

analyse (v)
analysis (n)
biology (n)
chemical (adj)
chemistry (n)
conclude (v)
data (n)
determine (v)
device (n)
element (n)

engineering (n)
equipment (n)
experiment (n/v)
gas (n)
indicate (v)
laboratory (n)
liquid (n)
method (n)
physics (n)
prove (v)

research (n)
science (n)
scientific (adj)
scientist (n)
solid (n)
substance (n)
symbol (n)
technical (adj)
technology (n)
theory (n)

A Complete the sentences using words from the box.

analysis equipment gas laboratory liquid research scientist solid



- 1 Carbon dioxide is a _____.
- 2 They're doing _____ into a new drug.
- 3 It's a big new _____.
- 4 Ice is a _____.
- 5 She's a _____.
- 6 They're taking great care with the _____.
- 7 Water is a _____.
- 8 They're doing an _____ of the data.

B Match the first part of the sentences (1–9) to the second part (a–i).

- | | |
|---|--|
| 1 Schools currently do not have enough | a that makes shoes completely waterproof. |
| 2 Samples of water from the river | b for scientific research. |
| 3 A toxic gas was released during the experiment, | c that he would have to repeat the experiment. |
| 4 They used different methods of calculation, | d the analysis of blood samples. |
| 5 The scientist concluded | e science teachers. |
| 6 The liquid became a solid | f are being analysed in a laboratory. |
| 7 Researchers have developed a substance | g but they got the same results. |
| 8 One part of her job is carrying out | h so they had to wear masks. |
| 9 The government has cut funding | i as soon as it cooled. |

C Complete the text. Use one word from the vocabulary list at the top of the page for each space. Use the correct form of the words.

One of the greatest ¹_____ discoveries is penicillin. It was discovered by Alexander Fleming at St Mary's Hospital in London while he was doing ²_____ into the bacteria that cause flu. In the summer of 1928, Fleming went on holiday, leaving all his ³_____ in a pile on a bench in the corner of his ⁴_____. When he returned, he noticed something strange in one of his dishes. The dish had been left open, and there was a blue-green ⁵_____ growing in it. There were still bacteria in the dish, but there were none near the new growth. Fleming ⁶_____ that the growth was stopping the bacteria from spreading. He then ⁷_____ it, and discovered it was similar to a mould that grows on bread when it is old. He extracted a thick ⁸_____ from the mould, which he called penicillin, and continued with his investigations. Unfortunately, few of his ⁹_____ were successful, and he failed to find an easy ¹⁰_____ for extracting penicillin from the mould. In the end, it was another team of ¹¹_____ who succeeded in developing the drug for mass production. In 1945, Alexander Fleming and his colleagues were awarded the Nobel Prize for their contribution to ¹²_____ and medicine.

D Match the words from the box to the definitions.

biology chemical chemistry data determine element
engineering indicate physics technology

- 1 To discover the facts about something: _____
- 2 The scientific study of the structure of substances and what happens to them: _____
- 3 Facts or information: _____
- 4 The scientific study of the design and building of machines, bridges, electrical equipment, etc.: _____
- 5 Involving changes to the structure of a substance: _____
- 6 The scientific knowledge and/or equipment that is needed for a particular industry, etc.: _____
- 7 The scientific study of living things: _____
- 8 One of the simple chemical substances, for example, oxygen, gold, etc.: _____
- 9 The scientific study of natural forces such as light, sound, heat, etc.: _____
- 10 To show that something is probably true and exists: _____

E Choose the best words to complete the sentences.

- 1 There is a *symbol* / *theory* that dinosaurs disappeared because a huge asteroid hit the Earth.
- 2 Scientists have succeeded in *indicating* / *proving* that humans are related to chimpanzees.
- 3 Modern kitchens have labour-saving *devices* / *elements* such as washing machines and dishwashers.
- 4 There have been massive developments in computer *data* / *technology* in recent years.
- 5 The train has been delayed due to a *chemical* / *technical* problem.
- 6 Research *determines* / *indicates* that eating habits are changing fast.
- 7 The *device* / *symbol* for silver is Ag.
- 8 The *data* / *theory* was collected from a survey of young people and their study habits.
- 9 Researchers are examining the new substance to *determine* / *prove* how it can be used.
- 10 The *chemical* / *technical* industry manufactures all sorts of products, such as soap and paint.

F Complete the conversation. Use one word from the vocabulary list on the previous page for each space. Use the correct form of the words.

- A Have you decided what you want to study at university?
- B I'd like to do a science degree, but I'm not sure which one yet.
- A If you like doing experiments with different substances, you could do ¹_____.
- B Oh, no. I don't mind the experiments, but there are so many chemical ²_____ to learn. I still don't know the ³_____ for the ones we've been studying this year!
- A How about ⁴_____, then? Are you interested in animals and plants and that kind of thing?
- B Yes, but I'd rather do something more ⁵_____. You know, design something that has a practical use.
- A You won't want to study ⁶_____ then.
- B Not really. Natural forces don't really interest me that much, and I'm not keen on trying to ⁷_____ other people's ⁸_____.
- A Well, if you want to do something more practical, you could try ⁹_____. There are loads of different branches: chemical, electrical, mechanical ...
- B Actually, I've been thinking about the mechanical side of things. Designing and building new machines and ¹⁰_____ for industry would be fascinating, I think.
- A It sounds as if you've made up your mind, then. Now all you have to do is decide where you want to study!