



Microchips

Reading to Writing Summary

EXAMPLE

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Student

Two types of lesson

Lesson#1: [Easy] **** [B2/C1]

1. Predict the content of the text. Write down key terms & ideas.
2. Read the text & check words & meanings with a dictionary.
3. Identify the key points and supporting details and complete the **outline**.
4. Write a one-paragraph summary of 200-250 words.
5. Check key points with the **completed outline** & **model answer** (try to achieve 4 key points and 4 supporting points).
6. Answer the critical thinking questions & check possible answers.

Lesson #2: [Hard] **** [C1]

1. Read the text – no dictionary.
2. Identify the key points and supporting details and complete the **outline**.
3. Write a one-paragraph summary of 200-250 words.
4. Check key points with the **completed outline** & **model answer** (try to achieve 4 key points and 4 supporting points).
5. Answer the critical thinking questions & check possible answers.

Teacher

Two types of lesson

Lesson#1: [easy] **** [B2/C1]

1. Distribute the text a week /day before the test. Students read, check vocabulary & meanings.
2. Test day: distribute a **new copy of text** and the **summary question**.
3. Set 1 hour to read the text, take notes and write a one-paragraph summary of 200-250 words.
4. Feedback¹: take in and mark [[use our correction code*](#)].
5. Feedback²: distribute **completed outline** & **model answer**. Students compare with their own work.
6. Summary marking: **should contain at least 4 main ideas with support** – see [summary key points](#).
7. Extra: critical thinking questions / group discussion (30 minutes).

Lesson #2: [hard] **** [C1]

1. Set 1 hour to read the **text** and write a one-paragraph summary of 200-250 words.
3. Feedback¹: take in and mark [[use our correction code*](#)].
4. Feedback²: distribute **completed outline** & **model answer**. Students compare with their own work.
5. Summary marking: **should contain at least 4 main ideas with support** – see [summary key points](#).
6. Extra: critical thinking questions / group discussion (30 minutes).

Correction code*: www.academic-englishuk.com/error-correction

The microchip shortage **EXAMPLE**

By C Wilson (2022)

The current global shortage of the miniscule, integrated circuits known as microchips and found in a [REDACTED], to cars looks set to continue for a number of years, as demand for these low-cost but highly-efficient [REDACTED]. Microchip production is known for its fluctuations, as can be seen over the last three years wherein [REDACTED] but then two years later grew from 6.5% to 26%, and with sales toppling almost one billion in April 2021, yet this growing scarcity first seen in the electronics industry, has now spread to [REDACTED] the automotive [REDACTED] considerable consequences (Gooding, 2021; Shein, 2021).

The microchip shortage can be traced back to the beginning of 2020, when the Covid-19 pandemic hit. Shein (2021) argues that the increase [REDACTED] and home-schooling meant chip manufacturers shifted their focus from cars. Now that these restrictions have [REDACTED] our incessant need for cutting-edge technology once again increased, but also prices of items such as computer [REDACTED] and 8% respectively (The Week, 2021). Although the demand for cars has returned to a high level, production [REDACTED] worth of lost production due to shutdowns of Ford and General Motors plants across North America and Jaguar Land Rover's poor sales over the last two years (Gooding, 2021). As [REDACTED], many car companies such as Nissan, Renault and Ram Trucks have had to omit certain elements from [REDACTED], such as navigation systems and intelligent rear view mirrors for blind spots (Shead, 2021). What has also become apparent over these last two years is the [REDACTED] manufacturers. Although [REDACTED] production and 70% of memory chip output now happens in Asia because costs are lower, specifically at Samsung [REDACTED] Manufacturing Company (TSMC), which also suffered at the hands of the country's worst drought in [REDACTED] many manufacturers with [REDACTED] (Shein, 2021; The Week, 2021; Gooding, 2021). Therefore, it could be said that although global health crises and natural disasters cannot be foreseen, [REDACTED] of manufacturing diversification.

In order to prevent the current crisis from deepening, Gooding (2021) reveals that in Asia, both Samsung and TSMC plans [REDACTED], whereas in Europe, the European Commission aims to double its global chip production by 2030 with up to €30bn as [REDACTED] manufacturers (Shead, 2021). With regard to North America, Shein (2021) reports that the new \$250bn Innovation [REDACTED] the sector, in [REDACTED] and Texas Instruments who have vowed to build a total of eight new fabrication facilities. However, not only are the fabrication plants extremely complex and expensive to construct, [REDACTED] it can [REDACTED] the silicon required into useable chips (The Week, 2021). Moreover, as reported by Shein (2021), microchip supply chains could be more transparent and diverse, with a focus on more regional [REDACTED] industry [REDACTED] a just-in-time approach and more towards just-in-case, and by using the analytical and statistical data available, [REDACTED] able to 'match [REDACTED] and manual processes'. Thus, although plenty of investment is being put forward, what is also needed [REDACTED] major changes are made to supply chains.

