AI cancer cures slowed by chip shortage, says UK's biggest tech boss

LEVEL B2


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I. WARM-UP

1. How do you think AI can help doctors and patients today?
2. What new technology would you like to see in the next five years?
3. Should countries try to build more chip factories? Why or why not?

II. KEY VOCABULARY

modelling
Building a detailed computer version of something to study how it works.

marker
A sign in the body, such as a DNA signal, that shows a condition.

humanoid
Shaped or acting like a human being.

shortage
A situation where there is not enough of something needed.

data centre
A building with many computers that store and process data.

manufacture
To make products in large numbers, usually in factories.

sceptical
Not fully convinced that something will happen or is true.

demand
How much people or companies want to buy a product or service.

III. READING

Rene Haas, chief executive of Cambridge-based Arm Holdings, says artificial intelligence will help cure cancer within our lifetimes. He argues that modelling how a DNA marker is affected by cancer is too complex today, but that as models improve and computers grow more capable, they are going to solve it.

He also predicts widespread humanoid robots within five years. Haas warns that a global chip shortage is slowing AI because data centres need vast numbers of processors. He calls the market supply-constrained and notes plans for multi-gigawatt data centres in France and the US, and even proposals to put them in space.

Arm's power-efficient designs are used in phones, cars and gadgets, and the firm now sells some of its own chips. Meta asked Arm to develop the Arm AGI chip, and demand since March has topped $2bn. Haas used to sit on AstraZeneca's board but stepped down in April.

He is sceptical about manufacturing chips in the UK, saying fabs are costly, need specialised workers and resources, and the ecosystem lies elsewhere. He adds that forecasts of mass job losses from AI are overstated, and that new roles would grow as robots and tools spread.

Reading text adapted from reporting by **BBC News***: "AI cancer cures slowed by chip shortage, says...". Original article linked at theenglishwire.com.*

IV. COMPREHENSION QUESTIONS

1. Who says AI could help cure cancer in our lifetimes?
2. What factor does Haas say is slowing AI growth?
3. Which company asked Arm to develop the Arm AGI chip?
4. Which countries did Haas cite for planned multi-gigawatt data centres?
5. What is Haas's view on manufacturing chips in the UK?

V. DISCUSSION

1. Will AI cure diseases faster with better data or bigger computers?
2. Should the UK invest in fabs despite high costs and resource needs?
3. Would humanoid robots in services make life better or worse? Why?
4. How could chip shortages affect everyday products you use?

VI. GRAMMAR FOCUS

Used to / would

Both describe past habits. Only 'used to' can describe a past state — a situation rather than an action. 'The building used to be a cinema' is correct; 'would be' is not.

*"Haas **used to sit** on AstraZeneca's board but stepped down in April."*

*"Engineers **would visit** factories regularly before automation spread."*

VII. GRAMMAR EXERCISE

Complete each sentence using 'used to' or 'would'.

1. The mayor (visit) ___ the market every Friday. _____
2. As a student, Ana (own) ___ a very slow laptop. _____
3. Neighbours (share) ___ ladders and tools freely. _____
4. Workers (walk) ___ to the docks before dawn. _____
5. The town (have) ___ three daily newspapers. _____

Teacher's Notes

TEACHERS ONLY

These notes are designed to help you get the most out of this lesson. Please do not share this page with students.


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I. LESSON GUIDE

- Timing: 8–10 minutes warm-up, 10 minutes vocabulary, 12–15 minutes reading and comprehension, 8–10 minutes grammar, 12–15 minutes discussion.
- Pre-teach names and terms: Arm Holdings, Meta, data centre, fab, humanoid, marker.
- First read for gist, then scan for details like $2bn demand and locations of data centres. Pair-check answers before whole-class feedback.
- Differentiate by task: stronger students summarise Haas's stance in five bullets; others highlight key sentences and explain them.

II. DISCUSSION FACILITATION TIPS

1. If students choose one side quickly, ask them to name a real dataset or computer task.
2. Run a quick cost–benefit T-chart in pairs before sharing views with the class.
3. Prompt examples (cleaning, security) and ask for two pros and two cons each.
4. Get students to list three devices they own and predict one impact per device.

III. EXTENSION ACTIVITIES

Debate: In teams, prepare and deliver a 2-minute case for or against UK chip fabs, citing the text.

Writing: Write a 90-word news brief updating the $2bn Arm AGI chip demand six months later.

IV. ANSWER KEY OVERVIEW

Comprehension questions: short factual answers from the text.

Grammar exercise: Used to / would

Discussion: open-ended. Accept any reasonable ideas supported by examples and reasoning.

Answer Key

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IV. COMPREHENSION QUESTIONS

1. Who says AI could help cure cancer in our lifetimes?
   Rene Haas, the CEO of Arm Holdings.
2. What factor does Haas say is slowing AI growth?
   A global shortage of chips needed for data centres.
3. Which company asked Arm to develop the Arm AGI chip?
   Meta, the owner of Facebook.
4. Which countries did Haas cite for planned multi-gigawatt data centres?
   France and the US.
5. What is Haas's view on manufacturing chips in the UK?
   He is sceptical: fabs are costly, need specialised workers and resources, and the ecosystem lies elsewhere.

V. DISCUSSION

Open answers. Accept any reasonable ideas supported by examples and reasoning.

VI. GRAMMAR FOCUS

Key point: Both describe past habits. Only 'used to' can describe a past state — a situation rather than an action. 'The building used to be a cinema' is correct; 'would be' is not. (Example 2 constructed.)

> *"Haas* **used to sit** *on AstraZeneca's board but stepped down in April."*
>
> *"Engineers* **would visit** *factories regularly before automation spread."*

VII. GRAMMAR EXERCISE

Complete each sentence using 'used to' or 'would'.

1. The mayor ___ the market every Friday. **used to/would visit**
2. As a student, Ana ___ a very slow laptop. **used to own**
3. Neighbours ___ ladders and tools freely. **used to/would share**
4. Workers ___ to the docks before dawn. **used to/would walk**
5. The town ___ three daily newspapers. **used to have**