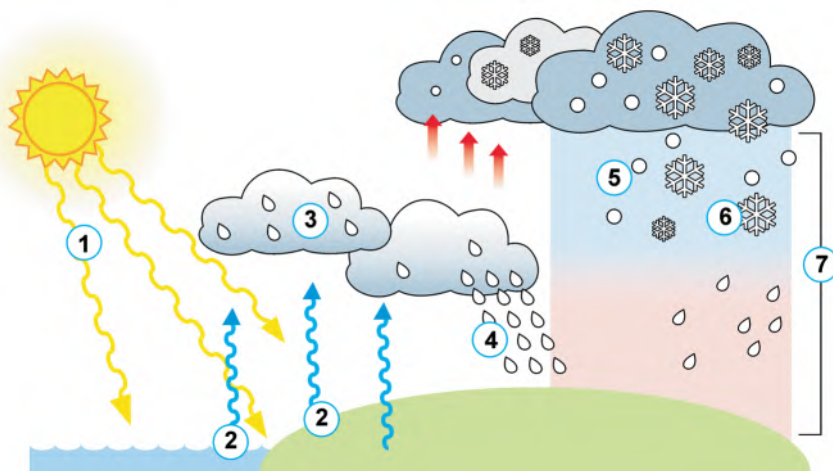


6a. Are you weather-wise? Look at the picture and explain in pairs how weather works.



6b.  Look and write how weather works.

Lesson 6. How is weather predicted?

1. For centuries people used their senses and experience to predict (= forecast) weather. Read what you should observe (= watch) and match the observations with their explanations.



1. Observe plants. 2. Check for humidity. 3. Observe birds. 4. Watch the clouds.

- A. Many people feel it in the hair (it curls up), or salt clumps (берется комками). It happens before rain.
- B. If there is a cover of them at night – expect warmer weather. They are like a blanket (как одеяло) for the earth. They keep warmth near the ground.

- C. They fold up (сворачивают) their leaves and flowers before rain.
 D. They fly low if the air pressure is low, which happens before rain.

2. Discuss in pairs and then with the whole class.

1. Do you observe weather? 2. Do you know any observations that help you to predict weather? 3. Are they always correct? 4. Is it safe to trust (доверять) such observations?

observe (v) = watch, observation (n) – ?

3. Today the International Weather camp are learning how weather is predicted.

A. Look at the instruments used in weather forecasting. Read their names¹. Which of them are used by many of us?



barometer
[bə'rɒmɪtə]



anemometer
[ˌænɪ'mɒmɪtə]



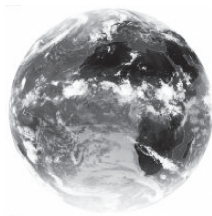
psychrometer
[saɪ'krɒmɪtə]



rain gauge
[reɪdʒ]



thermometer
[θə'mɒmɪtə]



satellite image
['sætəlaɪt 'ɪmɪdʒ]



wind vane

¹There is no need to remember the tools, unless you want to.

**B. Do you know what these tools (= instruments) measure¹?
Match two parts to make up correct sentences.**

- | | |
|--|---------------------------------------|
| 1. The thermometer is used to measure | a) with the help of an anemometer. |
| 2. Air pressure is measured | b) with a psychrometer. |
| 3. Wind speed is measured | c) the precipitation that has fallen. |
| 4. The humidity, or moisture in the air, is measured | d) temperature. |
| 5. A rain gauge is used to measure | e) with a barometer. |

C.  **Listen and check your guesses.**

Grammar focus

The Passive Voice

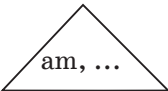


- Read the sentences in the Passive Voice and answer the questions in pairs, then check with the class.

1. What is the tense? 2. Why is the Passive Voice used?
3. How is the Passive Voice formed?

- Specific instruments, or tools, *are used* by meteorologists to collect information, called data ['deɪtə].
- Many years ago the various human senses *were used* as weather observing tools.
- It is difficult to say today how weather *will be forecast* in the future.

- Copy the table and complete it in your exercise book.