As it is estimated that the microchip shortage [REDACTED], and as a result, product delays could continue for even longer, the optimal solution would be for semiconductor [REDACTED] in supply and demand. This can be achieved through avoiding a dependency on Samsung and TSMC and making better use of the supply and demand data available in order to be [REDACTED]. As [REDACTED] how much we need to have the latest gaming console or OLEG television, so that the [REDACTED] time.

Reference list

Gooding, M., (2021). *Here's what we know about the global chip shortage* [online]. Available at: <https://techmonitor.ai/technology/chip-shortage-tsmc-samsung-us-uk-taiwan-automotive> [Viewed 02.03.2022].

Shead, S., (2021). *The global [REDACTED]* [online]. Available at: <https://www.cnn.com/2021/05/07/chip-shortage-is-starting-to-have-major-real-world-consequences.html> [Viewed 20.03.2022].

Shein, E., (2021). *Global chip shortage: Everything you need to know* [online]. Available at: [REDACTED] [Viewed 20.03.2022].

The Week, (2021). *'There is no end in sight': everything to know about the great microchip shortage* [online]. Available at: [REDACTED] [Viewed 20.03.2022].

Summary: Key Points

Take notes on the key points of the text.

1. Main idea:
Support:
2. Main idea:
Support:
3. Main idea:
Support:
4. Main idea:
Support:

Summary: Key Points (ANSWERS)

Take notes on the key points of the text.

<p>1. Main idea: The unpredictability of the microchip industry</p> <p>Support:</p> <ul style="list-style-type: none"> • Miniscule, [redacted] (MC). Low-cost eff. semiconductors. • Shortage = a number of years. • Microchip [redacted] in 2018 = 2 years later = 6.5% to 26%. • 1 bn sales [April 2021]. • Scarcity = [redacted] (Gooding, 2021; Shein, 2021).
<p>2. Main idea: I The rationale for the issues of scarcity</p> <p>Support:</p> <ul style="list-style-type: none"> • MC shortage = [redacted] (2020). • ↑ demand = working remotely & home-schooling (Shein, 2021) • X restrictions = ↑ demand for cars & technology. • Car comp [redacted] Shead, 2021). • World's reliance = 2 manufacturers. Samsung (S. Korea) & Taiwan Semiconductor [redacted] (TSMC). • > 80% of production & 70% all MCs = Asia. • [redacted] (Shein, 2021; The Week, 2021; Gooding, 2021).
<p>3. Main idea: Focused global solutions</p> <p>Support:</p> <ul style="list-style-type: none"> • Samsung & TSMC plans [redacted] (Gooding, 2021) • EU Comm. to double glob. chip prod. by 2030 = €30bn (Shead, 2021). • New US [redacted] Bill (Shein, 2021). • Intel Corp. and Texas Instr. = build 8 new fabri. facilities. • Fabri. plants = [redacted] to construct. • MCs = elaborate = 4 months transform silicon = useable chips (The Week, 2021). • Supply chains = [redacted] reg. sourcing, delivery strats (automotive industry - just-in-time approach = just-in-case), [redacted] and stat data = ' [redacted] reduce errors and manual processes' (Shein, 2021). • Time = major [redacted]
<p>4. Main idea: Improvements in supply and demand</p> <p>Support:</p> <ul style="list-style-type: none"> • MC shortage = many years. • Op. sol. = [redacted] of supply & demand. • Reduce depend. on Samsung and TSMC. • Impr. [redacted] of pot. declines and peaks. • Consumers = consider not buying latest gadget. • Industry [redacted]

Summary

Task: Write a 200-250 word summary on the key features of the text.

