Name _____

AI Budget Scenarios

Instructions: Each company has **$100 to spend on AI**. Small models cost **$2 per use**. Big models cost **$10 per use**. Solve each problem and decide if they should use Small Models, Big Models, or both.

Problem 1: Customer Chatbot - A bakery expects **40 customer questions** this week. Each question costs $2 with a small model or $10 with a big model. Can the bakery afford either option with $100?

Problem 2: Document Summaries - An office needs **25 summaries** of short reports. Each summary costs $2 with a small model or $10 with a big model. Which option fits within the budget?

Problem 3: Technical Translations - A company needs **12 translations** into multiple languages. Each translation costs $2 with a small model or $10 with a big model. Can they afford big models only?

Problem 4: Tutoring Sessions - A school wants **30 tutoring sessions** for students. Which model should they pick if they want to stay under $100?

Problem 5: Research Lab - A lab must analyze **15 complex reports**. Each analysis costs $2 with a small model or $10 with a big model. Which option works better within the budget?

Problem 6: Marketing Help - A small business wants **50 ad slogans** created. Can they afford small models, big models, or both with $100?

Problem 7: Mixed Tasks - A company wants to do **20 simple customer questions** and **5 complex scientific explanations**. Could they afford this mix with $100?

Problem 8: Balanced Use - A startup wants to split its $100 evenly between small and big models. How many uses could they buy of each?