🎯 Project Aim:

To explore and explain how ultrasound scans work, their role in medicine, and why they are a valuable diagnostic tool.

☑️ Learning Goals:

By completing this project, you will:

- Understand the science behind ultrasound imaging
- Learn how ultrasound is used in real-world medical settings
- Evaluate its advantages and limitations
- Develop your research, summarizing, and presentation skills

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📌 Your Task:

Research and create a **mini-report or multimedia presentation** that answers the following five key questions:

🔍 Research Questions:

1. **What is ultrasound?**
   - What type of waves are used?
   - What are their properties (e.g., frequency, non-ionizing)?
2. **How does ultrasound create images?**
   - What is the role of the transducer?
   - How are echoes turned into pictures?
3. **How is ultrasound used in medicine?**
   - Common uses (e.g. pregnancy scans, organ imaging, heart exams)
   - Include at least **two real-life examples**
4. **What are the advantages and disadvantages of ultrasound scans?**
   - Why is it preferred in some cases?
   - What are its limits compared to other scans like X-rays or MRIs?
5. **Is ultrasound safe?**
   - Are there any known risks?
   - What do scientists and doctors say?

📕 Final Product Options (choose one):

Option A: Written Report

- ½ - 1 page of A4
- Include diagrams or labeled illustrations
- Use headings for each of the 5 research questions

Option B: Slideshow Presentation

- 8–10 slides with clear titles and key points
- Include at least 2 visuals (e.g. diagrams, charts, scan images)
- Optional: Record a voiceover or presenter notes

Option C: Illustrated Poster (Digital or Hand-Drawn)

- Clear sections answering the 5 questions
- Use images, diagrams, and brief bullet points
- Must be neat, creative, and informative

📚 Research Tips:

- Use reputable sources: NHS.uk, BBC Bitesize, Mayo Clinic, HowStuffWorks, or educational YouTube channels like SciShow or TED-Ed.
- Keep notes as you go—summarize in your own words!
- Track your sources—include a short bibliography or list of websites/books you used.