ESP 1–5

Шарабарин Михаил  
  
Task 1:

1. What are some steps in the process of creating software?

- Plan the program.

- Write the code.

- Fix errors.

- Put the program on a computer.

- Check if it works correctly.

2. What are some responsibilities of a software engineer?

- Create useful programs.

- Work in small groups on small projects.

- Work with the whole class on big projects.

- Find and solve problems in software.

- Check other students’ programs.

Task 2:

1. What is NOT included in the course?

C) The history of software development

2. What will the students do for each other?

D) Evaluate performance

3. What is true of the programming-in-the-small project?

B) It involves small groups of students

Task 3:

1) evaluate - D: to carefully study something and assess its qualities

2) design - B: to plan the way that something will be created

3) software - H: the programs that perform particular functions on a

computer

4) develop - C: to bring something from initial conception to action or

implementation

5) investigate - G: to get more information about something

6) install - F: to put something into the place where it will function

7) write - A: to form letters and words into sentences or instructions

8) test - E: to operate something to see whether it works

Task 4:

1. A) Programming-in-the-small often creates less complex software

2. B) Students are working on programming-in-the-large to create a program with many levels and functions

Unit 2

Task 1:

1. What are common types of personal computers?

- Desktop computers (powerful and customizable).

- Laptops (portable for mobile use).

- Tablets (lightweight with touchscreens for casual tasks).

2. What computers are typically used in business environments?

- Desktops (stable for office setups).

- Laptops (flexible for mobile employees).

- Workstations (high-performance for specialized tasks like data analysis).

Task 2:

1. What is the main idea of the article?

D) Technology arising from advances in software development

2. According to the article, which of the following is NOT something that software engineers do?

D) Increase the size of desktops for homes and businesses

3. What opinion does the article express about software engineering?

B) It is responsible for improving many areas of people's lives.

Task 3:

1) PC - Ca computer that is intended for personal use

2) laptop – Ba hinged computer that is easy to transport

3) workstation – Da powerful computer that processes advanced tasks

4) tablet – Aa very small computer that typically does not have a keyboard

5) desktop – Ea computer that is intended for use in one location

Task 4:

1. The student carried a notebook to class every day.

2. The company connected all of its computers to the same server.

3. Early computers were so large that they occupied entire rooms.

4. A computing cluster is more powerful than most other types of computers.

5. The company installed embedded computers in employees' cars.

Unit 3

Task 1:

1. What accessories are used to input information into a computer?

- Keyboards (for typing)

- Mice and touchpads (for screen navigation)

- Stylus pens (for drawing or precise touchscreen input)

2. What accessories display computer information?

- Monitors (standard output in different sizes and resolutions)

- Projectors (enlarge screen display onto surfaces)

- Digital displays (such as smart TVs or public signage)

Task 2:

1. The order includes monitors in two different sizes. (True)

2. Some of the optical mice are not wireless. (True)

3. The customer requested an extra package of flash drives. (False)

Task 3:

1) The mouse is wireless, so the user doesn't have to plug it in.

2) If the scroll wheel breaks, it's hard to move up and down on the screen.

3) Today's flat panel monitors are more popular than old rounded ones.

4) The student types 50 words per minute on his keyboard.

5) The new laser printer produces sharp, clear text on every page.

6) A monitor and a mouse are types of peripherals.

Task 4:

1. Displaying Information

a) monitor

b) projector

c) digital display

2. Inputting Information

a) keyboard

b) mouse

c) stylus pen

3. Storing Information

a) flash drive

Unit 4

Task 1:

1. What features protect a computer's interior?

- Casing/chassis (shields components from dust, moisture, and physical damage).

- Cooling systems (fans and heatsinks prevent overheating).

- Surge protectors (guard against power surges).

- Internal security measures (firewalls and antivirus software).

2. What are the main functional components of a computer?

- CPU (processes data and instructions).

- RAM (temporarily stores data for quick access).

- Storage devices (hard drive/SSD for long-term data retention).

- Motherboard (connects all components).

- Power supply unit (provides electrical power).

Task 2:

1. The computer's ports are protected from interior dust buildup. (True)

2. The computer has a display that shows its internal temperature. (False)

3. A CD/DVD drive can be purchased separately. (False)

Task 3:

1) A: A cover prevents a computer from getting dirty.

B: The new processor is faster than the old one.

2) A: The computer's case protects it from damage.

B: The cable plugs into the port.

