

**CS2 Unit 1 Grammar and Vocabulary Activities, based on Japanese Scientist 6 (p. 7)**

Combine the words and their meaning.

[Pair Work] A: What does X mean? B: The {noun | adjective | verb} X means ....

<i>words</i>	<i>definitions</i>
nucleus	the study and treatment of diseases and injuries
gene	the central part of a cell that contains the genetic material
egg	the scientific study of the normal functions of living things
cell	a unit inside a cell which controls a particular quality in a living thing that has been passed on from its parents
medicine	the smallest unit of living matter that can exist on its own
physiology	a cell that combines with a sperm to create a baby or young animal

Ask *wh*-questions to find the underlined information. Answer them with SA + FU. Turn each sentence into a *yes/no* question and a tag question.

- Shinya Yamanaka was born in 1962.
- Shinya Yamanaka was born in Osaka, Japan.
- Shinya Yamanaka won the Nobel Prize for Physiology and Medicine in 2012.
- Shinya Yamanaka won the Nobel Prize for Physiology and Medicine in 2012.
- Shinya Yamanaka discovered the method of reprogramming mature cells to become pluripotent.
- Our lives begin when a fertilized egg divides and forms new cells.
- These new cells become increasingly varied over time. (Use *which cells*.)

Combine the two sentences with a relative pronoun.

- The scientist won the Nobel Prize for Physiology and Medicine in 2012. He was born in 1962 in Osaka, Japan.
- A fertilized egg divides and forms new cells. They in turn also divide.
- A fertilized egg divides and forms new cells. They are identical in the beginning.
- It was long thought that a mature cell could not return to an immature state. It has been proven incorrect.
- This modified egg cell grew into a new frog. This proves that the mature cell still contained all the genetic information.
- The mature cell still contains the genetic information. It is needed to form all types of cells.

Turn the sentences into the passive voice.

- Shinya Yamanaka won the Nobel Prize for Physiology and Medicine in 2012.
- People can reprogram mature cells to become pluripotent.
- People have proven this incorrect.
- John Gurdon removed the nucleus of a fertilized egg cell from a frog.
- People need the genetic information to form all types of cells.