

Judges' Scoresheet (2023 KidWind Challenge)

NOTE TO JUDGES: Team presentation/judges' panel is worth 40% of a team's total score. Make sure to leave written comments for #1 - 3. **Remember to be constructive – this document will be scanned and sent to the team after the competition.** Questions below are intended as talking points for the judges; there will not be sufficient time to go over each question. Each team has a maximum of 15 minutes with the judges (teams are told to provide a brief presentation and allow time for questions from the judges). Total Points will be tallied and checked by a score keeper.

School name: _____

Team name: _____

Total Points Earned:
(Scoring of 0-40)

Division: 4th-8th 9th-12th (circle one)

1. Overall feedback and comments for team

2. What did the team do best?

3. What should the team work upon improving the most?

4. Scoring (circle one point value for each category)

Blades (0-6 points) 0 1 2 3 4 5 6

- What was the engineering process for blade design?
- Do the blades appear sturdy? Are blades shaped – airfoils, twisted, flat?
- How did the team determine: pitch of blades, # of blades, length, material, etc?
- Was there a great deal of experimentation? Do they have documentation?

Drivetrain (0-6 points) 0 1 2 3 4 5 6

- Direct drive, geared or pulley system?
- Why did they choose the system they used?
- What materials did they use to construct drivetrain?
- What were the major challenges with the drivetrain?

Innovation (0-6 points) 0 1 2 3 4 5 6

- How creative were students in construction and materials used in their turbine?
- Did they try a vertical or horizontal axis? Why?
- Did the students use any CAD or 3D printing?
- Is their turbine design different than others? Is it creative while still functional?
- How many design iterations did they talk about?

Independence (0-4 points)

0 1 2 3 4

- Do you feel like students did this work themselves?
- Do you feel like they applied concepts they learned?
- If they did any CAD work or 3D printing, is it clear they did the work and not a coach or parent?

Overall Appearance & Materials (0-4 points)

0 1 2 3 4

- What types of materials were used to build the turbine? New? Recycled?
- Were they careful not to use any prefabricated kits?
- Were students precise in their turbine building? Is it a "nice-looking" rig?

Type of Presentation (0-4 points)

0 1 2 3 4

- What kind of documents did the students share? Was it a short report, engineering notebook, video, or poster?
- What is your overall feeling about the document or presentation?
- Was it interesting and organized? Was it creative? Does not have to be – we are more interested in looking for evidence of a PROCESS of learning.
- Is the statement thoughtful and show evidence of their work?

Depth, Complexity & Clarity (0-6 points)

0 1 2 3 4 5 6

- Did the team show a progression of discovery?
- Did the team provide evidence they made changes based on research or discoveries?

Delivery (prepared or improvised) (0-4 points)

0 1 2 3 4

- Was the documentation and/or presentation neat and organized?
- Do you feel like the students practiced?
- Did all students take part in the discussion? Or did one student dominate?
- Do you feel like the students "knew their stuff" or were they just reading or making it up?

Additional Comments: