**Blue Waters Petascale Semester Curriculum v1.0**

**Unit 2: Parallel Computing Concepts**

**Lesson 5: Parallel Algorithms 2**

**Sample Assessment**

*Developed by Beau Christ for the Shodor Education Foundation, Inc.*



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*Browse and search the full curriculum at*[*http://shodor.org/petascale/materials/semester-curriculum*](http://shodor.org/petascale/materials/semester-curriculum)

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*We want to hear from you! Please let us know your experiences using this material by sending email to* [*petascale@shodor.org*](mailto:petascale@shodor.org)

1. Is it possible to parallelize a sorting algorithm? If so, how? If not, why not?
2. What is one way to parallelize a matrix multiplication computation?
3. Why can’t the generic Bubble Sort be parallelized?
4. What is the trapezoidal rule? Describe how it can be parallelized.