

**Read this document
completely before doing
anything!**

Part A Questions

1. Discuss, and make a comparison of, pollution by conventional fossil-fuel power plants and nuclear-fission power plants. Consider thermal pollution, chemical pollution, and radioactive pollution.
2. A sample has an activity of 0.0061 Bq per gram of carbon.
 - a. Find the age of the sample, assuming that the activity per gram of carbon in a living organism has been constant at a value of 0.23 Bq.
 - b. Evidence suggests that the value of 0.23 Bq might have been as much as 40% larger. Repeat part (a), taking into account this 40% increase.
3.
 - a. A sample is being dated by the radiocarbon technique. If the sample were uncontaminated, its activity would be 0.011 Bq per gram of carbon. Find the true age (in years) of the sample.
 - b. Suppose the sample is contaminated, so that only 98.0% of its carbon is ancient carbon. The remaining 2.0% is fresh carbon, in the sense that it contains has not had any time to decay. Assuming that the lab technician is unaware of the contamination, what apparent age (in years) would be determined for the sample?

Part B Questions

1. How did using ChatGPT change (or not change) your understanding of the physics concept involved? (*Focus on what you understood better, differently, or still found confusing after using ChatGPT.*)
2. When using ChatGPT, were you mainly checking answers, following steps, or actively explaining and questioning ideas? (*Describe how you interacted with ChatGPT, not whether you liked it.*)
3. At what point did you realize ChatGPT's explanation was helpful or insufficient, and what did you do next? (*Mention a specific moment when you judged the explanation and how you responded, e.g., asked follow-up questions, stopped using it.*)
4. Did using ChatGPT help you solve similar physics problems on your own afterward? Why or why not? (*Think about whether you could apply the idea independently, not just repeat the same steps.*)
5. How did you decide whether ChatGPT's solution or explanation was correct? (*Explain how you checked or evaluated the answer, e.g., equations, logic, units, prior knowledge.*)

For Part B, make sure to type it out in Word and then save as pdf, no handwriting please.

How to export your chat?

For Part A, Step 1

The screenshot shows a Microsoft Word document titled "Content_analy" with a tab for "Chicken Rice Recipe". The browser window displays chat history with ChatGPT. A large red arrow points from the top right towards the "Share" button in the browser's toolbar.

Microsoft Word - Content_analy

Chicken Rice Recipe

chatgpt.com/c/698c21db-be94-839e-b087-d8aaa9e50ec9

ChatGPT

Add soy sauce + pepper

Not Italian. But delicious.

If you literally only have oil + garlic + soy sauce

You can:

- Fry garlic in oil
- Eat it with **anything starchy**
- Or just spoon it over crackers 🍪 (we've all been there)

Real talk

At this point, don't aim for "chicken rice".

Aim for:

Warm + savoury + garlicky

That's the soul of it.

Ask anything

ChatGPT can make mistakes. Check important info.

Microsoft Word ribbon icons

Type here to search

Windows taskbar icons: File Explorer, Mozilla Firefox, Microsoft Edge, Microsoft Word, Microsoft Powerpoint

System tray: 2:31 PM, ENG, 11/2/2026, Settings

Step 2

Microsoft Word - Content_analy X Chicken Rice Recipe X + chatgpt.com/c/698c21db-be94-839e-b087-d8aaa9e50ec9 Sign in Sync and save data Sign In

ChatGPT Add soy sauce + pepper Free offer

New chat Not Italian. But delicious.

Search chats

Images

Apps

Codex

GPTs

RPH Untuk Cikgu

Explore GPTs

Projects

New project

proposal

Your chats Shafiq R Free Claim offer

If you literally only have oil + garlic + soy sauce

You can:

- Fry garlic in oil
- Eat it with anything starchy
- Or just spoon it over crackers (we've all been there)

Real talk

At this point, don't aim for "chicken rice".

Aim for:

Warm + savoury + garlicky

That's the soul of it.

Ask anything

ChatGPT can make mistakes. Check important info.

New tab Ctrl+T

New window Ctrl+N

New private window Ctrl+Shift+P

Bookmarks >

History >

Downloads Ctrl+J

Passwords

Extensions and themes Ctrl+Shift+A

Print... Ctrl+P

Save page as... Ctrl+S

Find in page... Ctrl+F

Translate page...