The Passive Voice (be + V3)

The Present Simple Passive	The Past Simple Passive	The Future Simple Passive
 am, ... V3	 ... V3	 Will ... V3

¹measure ['meɪʒə] (v) – измерять, измерять; (n) – мера

- Complete the sentences to make up a five-sentence rule about the use of the Passive Voice.

third form of the action verb	by	don't know
verb <i>be</i>	with	word-signal

1. The Passive Voice is used when we ... or don't want to mention (упоминать) the actual doer of the action.
2. The Passive Voice is formed with the help of the... in the corresponding (соответствующее) tense and the...
3. We choose the tense of the sentences in the same way as we do in the Active Voice – we pay attention to the..., e.g. 100 years *ago*, *usually*, etc.
4. For the doer of the action we use the preposition... in sentences with the Passive Voice.
5. For the instrument of the action we use the preposition... in sentences with the Passive Voice.

4a. Read the talk of a meteorologist and use the correct form of the verb 'be'. What is the tense of the sentences in the Passive Voice?

For centuries weather observing tools were the various human senses – the eye, the nose, the ear. The technology of weather observation (1) (*be*) developed in the last seven centuries. The rain gauge, barometer, anemometer, psychrometer and thermometer (2) (*be*) all invented in the years between 1400 and 1700. These instruments (3) (*be*) improved through the years, but even today they are the basic observing tools of weather observers all over the world. However, things have changed. With the development of the telegraph ['telɪɡrɑ:f] in the 1840's, then radio and telephone, new observing systems such as instrumented balloons, radar and satellites have appeared. They are now part of the range of tools that (4) (*be*) used by weather watchers. Thus (таким образом), the quality (качество) of the data, the possibilities (возможности) of



meteorologists to exchange information from the weather stations in different regions and the rate (скорость) of this exchange have experienced a huge leap (скачок), especially¹ with the appearance of computers.

The data collected by different weather observers, (5) (*be*) brought to processing ['prəʊsesɪŋ] computers. The processed ['prəʊsest] information in the form of forecasts, maps, and even three-dimensional (трехмерные) models² (6) (*be*) sent back to weather information users via³ television, radio, and the Internet. But today nobody can say how weather (7) (*be*) predicted in the future, or how accurately it (8) (*be*) predicted.

4b.  Listen, check and be ready to answer the questions below.

- How was weather observed in ancient times?
- When was the technology of weather observation developed?
- What instruments were invented between 1400 and 1700?
- Which inventions increased the rate of weather information exchange?
- How will weather be predicted in the future?

5. Give a brief explanation about how weather is predicted.

Help box

Different instruments are used to measure atmospheric phenomena – ...

Nowadays, the data collected at different weather stations is ..

The processed information is presented in the form of ...

Finally, the weather forecast is sent to its users via ...

6.  Read and write the letter about the International Weather camp. Which forms of the Passive Voice should be used here?

¹ especially [ɪˈspeʃ(ə)li] – особенно

² three-dimensional [ˈθriː daɪˈmenʃ(ə)nəl] models [ˈmɒd(ə)lz] – трехмерные модели

³ via [ˈvaɪə] – посредством

Hi everybody,
How are you?

The camp is great. Every day we (1) *wake up* at 7.30 and after washing we (2) *tell* to go to the canteen to have breakfast. Everything (3) *cook* very well here. You know we (4) *ask* to clean the table after the meals. Some don't like it at all, but I think it's not bad. In this way we (5) *teach* to be independent.

We have already done quite a few interesting things. Our first project – a weather forecast competition – has just starting. Besides, we (6) *teach* to forecast weather in our last class. Yesterday we (7) *take* round a weather station. We (8) *show* different measuring tools. We also (9) *explain* how predictions about weather usually (10) *make*. I believe, with satellites and computers weather (11) *predict* very well in the future.

On the whole the camp is both useful and enjoyable.
Love and best wishes,
Nelly.

Lesson 7. Weather forecasts

1a. Have a brief survey about weather forecasts. Answer the questions below.

1. How often do you get acquainted with weather forecasts?
2. What kind of weather forecasts do you prefer: radio, TV or Internet?
3. Do you use mobile phone apps to get updates on (обновления) weather?

1b. Look at the weather forecast, given by an app1Weather, and answer the questions.

1. What kind of information about weather does it give?
2. Is it interesting to get details?