

Unit 2: Quadratic Functions and Equations — Trajectory Project

| Criteria | 4 – Excellent | 3 – Good | 2 – Fair | 1 – Poor | 0 – Missing |
|----------------------------------|---|--|---|--|-------------|
| Equation Setup | Quadratic equation realistic, matches motion, variables defined | Equation reasonable, small unrealistic coefficient | Attempted but incomplete or unrealistic | Incorrect equation with little relevance | None |
| Forms of Quadratics | Correctly shows standard, vertex, and factored forms | At least two forms correct; one error | One form attempted but flawed | Minimal attempt | None |
| Analysis | Vertex, intercepts, axis correctly identified & explained | Mostly correct, small errors | Partially correct; incomplete | Very limited attempt | None |
| Real-World Connection | Results (max height, flight time) interpreted clearly in motion context | Connected but vague | Mentioned but misinterpreted | Minimal attempt | None |
| Visual & Presentation | Graph neat, labeled, realistic parabola shown | Graph present but missing labels | Graph rough or unclear | Minimal graph | None |