Student Answers and Explanations

Notes for SHS | Topic 60 | Global Student Learning Resources

1. Tokenization

Any plausible alternatives must be labeled guesses; production tokenizers can use word fragments and punctuation and may differ by model. Use the official tokenizer tool for actual counts.

2. IDs and vectors

ID is an integer index for a token; an embedding is a learned numerical vector representing the token at a stage of processing. A 2D sketch is simplified.

3. Attention

Book and bag are possible antecedents, and the sentence is potentially ambiguous. Attention weights show computation, not definitive human interpretation.

4. Probabilities

0.75 + 0.15 + 0.10 = 1.00. Sun is most probable; stochastic selection could still pick Moon or Planet.

5. Toy model

After student: checks 0.5, reads 1/3, asks 1/6. Missing neural embeddings, transformer attention, large-scale learning, instruction post-training, advanced reasoning, tools.

6. Better prompt

Example: Explain photosynthesis to a 15-year-old in 150 words, describe one relevant diagram, then ask two practice questions with model solutions. Tell me which claims I should verify in a school textbook.

7. Citations

Look up title, author, publisher and date in independent catalogues, confirm DOI resolution, read actual source and compare the claim. A plausible-looking citation is not evidence.