторе;
- Чернобыльская атомная электростанция;
- была заражена радиоактивными частицами;
- неизлечимая болезнь;
- предпринять меры;
- обеспечить социальную защиту пострадавшего населения;
- непригодная к использованию земля;
- ликвидация последствий.

Chernobyl holocaust



Japan holocaust

Earthquake & tsunami



Quake hits Fukushima

On March, 11 2011 a strong earthquake hit and devastated north-east coast of Japan, knocking out electricity in Iwate prefecture. The earthquake is classified as 12 magnitude tremor by the US Geological Survey and 9 on the Richter scale. It became the biggest earthquake in recorded Japanese history and the fifth biggest in the world .



Use the information to describe the slide:

It triggered tsunami which killed as many as 27,000 people. Tsunami wave was as high as 15 meters. The worst hit was Kamaichi and the port town of Sendai as well as the nearest islands. At top speed, the tsunami travelled at 800km per hour.



Use the facts to describe the slide:

The earthquake that hit Japan was several times more powerful than the worst earthquake the nuclear power plant was built for.



Use a good dictionary to find synonyms to the highlighted words:

Entire towns were *wiped off* the map. Houses, cars, ships, buildings *were washed away*, roads *buckled*, highways *collapsed*, power lines *tangled*, railway tracks *damaged*. 530 000 people lost their homes.



Describe the picture using the
cues:

a strong earthquake, hit,
devastate, knock out, be
classified, magnitude tremor,
trigger, wipe off, wash away,
collapse, nuclear power plant,
estimate damage, deploy for the
emergency work.



Scan the passage.

50 000 people, including soldiers, coast guard and others, were initially deployed for emergency work. That figure rose to 100 000. Damage estimates as high as \$300 billion.

Match the figures with the facts:

03/11/2011; 12; 27,000; 15; 3; 99; 10000;
03/26/2011; 03/12/2011.

Power station



Divide this sentence into 3 shorter sentences.

3 nuclear power plants experienced problems with overheating reactors but 2 were brought under control, leaving all eyes focused on the Fukushima Daiichi nuclear power plant where the tsunami overran the diesel powered generators, leading to the emergency shutdown of the reactors.



One reactor exploded on the twelfth of March. Another explosion was on the thirteen of March. On the first Tuesday there was a second explosion at Reactor #2 as well as a fire at Reactor #4.



Compare Chernobyl crash with that in Fukushima:

Since the reactor's cooling capability was limited, and the water inventory in the reactor was decreasing, engineers decided to use sea water to cool reactors. This process decreased the temperature of the fuel rods to a non-damaging level.



At the station, a sharp increase in background radiation was immediately registered which exceeds the rate of 10 thousand times. The cause of the explosion is linked to a loss of power and subsequent overheating caused by failures in the plant's cooling system. The Fukushima nuclear plant was badly damaged after this natural disaster.



Aftermaths

As of late March 26, some 99 products, including milk and vegetables, had been found to be contaminated in Tokyo. Radiation has already seeped into vegetables, raw milk, the water supply and even seawater in areas surrounding the plant. Traces of radiation first detected in spinach and milk from farms 30-120 km from the nuclear plant.

Japan holocaust



**Thank you for your
attention!**