# Sorting Algorithm Storyboard Proficiency Rubric

*Visual documentation of sorting algorithm steps*

## EMERGING

*Missing algorithms or major gaps in understanding the sorting process*

- Covers fewer than 5 algorithms or skips many steps; hard to follow the sorting process
- Diagrams are messy or hard to read; missing labels for key parts like sorted/unsorted sections
- Shows incorrect logic or wrong order of operations for one or more algorithms
- Submits more than 3 days late without communication, uses wrong file format, or leaves sections incomplete

## PROFICIENT

*Complete storyboards with clear logic that is easy to follow*

- All 5 algorithms shown from unsorted to sorted with no skipped steps
- Diagrams are neat with consistent labels for comparisons, swaps, and sorted/unsorted parts
- Starting lists chosen well to show all algorithm behaviors; logic flows clearly
- Submits on time as organized PDF, communicates about any delays, all sections complete

## DEVELOPING

*All algorithms included but some steps unclear or missing detail*

- Covers all 5 algorithms but skips some steps or uses starting lists that hide key operations
- Diagrams are readable but labels are inconsistent; some symbols not explained
- Logic is mostly correct but requires effort to follow; some transitions unclear
- Submits 1–2 days late or requests last-minute extension; PDF organized but some sections rushed

## EXTENDING

*Impressive quality with sub-procedure breakdowns and polished presentation*

- Includes separate storyboards for sub-procedures (find min, partition, shift) referenced in main diagrams
- Visual design is polished; uses color, spacing, or creative layouts to enhance clarity
- Demonstrates deep understanding by choosing lists that highlight edge cases or tricky steps
- Submits quality work early, well-organized sections, clear communication throughout

**Assessment Note:** Submit a single organized PDF with one section per algorithm. Each storyboard should sort a list of 7 integers using step-by-step diagrams. Label key features (current terms, sorted/unsorted parts) and processes (compare, swap). Optional: create separate sub-procedure storyboards for complex steps.