

6. ...s happen after a continuous rain, covering streets with water. They are usually a lot worse if a nearby river bursts its banks (выходит из берегов).
7. An... is not only snow or ice, sliding a mountain; it is also rock. There are about 1,000,000 snow...s every year.
8. ...s are often difficult to control, as they can spread very fast, especially in hot dry weather and burn a lot of forests or bush (кусты).

5b.  Listen and check.

6.  Write 10 one-sentence riddles about natural disasters.



Year 9 → Unit 6 → Lesson 2 → Extreme weather – 2

## Lesson 3. Are extreme weather events related to climate?

1. Discuss the following questions with your class.

1. *What continents or places on the Earth experience different extreme weather events most often?* 2. *Are they related to seasons?*

2a.  Listen and read about the following extreme weather events and say on what continents they occurred.

Hurricane Katrina hit the south-eastern part of the USA in late August 2005. With winds of up to 127 mph (204 kmph) and huge waves (волны), the hurricane killed 1,836 people. 80% of the coastal city of New Orleans [nju:'ɔ:li:nz] was flooded to depths of up to 6 meters. The **damage caused** by the flood and the wind was worth around \$300 billion.



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From late June to late August 2010 Russia **suffered from** one of the worst heatwaves in world history, called the Great



Russian heatwave. In July temperatures in Moscow rose to 39 °C and broke records in other Asian ['eɪʒ(ə)n] and European ['jʊərə'pi:ən] territories of Russia. The **impacts** were catastrophic [ˌkætə'strɒfɪk]. This extremely hot and dry long lasting weather caused wildfires, which

**destroyed** about 200,000 hectares ['hekteəz] of forests and peat fields (торфяники). The drought, which followed **lack of** rain for two months, destroyed grain crops (урожай зерновых) in 28 regions.

The heat, smoke and smog as a result of wildfires around Moscow killed more than 10,000 people. The UNO estimates<sup>1</sup> of **human loss** are at 55,736 people in the whole of Russia.

lose (lost, lost) (v) терять – loss (n)?

human loss = loss of people, loss of life

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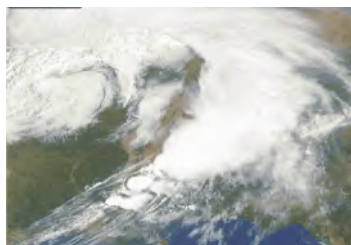
The winter of 2010–2011 brought heavy snowfalls, record low temperatures, travel chaos ['keɪs] and school **disruption** to Great Britain and Ireland. A maximum snow depth of 60 cm was recorded on 1 December in the Peak District and Sheffield. Scotland and Northern England felt the greatest impacts.

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In April 2011 at least 100 tornadoes **swept through** the states of Alabama [ˌælə'bæmə], Mississippi [ˌmɪsɪ'sɪpi], Arkansas

<sup>1</sup>The UNO estimates ['estɪməts] – по оценкам ООН

[ˈɑːkənsɔː], Tennessee [ˌtenəˈsiː], Georgia [ˈdʒɔːdʒə], Louisiana [luːiːziˈænə] and Virginia [vəˈdʒɪniə]. At least 310 people lost their lives [laɪvz] and the storms caused a lot of **destruction**. The tornadoes cost billions of dollars worth of damage.



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On December 27, 2015 heavy rain caused flooding in Northern England. It **disrupted** normal life. People were evacuated [ɪˈvækjuːeɪtɪd] from 2,200 homes in York. On July 18, 2017 a tiny Cornish seaside town (Wales) was flooded after a storm, when water ran over the seawall. The flood was **disastrous**, but fortunately did not **injure** anybody.



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A lightning **strike** killed 323 reindeer in Norway on 26 August 2016 during a thunderstorm. The herd of animals was on a hill in an area from 50 to 80 metres in diameter [daɪˈæmɪtə]. The animals were killed by the ground current (ток заземления): lightning **struck** the ground and the electricity current spread along the ground surface and travelled through the bodies of the animals. Ground currents cause most lightning **deaths** and **injuries**.

die (v) умирать – death [deθ] (n)?

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These extreme weather events occurred in the 21<sup>st</sup> century, and there have been hundreds of other natural **disasters** – summer heat waves, winter freezes, tropical cyclones, tornadoes, wildfires, floods and other natural disasters since 2000, which bring along destruction and human loss. Do they mean the global climate is changing?

**2b.** Read the text again. What do the words in bold mean? Use the definitions for help. Sum up each text in 1–2 sentences.

