

Finch Olympics Rubric

| Criterion | Basic | Proficient | Advanced |
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| Scientific Concepts and Calculations (Kinetic Energy & Velocity) | Attempts calculation but makes significant errors in measuring or computing kinetic energy. Shows partial or minimal understanding of the concept. | Correctly calculates kinetic energy with minor errors in measurement or computation. Understands the relationship but needs slight clarification. | Accurately calculates kinetic energy using mass and velocity, correctly measuring all necessary variables. Demonstrates a deep understanding of the relationship between kinetic energy, velocity, and mass. |
| Coding and Robotics Performance | Attempts to code the robot but encounters significant difficulties requiring major corrections or does not effectively code the robot to complete the challenge. | Codes the robot with minor errors requiring some adjustments but completes the task successfully. | Successfully codes the robot to complete the maze and compete effectively in sumo wrestling with minimal assistance. |
| Collaboration & Personal Accountability | Inconsistently follows group norms and contributes minimally to teamwork or does not contribute meaningfully. | Generally contributes to the group, follows most norms, and takes some responsibility. | Actively contributes to group efforts, follows group norms, and takes responsibility for individual and team tasks. |
| Metacognition & Reflective Evaluation | Reflects superficially with minimal connection to learning and performance or does not engage in reflection. | Provides reflections with some insights but lacks depth in self-assessment. | Thoughtfully reflects on strategies, strengths, and weaknesses, making meaningful adjustments based on experience. |

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| Creativity & Originality | Shows limited creativity, mainly following common approaches or does not engage in creative problem-solving. | Uses creative problem-solving but may rely on existing ideas with slight modifications. | Develops and implements unique and innovative strategies to complete challenges effectively. |
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| Minimum Requirements | Failure to meet these requirements will result in a Below Basic and must be remediated. |
| Finch Mazes | <ol style="list-style-type: none"> 1. Complete all required calculations for kinetic energy and velocity, including measurements of mass, distance, and time. 2. Successfully program and test their robot. 3. Submit all necessary documentation, including calculations and coding scripts. |
| Finch Sumo Wrestling | <ol style="list-style-type: none"> 1. Participate in at least two rounds of sumo wrestling. 2. Reflect on their collaboration, creativity, and metacognition through a written or verbal reflection. 3. Submit all necessary documentation, including coding scripts, and reflection responses. |