|  |  |  |
| --- | --- | --- |
| **Group Number:** | **Period:** | **Date:** |
| **Names:** | | |

|  |  |
| --- | --- |
|  | **Sorting Project**  Worksheet and Presentation 15 points Summative Group |

Directions:

* You will work in your row groups of 4-6 members.
* You will watch the five sorting videos in Google Classroom and choose three to research and write about.\*
* Your project will compare the various sorting methods and describe how they work and under what conditions they outperform or for what applications are they best suited.
* Each group will demonstrate only one method to the class.
* Group can conduct research on the internet for additional information.
* Groups will present in random order.
* Presentations will take place on Day 2 of the project.
* Numbered Styrofoam cups will be available for you to use for your presentation.
* You are welcome to bring in other items or props for your presentation, just clear with the teacher first.

\*Groups of 3-4 members choose two sortation methods.

Sorting Methods

|  |  |
| --- | --- |
| Selection Sort: | <https://www.youtube.com/watch?v=f8hXR_Hvybo> |
| Insertion Sort: | <https://www.youtube.com/watch?v=DFG-XuyPYUQ> |
| Merge Sort: | <https://www.youtube.com/watch?v=EeQ8pwjQxTM> |
| Bubble Sort: | <https://www.youtube.com/watch?v=8Kp-8OGwphY> |
| Quicksort: | <https://www.youtube.com/watch?v=aQiWF4E8flQ> |

(Please see next page ->)

|  |  |
| --- | --- |
| Sort #1 |  |

|  |
| --- |
| Description: |
| Advantages: |
| Disadvantages: |

|  |  |
| --- | --- |
| Sort #2 |  |

|  |
| --- |
| Description: |
| Advantages: |
| Disadvantages: |

|  |  |
| --- | --- |
| Sort #3 |  |

|  |
| --- |
| Description: |
| Advantages: |
| Disadvantages: |

Grading Rubric:

|  |  |
| --- | --- |
| Do you have? | Points |
| Names for you and your group members with individual contributions indicated via font color | 1 |
| Three sortation methods explained | 12 |
| Well written text and use of citations as is necessary | 1 |
| Complete and on time ready to present and all group members participate | 1 |
| **TOTAL** | **15** |

Tips for a superior grade

* Be prepared to demonstrate your chosen sortation method
* Demonstrate knowledge of subject matter during presentation