

Sustainable Engineering Design and Evidence Rubric

NAME _____ DATE _____ PERIOD _____

Major evidence packet: 16 points

Score the final Pest Patrol design, revision record, and Trends Evaluation together. Paper, Canva, Adobe Express, or another approved design route is equal. Xello completion, drawing skill, platform access, and public speaking are not separate grades.

CRITERION	MASTERS - 4	MEETS - 3	APPROACHES - 2	NEEDS IMPROVEMENT - 1	NO EVIDENCE - 0
Evidence reasoning	Connects at least three design features to specific field-report evidence and explains one complete evidence-to-feature-to-benefit chain	Three evidence links are present and one chain is mostly complete	Two usable evidence links or a partly explained chain	Partial design with little source evidence	Blank or off topic
Functional communication	Six or more readable labels explain sensing, movement, reporting, and safety/crop protection	Six labels are present and most functions are clear	Four or five usable labels; one required function is unclear	A drawing is present but the reader must guess how it works	Blank or unusable
Revision and tradeoff	Makes a visible evidence-based revision and explains a specific benefit plus cost, risk, or limit	Revision is visible and a reasonable tradeoff is named	Revision or tradeoff is present but weakly explained	Feedback is copied or acknowledged without a useful change	No revision evidence
Trend and career evaluation	Compares two trends, uses two accurate sourced facts, explains changed work, and states an evidence limit	Uses two facts and gives a defensible career recommendation	Uses one accurate fact and a general trend connection	Preference is stated with little or inaccurate evidence	Blank or off topic

Performance-band conversion

RAW POINTS	PERCENT RANGE	BAND
15-16	90-100	Masters
13-14	80-89	Meets
12	70-79	Approaches
10-11	60-69	Needs Improvement
0-9	Below 60	Follow campus or district policy

Before you submit

- Check that your design shows three evidence links and explains what one feature does and why it helps.
- Show one visible revision and explain why it improves the work.
- Peer feedback helps you revise, but your score does not depend on a reviewer catching every issue.
- Keep BLS figures labeled as national medians and projections. Do not call them DFW starting pay or guaranteed outcomes.
- Your evidence and reasoning matter more than perfect English mechanics. The meaning still needs to be clear.
- Ask your teacher about the normal revision process for a major assignment.