

### Comparisons - Small Models vs. Big Models Answer Key

1. **Small Models** are often cheaper to run, while **Big Models** require much more electricity and servers.
  - *Reason: Small models are efficient and low-cost; big models need powerful infrastructure.*
2. Because they are trained on massive amounts of data, **Big Models** can handle more languages with greater accuracy.
  - *Reason: Big models have larger training data and parameters.*
3. **Small Models** are light enough to run on smartphones or laptops without internet access.
  - *Reason: Their low memory needs allow local device use.*
4. **Both** sometimes give confusing or incorrect answers, so users must think critically.
  - *Reason: Errors are common across model sizes.*
5. A bakery chatbot answering simple menu questions would work best on **Small Models**, but advanced medical research explanations would require **Big Models**.
  - *Reason: Simple vs. highly complex tasks.*
6. **Big Models** provide highly detailed, nuanced responses, while **Small Models** usually respond more quickly.
  - *Reason: Size vs. speed trade-off.*
7. Teachers in rural schools with slow internet might prefer **Small Models** because they are more practical.
  - *Reason: Small models don't need constant connectivity.*
8. Scientists needing complex reasoning and specialized knowledge would rely on **Big Models**.
  - *Reason: Big models are stronger in advanced reasoning tasks.*
9. **Both** can summarize articles, help with writing, and answer everyday questions.
  - *Reason: Shared ability of small and big LLMs.*
10. The choice between **Small Models** and **Big Models** depends on whether speed and cost or power and detail are more important.
  - *Reason: Users must weigh trade-offs when choosing.*