1. **(POGIL)** Define a ***pseudocode algorithm*** that will efficiently play the guessing game.
2. **(POGIL)** To guess a number between 1 and 100, what's the maximum number of guesses your algorithm would take?
3. **(POGIL)** To guess a number between 1 and 500, what's the maximum number of guesses your algorithm would take?
4. Suppose you have a deck of cards and you want to find the Ace of Spades. If the deck is shuffled, which is the best search algorithm to use and why?
5. Give an example of a search problem you encounter in everyday life. Does it use sequential, binary, or some other search algorithm?

**Portfolio Reflection Questions**

**Make a copy** of this document in your Portfolio Assignments folder and answer these questions in the spaces below. Once complete, turn in this assignment according to the steps given by your teacher.

[5.3 Search Algorithms Curriculum Page](https://course.mobilecsp.org/mobilecsp/unit?unit=24&lesson=161)

Answer the following questions:

Questions for the Classroom Activity

1. (**POGIL**) Define a ***pseudocode algorithm*** that will efficiently play the guessing game.

**Answer**

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2. (**POGIL**) To guess a number between 1 and 100, what's the maximum number of guesses your algorithm would take?

**Answer**

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3. (**POGIL**) To guess a number between 1 and 500, what's the maximum number of guesses your algorithm would take?

**Answer**

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4. Suppose you have a deck of cards and you want to find the Ace of Spades. If the deck is shuffled, which is the best search algorithm to use and why?

**Answer**

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5. Give an example of a search problem you encounter in everyday life. Does it use sequential, binary, or some other search algorithm?

**Answer**

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