Zoom - 100% + ↗

Settings

More tools >

Report broken site >

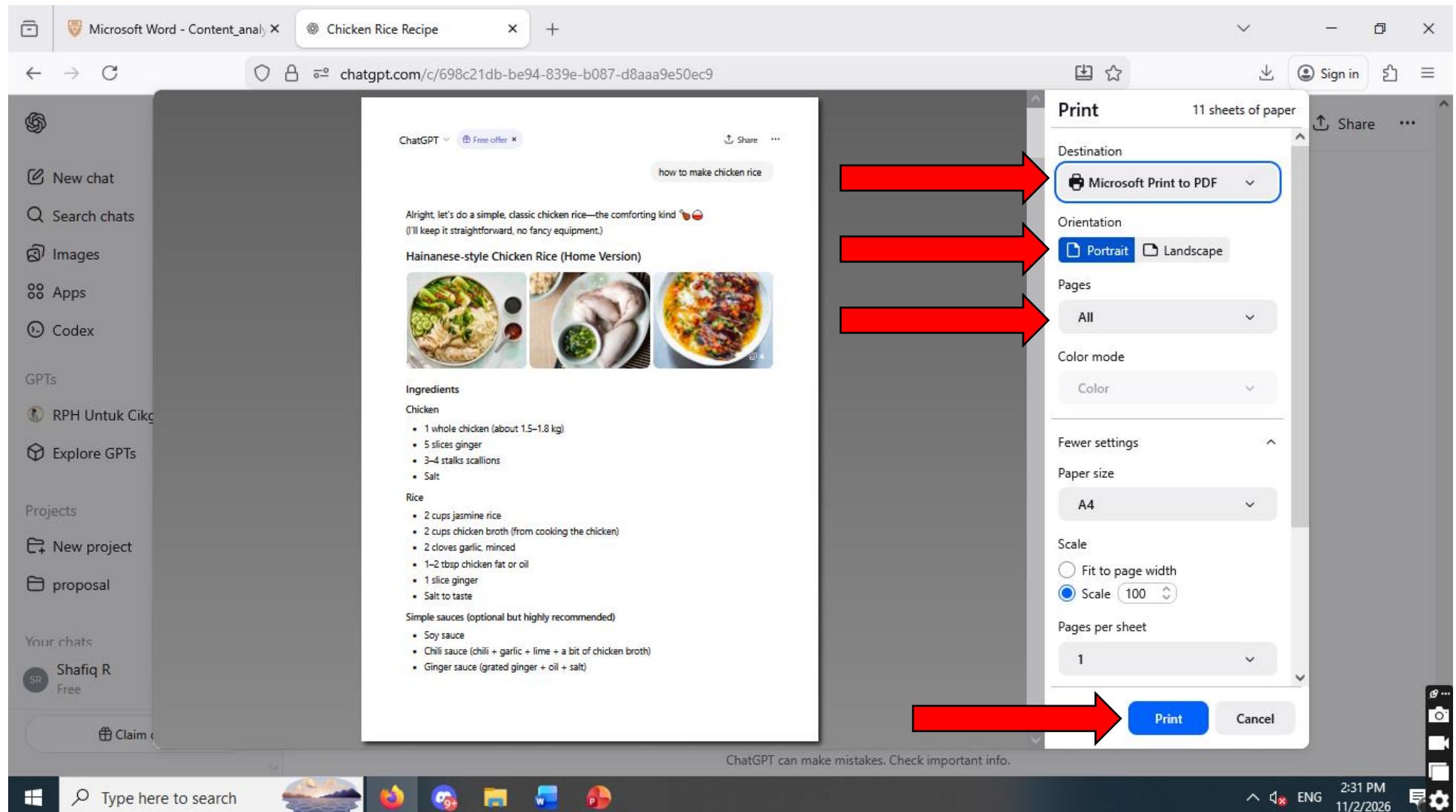
Help >

Exit Ctrl+Shift+Q

Type here to search ENG 2:31 PM 11/2/2026



Step 3



Name your file “**yourname_partA.pdf**”

**For Part B, make sure to type it
out in Word and then save as pdf,
no handwriting please.**