1. **(POGIL)** Explain how a parallel algorithm speeds up a solution to a problem compared to a sequential algorithm using the POGIL activities with searching and sorting cards as examples.
2. **(POGIL)** What was the speed up you measured in these activities?
3. **(POGIL)** Did the speed up you measured change proportionally to the number of processors? For example, if you doubled the number of processors, did the speed double, less than double, or more than double? Explain what you believe led to the results you observed.
4. **(POGIL)** What are the benefits and challenges of parallel computing?

**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.

[5.9 Parallel Computing Lesson](https://runestone.academy/runestone/books/published/mobilecsp/Unit5-Algorithms-Procedural-Abstraction/Parallel-Computing.html)

Answer the following questions:

Questions for the Classroom Activity

1. (**POGIL**) Explain how a parallel algorithm speeds up a solution to a problem compared to a sequential algorithm using the POGIL activities with searching and sorting cards as examples. What was the speed up you measured in these activities?

**Answer**

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| --- |

2. (**POGIL**) What was the speed up you measured in these activities?

**Answer**

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| --- |

3. **(POGIL)** Did the speed up you measured change proportionally to the number of processors? For example, if you doubled the number of processors, did the speed double, less than double, or more than double? Explain what you believe led to the results you observed.

**Answer**

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| --- |

4. (**POGIL**) What are the benefits and challenges of parallel computing?

**Answer**

|  |
| --- |