



Read the passage carefully. Then answer each question in a full sentence, using evidence from the text where asked.

How Chatbots Learn to Talk



Have you ever chatted with a computer program online? These programs are called chatbots, and they can answer questions or help you find information. It might seem like they are thinking, but chatbots don't actually have brains or feelings like people do. Instead, they learn to "talk" by studying massive amounts of text. Imagine teaching a baby to understand language. A baby hears millions of words and sentences from people around them. Over time, the baby starts to understand what words mean and how to put them together.

Chatbots learn in a similar way, but much faster and with much more information. They are fed huge amounts of `data`, which includes countless books, articles, and conversations from the internet. This information is processed by something called a `neural network`. Think of a neural network as a special kind of computer brain that looks for patterns in the data. An `algorithm` is like a set of rules that tells the neural network how to find these patterns and make predictions. Through a process called `training`, the chatbot learns which words usually follow others, so it can create sentences that make sense.

For example, a chatbot used by a clothing store might learn to answer questions about shirt sizes or delivery times. It can quickly give you facts it has learned. However, there are many things a chatbot cannot do. It cannot truly understand your emotions if you are upset, and it cannot come up with a brand-new story or joke that it hasn't seen before. All of its responses, or `output`, are based on the patterns it found in its training data.



Chatbots are helpful tools, but they only know what they have been taught, and they don't have their own thoughts or feelings.

COMPREHENSION QUESTIONS

(1) What are computer programs that chat online called?

(2) Based on the passage, what does the word "data" refer to when talking about chatbots?

(3) What is the main idea of this passage?

(4) Why do chatbots need to study "massive amounts of text" to learn?



(5) Which sentence in the story tells you what a neural network does?

(6) Based on the passage, do you think chatbots are more helpful or harmful?

