

Overarching Enduring Understanding
Can you capture the wind?

FLOW OF INSTRUCTION

4-ESS3-1

Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

4-PS3-1

Use evidence to construct an explanation relating the speed of an object to the energy of that object.

4-PS3-2

Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.

4-PS3-4

Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.

3-5-ETS1-1

Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

3-5-ETS1-2

Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

3-5-ETS1-3

Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

4-PS3-3

Ask questions and predict outcomes about the changes in energy that occur when objects collide.

4-ESS2-1

Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.

4-ESS1-1

Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.



Unit	Wind Harnessers
Grade Level	Grade 4
Price	\$900 – Full Curriculum Unit