Word Count: _____

Summary: Microchips

Sample

According to Wilson (2022), the world is experiencing a [REDACTED] to as [REDACTED] production is a volatile industry with fluctuations in supply and demand but recently there has been [REDACTED] of chips in over 170 electronic industries (Gooding, 2021; Shein, 2021). There are two main reasons for the shortage. The first is [REDACTED] which led to [REDACTED] that people could work remotely and offer home education to their children (Shein, 2021). The second is the world's reliance on two main [REDACTED] microchip output: Samsung and Taiwan Semiconductor Manufacturing Company (TSMC). There are a range of global [REDACTED] microchip shortage which consist of the two main manufacturers investing \$500bn in additional capacity [REDACTED] chip [REDACTED] markets. In addition, Shein (2021) calls for supply chains to be more diverse and transparent, [REDACTED] statistical data techniques to avoid potential declines and peaks. Overall, Wilson (2022) highlights that change in supply chains [REDACTED] but this could take a couple of years.

225 words

Critical Thinking Questions

i) What's the stance of the author? What is the evidence for this?

[2 points]

ii) Is this a credible article? Yes /no – why

[2 points]

iii) Highlight three ideas in the text you would use for an essay on: 'How has [redacted] been affected by [redacted] done?'

[4 points]

iv) Highlight two areas in the text that you question, disagree with or lack evidence.

[2 points]

Critical Thinking Questions

i) What's the stance of the author? What is the evidence for this?

The writer holds a generally neutral stance offering key facts of the microchip industry. However, there are places where the author's stance shows. In P2, the author voices their opinion on a lack of manufacturing diversification.

P2. 'Therefore, it **could be said** that [redacted] cannot be foreseen, the same **cannot be said for the lack of** [redacted].

In P3, the author states it's necessary for more time.

P3. Thus, [redacted] what **is also needed** is time, and this will **not be enough unless** major [redacted], chains.

In P4, the author reiterates their stance for less dependency on Asia and focusing on supply and demand. Also, they question consumer buying patterns.

P4. This **can be achieved** [redacted] and **making better use of** the supply and demand data...

As consumers, it **is also perhaps worth considering** how much [redacted] or OLEG [redacted] **can recover** in time.

[2 points]

ii) Is this a credible article? Yes /no – why?

Yes, to a certain extent but credibility is debatable. There are four sources used but the sources are mainly media based / news websites. [redacted] and informative but who are the authors? What authority do they have on the subject? There are no reference lists on the articles which [redacted].

[2 points]

iii) Highlight three ideas in the text you would use for an essay on: 'How has [redacted] been affected by [redacted] done?'

P1: Growing scarcity in the electronics industry, = 170 industries, = automotive industry.

P2: Increase electronics = [redacted] = MC manufacturers shifted their focus from cars.

P2: Demand for cars = high level, [redacted], of Ford and General Motors (North America) & Jaguar Land Rover's poor sales = last 2 years.

P2: Modern =1,000s chips [redacted] = omit certain elements e.g. nav. systems & intelligent rear view mirrors (Shead, 2021).

P3: Shein (2021),[...] [redacted], just-in-case, and by using the analytical and statistical data, all parts of the supply chain would be [redacted] with [redacted].

These are the main ideas focused on cars but any solutions regarding the microchip sector are valid too.

[4 points]

iv) Highlight two areas in the text that you question, disagree with or lack evidence.

P1: Why is microchip production known for its fluctuations? **What causes the fluctuations of the market?** [redacted]

P1: Yet this growing scarcity first seen in the electronics industry, has now spread to almost 170 industries. [redacted] **quite low.**

P2: The microchip shortage can be traced back to the beginning of 2020 [redacted] hit. **Was it just this?** [redacted] **by 26% so was production a variable in the shortage?**

P2: Although the [redacted] has not, as can be seen in the \$47 billion worth of lost production due to shutdowns of Ford and General Motors plants across North America and Jaguar [redacted]. **What has [redacted] they going into bankruptcy? What is their strategy to this lost production?**

P2: (TSMC), which also [redacted] over fifty years in 2021, leaving many manufacturers with insufficient quantities of water needed to make chips. **Is this the main reason for microchip shortage?** [redacted] **What are TSMC doing about [redacted] ?**

P3: Both Samsung and TSMC plan to invest \$451bn and \$100m respectively in additional capacity. **What will they invest in?** [redacted] **investment be spent? Why is [redacted] Samsung?**

P3: Fabrication plants are extremely complex and expensive to construct. **How much does it cost and how [redacted]**

P3: Microchip supply chains could be more transparent. **What does this mean? What type of transparency?** [redacted]

P3: What is also needed is time. **How much time is needed?** [redacted]

P4: This can be achieved through avoiding a dependency on Samsung and TSMC. **Is this achievable? These two dominate [redacted], difficult.**

[Any 2 of these – obviously subjective so accept any credible student answer too].

[2 points]