

Name _____

Error Spotting: Small vs. Big Models

Large Language Models (LLMs) come in two main sizes: small and big. **Small models** are fast, light, and inexpensive. They can run directly on laptops or even smartphones without internet access, which makes them useful for schools, families, and small businesses. Their trade-off is that they often struggle with very complex reasoning or tasks that require advanced technical knowledge.

Big models are trained with billions or even trillions of parameters. They are powerful enough to provide detailed answers, handle multiple languages, and perform advanced reasoning. The downside is that they require powerful servers, consume a lot of electricity, and cost much more to run.

Both small and big models can write, summarize, and answer questions, but both may also produce mistakes. Users should always check their outputs carefully.

Instructions: Each explanation below contains mistakes about small and big models. Read carefully, underline or highlight the errors, and then rewrite the explanation correctly in your own words.

Problem 1 - Small models are the most advanced type of AI. They handle complex reasoning better than any other model and are excellent at switching between dozens of languages. Big models are weaker and simpler, designed only for basic everyday use.

Problem 2 - Big models are faster and cheaper than small models. They run on phones without internet and require almost no electricity. Small models are slower and cost more, but they are highly detailed and provide the most accurate answers.

Problem 3 - Both small and big models are perfect and never make mistakes. Small models are especially strong in technical research, while big models are only good for answering simple questions.

Problem 4 - Small models are extremely expensive to run because they need powerful servers and huge amounts of energy. Big models are affordable and practical in schools because they can easily fit on laptops.

