

## Week 5 Cause and effect

The process of seeking relationships among scientific facts includes looking for cause and effect. The fifth-century B.C. Greek philosopher Leucippus suggested that there is causality in nature, that is, that every natural event has a natural cause. All science is based on this assumption. Scientists must be careful, however, not to assume that one event caused another just because they happened in sequence.

### Task 1 Cause and effect – searching for connections

Work in pairs. Speculate on how two or more of the following phenomena can be connected using cause and effect relationships. Suggest possible reasons.

1. drug abuse and increasing alcohol consumption among younger people
2. rapidly increasing urban populations
3. social problems such as homelessness
4. more reporting by doctors of cases of depression
5. more students dropping out of school
6. greater awareness of environmental issues
7. an increase in the number of single-person households

### Task 2 Academic language Cause and Effect (1)

#### a) Identify the nouns and verbs relating to cause and effect in sentences 1-6.

1. Sea fishing on an industrial scale has led to a considerable transformation of the marine development.
2. The safety of modern wards in hospitals owes much to early pioneers in hygiene such as Lister.
3. The financial collapse was triggered by a computer failure.
4. Ideas and discoveries from past civilizations such as the Greeks and Sumerians still have a huge impact on our lives today.
5. The main cause of change in the modern world is not technological advances, but human imagination.
6. Human behaviour has contributed most to the changes that we see in the planet today.

#### b) Write sentences showing the cause and effect relationships between the phenomena. Use the cause and effect language in brackets.

**Example:** *natural phenomena / earthquakes / other catastrophes (trigger)*

*Natural phenomena such as earthquakes can trigger other catastrophes.*

1. a range of marine processes / constantly / marine environment (change)
2. science and medicine / well-being / society (impact)
3. many illnesses / general public / pollution / accidents (cause)
4. a knowledge / marine ecosystems / planet / future generations (save)
5. people's lives / greatly / science and the arts (improve)

### Task 3 Academic language Cause and Effect (2)

Compare the sentences below using the word **result** and notice the word class.

One key **result of** rising house prices is unaffordability. (noun)

Rising house prices is a significant phenomenon. **As a result**, houses become unaffordable for many people. (adverbial)

The phenomenon of unaffordability may occur **as a result of** rising house prices. (preposition)

Rising house prices may **result in** unaffordability. (verb)

Unaffordability may **result from** rising house prices. (verb)

Now complete the sentences with prepositions **in, of, from**.

1. Headaches may result \_\_\_ stress and dehydration.
2. One result \_\_\_ improving secondary school education is likely to be greater competition for university places.
3. Sudden adoption of a low-calorie diet may not result \_\_\_ weight loss as intended.
4. Arguably this phenomenon results \_\_\_ three major causes.

Write at least three sentences containing the phrases **result in, from, as a result** about your area of study.

### Task 4 Listening

([http://www.periodicvideos.com/videos/mv\\_penicillin.htm](http://www.periodicvideos.com/videos/mv_penicillin.htm))

Listen to a short talk on penicillin and describes how it works.

### Task 5 Grammar and vocabulary

#### I. Passive voice. Transform the sentences from active into passive voice.

The bad weather is causing serious problems for farmers. – These problems...

The bad weather has caused serious problems for farmers. – These problems...

The bad weather caused serious problems for farmers. – These problems...

The bad weather will cause serious problems for farmers. – These problems...

The bad weather must have caused serious problems for farmers. – These problems ...

#### II. Phrasal verbs – cause and effect

Complete the blanks with particles.

1. The new airport has brought \_\_\_\_\_ a lot of changes on the island.
2. I think most of the problems teenagers experience spring \_\_\_\_\_ a feeling of insecurity.
3. The film sparked \_\_\_\_\_ a lively discussion in the class.
4. Nuts can trigger \_\_\_\_\_ a violent allergic reaction.
5. The wind stirred \_\_\_\_\_ a lot of dust.
6. I don't know what lies \_\_\_\_\_ their strange reaction.