

Unit 8, Lesson A

Question forms in the passive

- In most passive questions, the auxiliary verb (*is, were, have, etc.*) or modal verb (*will, can, etc.*) comes before the subject.

Statement	Yes-No question	Information question
The population is expected to rise.	Is the population expected to rise?	When is it expected to rise?
The issue is being discussed .	Is the issue being discussed ?	Where is it being discussed ?
The idea was developed at Columbia.	Was the idea developed at Columbia?	Where was it developed ?
Crops have been grown in water.	Have crops been grown in water?	How long have they been grown in water?
Water will be recycled .	Will water be recycled ?	How will it be recycled ?

- When the question word is the subject, the auxiliary or modal verb does not change position.
Vertical farming **is going to be discussed** next week. → What's **going to be discussed** next week?
An expert in vertical farming **will be invited** to speak. → Who **will be invited** to speak?
- Information questions about the "doer" can end in *by*.
Vertical farming **was developed by** Despommier. → Who **was** vertical farming **developed by**?

A Complete these yes-no questions in the passive for the responses given.

- A Is the population expected to increase in the future?
B Yes, the population is expected to increase by 3 to 4 billion people in the next 50 years.
- A Can more food be produced to feed this population?
B Yes, more food can definitely be produced, but it won't be easy.
- A Have any methods been developed to increase the food supply?
B Actually, several methods have been developed. One is called vertical farming.
- A Is vertical farming being used anywhere at the moment?
B Yes, vertical farming is being used in a number of places. But the method is still experimental.

B Complete the information questions in the passive.

- A How long have crops been grown in water?
B Crops have been grown in water since ancient times.
- A What is this method of farming called?
B This method of farming is called hydroponics.
- A Who was hydroponics first used by?
B Hydroponics was first used by the Egyptians, the Aztecs, and the Chinese in ancient times.
- A Where are most hydroponic crops grown?
B Most hydroponic crops are grown in greenhouses.
- A How can land be conserved?
B Land can be conserved by building high-rise hydroponic greenhouses in urban areas.
- A What kind of costs would be reduced by urban vertical farming?
B Transportation costs would be reduced by urban vertical farming.