

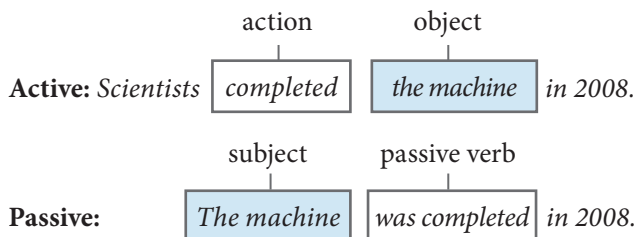
The Hadron Collider

➤ The Hadron Collider was completed in 2008 and it is the largest machine in the world. It was planned by over 10,000 scientists in 100 different countries. The machine continues to be developed and many different experiments have been carried out. The most famous involved sub-atomic particles being fired at each other. It was hoped that by doing this, the origins of the universe might be discovered.



Presentation

Use the passive form when you want to focus on the person or thing affected by the action. The subject of the passive verb is the object of the active verb:



The passive is often used when *the agent* ...

- is not important: *It was built in 1990 by someone.*
- is obvious or has already been mentioned: *Scientists do experiments so discoveries might be made by scientists.*
- doesn't want to be known: *I'm afraid the machine has been broken by me.*

Tenses and modal verbs

To form the passive, use *be* + past participle. See the table.

Passive infinitive and passive -ing form

You form the passive infinitive with *be* + past participle. You can use the passive infinitive with verbs that are followed by the *to* infinitive (e.g. *agree, demand, want*).

The Prime Minister agreed to be interviewed.


You form the passive -ing form with *being* + past participle. The passive -ing can be used with verbs that are followed by verb -ing (e.g. *enjoy, hate*).

The children enjoy being taken to the zoo.

You cannot use the passive form with intransitive verbs (e.g. *arrive, die, go, sit*) because they have no direct object: *The tests went well.* (not *The tests are gone well.*)

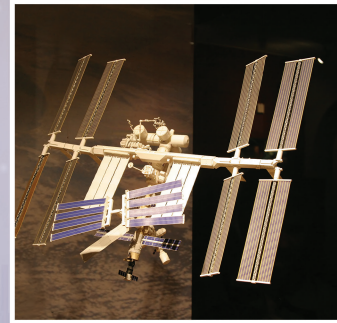
Active	Passive
Scientists test the machine.	The machine is tested.
Scientists tested the machine.	The machine was tested.
Scientists are testing the machine.	The machine is being tested.
Scientists were testing the machine.	The machine was being tested.
Scientists have tested the machine.	The machine has been tested.
Scientists had tested the machine.	The machine had been tested.
Scientists might test the machine.	The machine might be tested.

Exercises

- 1  Complete the first half of an article by writing the verb in brackets in the correct tense and passive form. Then listen and check.

SCIENCE NEWS

◆ The International Space Station (ISS) ¹ *is currently being run* (currently / run) as a joint project between five space agencies. The main structure ² (complete) in 1998, but the idea for cooperation in space began at the end of the Cold War. An agreement for a joint space programme between the USA and Russia ³ (not / reach) until 1992, and final plans for a new space station ⁴ (announce) a year later. Unlike previous spaceships and satellites, the ISS ⁵ (build) in space while in orbit. In fact, components ⁶ (still / add) today.



- 2  Complete the second half of the article by underlining the active or passive form. Then listen and check.

SCIENCE NEWS

◆ The ISS ⁷ *has become / has been become* the biggest space station ever. It ⁸ *can even see / can even be seen* from earth with the naked eye. The space agencies ⁹ *carry out / are carried out* daily experiments on the ISS. For example, new spacecraft systems ¹⁰ *regularly test / are regularly tested* here. It ¹¹ *has continuously staffed / has been continuously staffed* since 2000, so it ¹² *is using / is being used* as a research centre to assess the long-term effects of zero gravity on the human body. The results ¹³ *will affect / will be affected* the preparations for long-term space colonisation.

- 3 Choose the correct option. In two sentences, both answers are possible.

- 1 All the students hope to be put / *being put* into Mr Brown's class.
- 2 He can't stand *to be proved* / *being proved* wrong in an argument.
- 3 Are you prepared *to be asked* / *being asked* some difficult questions?
- 4 Anyone who is late for the bus risks *to be left* / *being left* behind!
- 5 Your aunt appeared *to be shocked* / *being shocked* by the film. What were you watching?
- 6 We knew he was missing school because he kept *to be seen* / *being seen* around town during the day.
- 7 I'm worried about *not to be chosen* / *not being chosen* for the team.
- 8 No one likes *to be delayed* / *being delaying* at airports.
- 9 The winning team stopped in their town *to be cheered* / *being cheered* by their fans after they won the cup.