1. **damage** ['dæmɪdʒ] (**to**) (*n*) – physical harm (вред) caused to buildings, houses, roads, etc., so that they are broken or spoiled: *The fire damage to the house was serious.* (*v*) *The fire damaged the house seriously.*
2. **cause** [kɔːz] (*v*) – make something happen, usually something bad: *The heavy rain caused floods.*
3. **suffer** ['sʌfə] (**from**) (*v*) – feel pain in your body or your mind
4. **impact** ['ɪmpækt] (**on**) (*n*) – an effect, or an influence
5. **destroy** [di'strɔɪ] (*v*) – damage something so badly that it no longer exists or can never return to its normal state; **destruction** (*n*) [di'strʌkʃ(ə)n]
6. **lack** (of) (*n*) – a situation in which you do not have any, or enough, of something that you need or want
7. **disrupt** [dɪs'rʌpt] (*v*) – to interrupt something and prevent it from continuing by creating a problem; **disruption** (*n*) [dɪs'rʌpʃ(ə)n]
8. **sweep** (swept, swept) (**through / across**) (*v*) – move or spread quickly
9. **disaster** [dɪ'zɑːstə] (*n*) – something bad that causes a lot of damage and loss of life; **disastrous** [dɪ'zɑːstrəs] (*adj*)
10. **injure** ['ɪndʒə] (*v*) – [often passive] hurt someone and cause physical damage to their body; **injury** ['ɪndʒəri] (*n*)
11. **strike** [straɪk] (struck, struck) (*v*) – hit somebody or hit something and damage or destroy it; **strike** (*n*)

**2c.** Are the disastrous extreme weather events related to definite climates? Discuss the answer to the question in pairs.

*Model:* I think, hurricanes are more related to the geographical position than to a definite climate. They occur on the American continent, on the North Atlantic coast.

**2d.**  Listen and check your guesses.

### 3. Discuss the following questions in pairs (use ex. 2a).

1. Which of the following natural disasters is the most frightening: a hurricane, a tornado, a flood, a thunderstorm, a heat wave? Why? What are their impacts?

2. Would you rather live in a climate that is very hot or very cold? What natural disaster risks, related to weather, would you encounter in each?

### 4a. Try to write a definition of extreme weather for Wikipedia. Complete the text, using the vocabulary of Lessons 2 and 3.

**Extreme weather** is an unexpected, uncommon, unpredictable, or unseasonal weather event, such as any storm – a blizzard, freezing rain, an i\_e s\_m, a h\_e, a th\_m, a t\_o, heavy r\_n or l\_ck of rain. Very often **extreme weather events** can c\_e natural disasters: an avalanche, black ice, a d\_t, a f\_d, a h\_tw\_e and a w\_e. A\_s occur after a heavy snowfall in the mountains. B\_ck i\_e happens after an ice s\_m, or f\_ng rain. D\_s occur after a long period of very hot weather and lack of rain. F\_s are caused by d\_s – very heavy rain that falls quickly. A h\_e is extremely hot and dry weather lasting for a long time. W\_s start as a result of continuous hot weather and l\_ck of rain.

E\_e weather and natural d\_s often cause serious ['sɪəriəs] d\_e to the economy of a whole country, to an individual person or to the environment<sup>1</sup>. They d\_t all spheres of life and work. Natural disasters also result in in\_s, l\_ss of life or other health im\_s, such as disease and epidemics [ˌepɪ'demɪks].

### 4b. Listen and check.

### 5. Use the key words and the photos to speak and write about the storm in Belarus.

- occur on July 1, 2016; a thunderstorm;
- sweep through; all regions but Brest;
- heavy rainfall; a strong wind; hailstones larger than an egg in Tolochin, Vitebsk region; a tornado in Tolochin and Sharkovshchina, Vitebsk region;

<sup>1</sup> **environment** [ɪn'vaɪrənmənt] – окружающая среда



- from 39 mm to 43 mm of precipitation in Grodno region; 24 mm in Minsk;
- 510 towns, villages and cities; suffer from the impacts of the storm;
- injure 36 people;
- cut off electricity in 1,128 towns, villages and cities;
- disrupt automobile, air and railway traffic;
- more than 4,250 fallen trees, including 3,611 trees in Minsk; broken or uprooted trees;
- 450 fallen trees – damage cars (447 in Minsk); damage 8 planes at the national airport;
- damage and flood 622 houses, 6 industrial and 89 agricultural buildings;
- destroy 1/10 of the forests;
- 13 mln BYN worth of damage (\$6.5 mln).

## Lesson 4. How to survive extreme weather?

1.  Listen and read the following talk about the weather. What was the weather like? Do you think it was dangerous?