Task 4:

1. Cooling

a) Heat sink

b) Fan

2. Routing

a) Power supply

b) Motherboard

3. Accessing Data

a) CD/DVD drive

b) Hard drive

Unit 5

Task 1:

1. What types of software enable computer operation?

- System software (operating systems like Windows/macOS/Linux, device drivers).

- Application software (word processors, web browsers, graphic design programs).

2. How do users manage computer hardware and software?

- Through the operating system (install/update software, adjust hardware settings).

- Using control panels/system preferences for configurations.

- Installing device drivers for hardware compatibility.

Task 2:

1. What is the main idea of the chapter?

A) Differences between old and new system software

2. Which is NOT a use of system software?

D) Installing firmware on a computer

3. What is the benefit of a windowing system?

B) It simplifies computer operations.

Task 3:

1) BIOS - D: a set of instructions in firmware

2) Operating system - B: programs that manage a computer's hardware and applications

3) Control - E: to have power over the way something functions

4) Manually - F: done directly by a person, without automatic functions

5) Operate - A: to function according to software instructions

6) Windowing system - C: a user interface organizing information into visual boxes

Task 4:

1) A: A computer's keyboard and monitor are part of its hardware.

B: Information about the operating system is stored in the firmware.

2) A: The device driver dictates computer-peripheral interactions.

B: System software allows users to run additional programs.

Dictionary

### Unit 1: The Software Engineer

- Software – программное обеспечение

- Design – проектирование, дизайн

- Develop – разрабатывать

- Write – писать (код)

- Test – тестировать

- Install – устанавливать

- Evaluate – оценивать

- Investigate – исследовать

- Artifact – артефакт (результат разработки)

- Programming-in-the-small – программирование в малом масштабе

- Programming-in-the-large – программирование в крупном масштабе

---

### Unit 2: Types of Computers

- Computer – компьютер

- PC – персональный компьютер

- Laptop – ноутбук

- Notebook – компактный ноутбук

- Tablet – планшет

- Desktop – настольный компьютер

- Server – сервер

- Workstation – рабочая станция

- Embedded computer – встроенный компьютер

- Computing cluster – вычислительный кластер

---

### Unit 3: Accessories and Peripherals

- Keyboard – клавиатура

- Optical mouse – оптическая мышь

- Scroll wheel – колесо прокрутки

- Monitor – монитор

- Flat panel – плоский экран

- Laser printer – лазерный принтер

- Inkjet printer – струйный принтер

- Scanner – сканер

- Flash drive – флеш-накопитель

- Wireless – беспроводной

- Peripheral – периферийное устройство

---

### Unit 4: Inside the Computer

- Case – корпус компьютера

- Port – порт

- Cover – защитная крышка

- Motherboard – материнская плата

- Processor – процессор

- Hard drive – жесткий диск

- CD/DVD drive – CD/DVD-привод

- Power supply – блок питания

- Fan – вентилятор

- Heat sink – радиатор охлаждения

---

### Unit 5: System Software 1

- Operating system – операционная система

- BIOS – базовая система ввода-вывода

- Firmware – микропрограмма

- Device driver – драйвер устройства

- Windowing system – оконная система

- Control – управление

- Operate – работать, управлять

- Manually – вручную

## Glossary (English → Definition)

| **Term** | **Alternative wording** | **Definition** |
| --- | --- | --- |
| perform (experiments) | execute | to carry out a planned scientific procedure |
| revisit | revisit | to go back over material for reinforcement |
| analyze | scrutinize | to examine thoroughly and in detail |
| propose | advance | to put forward for consideration |
| underscore | accentuate | to draw special attention to |
| verify | validate | to ensure accuracy or truth |
| intend | aspire | to have a clear aim or purpose |
| comprise | consist of | to be formed from various parts |
| investigate | explore | to examine systematically |
| develop (experiments) | formulate | to create and set up systematically |
| document | formalize | to record in an official written form |
| highlight | spotlight | to make something especially noticeable |
| provide findings | present conclusions | to share the results of analysis |

## Dictionary (English → Russian)

| **Term** | **Translation** |
| --- | --- |
| execute (experiments) | выполнять (эксперименты) |
| revisit | повторно изучать |
| scrutinize | тщательно изучать |
| advance (ideas) | выдвигать, предлагать |
| accentuate | подчёркивать |
| validate | подтверждать |
| aspire | стремиться |
| consist of | состоять из |
| explore | исследовать |
| formulate (experiments) | разрабатывать |
| formalize | оформлять официально |
| spotlight | выделять |
| present conclusions | представлять выводы |