Answer key

1 Programming

A

Open task

B

SS compare their answer to A with the Glossary.

2 Steps in programming

A

1c   2a   3d   4e   5b

B

SS check their answers to A.

C

1 Understand the problem and plan a solution
2 Make a flowchart of the program
3 Write instructions in a programming language
4 Compile the program (to turn it into machine code)
5 Test and debug the program
6 Prepare documentation

D

Open task

3 Computer languages

A

Eight: FORTRAN, COBOL , BASIC, Visual BASIC, PASCAL, C, C++, Java

B

1 No, computers don't understand human languages because the processor operates only on machine code.
2 An assembler is a special program which converts a program written in a low-level language into machine code.
3 To make programs easier to write and to overcome the problem of intercommunication between different types of computer.
4 PASCAL
5 A compiler translates the source code into object code (machine code) in one go. However, an interpreter translates the source code line by line, as the program is running.

6 Because they use instructions called markup tags to format and link text files.

C

1 XML
2 FORTRAN
3 Java
4 VoiceXML
5 COBOL

4 Word building

```
program (n or v)
programmers (n)
programming (n or present participle of v)
programmable (adj)
```

1 programming
2 program
3 programmers
4 programmable

```
compile (v)
compiler (n)
compilation (n)
```

5 compilation
6 compiler
7 compile

```
bug (n or v)
debug (v)
debugger (n)
debugging (n or present participle of v)
```

8 bug
9 debugger; debug
10 debugging

5 Language work: the infinitive

A

2 It's expensive to set up a data-processing area.
3 It's advisable to test the programs under different conditions.
4 It's unusual to write a program that works correctly the first time it's tested.
5 It's important to use a good debugger to fix errors.
6 It's easy to learn Visual BASIC.

B

1c   2b   3b   4c   5c   6a   7a   8b

C

Open task