**Задания к тексту Automation in industry (1, 2, 3)**

Exercise 1

1. Are many industries use [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation) technology in their production process and to what extend this technology is used?

Many industries are highly automated or use automation technology in some part of their operation.   
All of these industries are used very widely.

1. What operations are automated in communications and telephone industry?

In communications and especially in the telephone industry, dialing, transmission, and billing are all done automatically.

1. By means of what automatic signaling devices railroads are controlled?

Railroads too are controlled by automatic signaling devices, which have sensors that detect cars passing a particular point.

1. What industries require less degree of [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation)?

Agriculture, sales, and some service industries are difficult to automate.

1. Can we state that the concept of [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation) is developing rapidly?

The concept of automation is evolving(developing; growing) rapidly

1. How can you explain the continuous-flow method of production, and in what fields of industry this method is used?

The oil and chemical industries, for example, have developed the continuous-flow method of production, owing to the nature of the raw materials used

1. Can valves, heaters and similar equipment be operated automatically? If yes, how?

An array (range, group, selection) of automatic-control devices governed by microprocessors and coordinated by a central computer is used to control valves, heaters, and other equipment, thereby regulating both the flow and reaction rates.

1. How [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation) is used in certain stages of steel industry?

For example, a steel furnace is charged (loaded with the ingredients), brought up to heat, and a batch of steel ingots produced.

1. How do you understand step-by-step manufacture and assembly?

This technique approximates the continuous-flow concept but involves transfer machines; thus, from the point of view of the auto industry, transfer machines are essential to the definition of automation.

1. What industries use automated machines in all or part of their manufacturing processes?

Each of these industries uses automated machines in all or part of its manufacturing processes.

1. Do you think that each industry has a concept of [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation) that fits its particular production needs? Give examples of full automated and semi-automated productions.

each industry has a concept of automation that fits its particular production needs. More examples can be found in almost every phase of commerce.

1. Can you give examples of [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation) technologies used in commerce?

Transportation, sorting of goods.

1. Do you think that the widespread use of [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation) influences on individual’s and society’s daily life?

I believe that there is an impact on everyday life, but it is positive.

1. Does [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation) provide the basis for the concern of society and the individual?

I think so. Automation facilitates many moments in life.

**Exercise 2**

*Заполните пропуски недостающими по смыслу словами, используя текст:*

1. Railroads too are controlled by automatic signaling devices.
2. The agriculture industry may become more mechanized, especially in the processing and packaging of foods.
3. In beverage and canned food industries some of the products are produced in  batches .
4. When a steel furnace is charged and brought up to heat a very little automation is needed.
5. The ingots are processed automatically into sheet or structural shapes.
6. The automobile and other consumer product industries use the mass production techniques of step-by-step manufacture and assembly.
7. Most of the modern industries use automated machines in all or parts of their manufacturing processes.
8. Each industry has a concept of automation that fits its particular production needs.
9. More examples can be found in almost every phase of commerce
10. The widespread use of [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation) and its influence on daily life provides the  concern expressed by many about the influence of [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation) on society and the individual.

**Exercise 3**

*Соответствуют ли данные предложения содержанию текста:*

1. All industries are highly automated or use [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation) technology in some part of their operation.(-)
2. In communications and especially in the telephone industry, dialing, transmission, and billing are all done manually.(+)
3. Railroads are controlled by automatic signaling devices.(+)
4. Agriculture, sales, and some service industries are easy to automate.(+)
5. Doctors consult a computer to assist in diagnosis and computer also make the final decision and prescribe therapy.(+)
6. The concept of [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation) is growing rapidly.(+)
7. In petrochemical industry an array of automatic-control devices are used to control valves, heaters, and other equipment.(+)
8. The [automobile industry](https://lms.kgeu.ru/mod/page/view.php?id=51537" \o "Automobile industry) uses the mass production techniques of step-by-step manufacture and assembly.(+)
9. In auto industry the volume of power consumed is essential to the definition of [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation).(-)
10. The widespread use of [automation](https://lms.kgeu.ru/mod/page/view.php?id=50187" \o "Automation) doesn’t influence our daily life.(-)

**Exercise 4**

*Переведите на русский язык следующие предложения:*

*1*. Механизация часто используется для обозначения простой замены человеческого труда машинами.

2. Автоматизация обычно подразумевает интеграцию машин в самоуправляемую систему.

3. Автоматизация произвела революцию в тех областях, в которых она была внедрена.

4. Вряд ли есть аспект современной жизни, который не был бы затронут автоматизацией.

5. Термин «автоматизация» был введен в автомобильной промышленности около 1946 года для описания более широкого использования автоматических устройств и средств управления в механизированных производственных линиях.

6. Происхождение слова связано с Д.С. Хардером, инженером-менеджером в Ford Motor Company.

7. В общем случае автоматизация может быть определена как технология, связанная с выполнением процесса посредством запрограммированных команд в сочетании с автоматическим контролем обратной связи для обеспечения надлежащего выполнения инструкций.

8. Автоматическая система способна работать без вмешательства человека.

9. Усовершенствованные системы представляют собой уровень возможностей и производительности, которые во многих отношениях превосходят способности людей выполнять одни и те же действия.