



RENEWABLE ENERGY ON-SITE FIELD TRIP[®] – Wind CLASS OVERVIEW

This On-Site Field Trip™ consists of a 60-minute session that combines lecture, discussion and activity. Students discuss various types of energy sources and learn renewable vs. non-renewable options. An overview of how wind is formed, captured and transformed into electrical power is presented. Wind power is put into historical and worldwide perspective. Discussion topics of wind, force, power, electricity, old style windmills vs. new technologies are reinforced when students build their very own Vertical Axis Wind Turbine (VAWT). Students keep their VAWT and are encouraged to personalize it.

SUGGESTED GRADE LEVEL:

This class is appropriate for grades 1-12. The same concepts are covered regardless of grade. It is up to the individual teacher to determine the appropriate subject matter and depth of discussion for their particular class.

OBJECTIVES

Exploration of modern energy sources differentiating between renewable and non-renewable.

Discuss the origin of wind and the relationship between natural science and technology.

Understand the basic concepts of a modern wind turbine

Successful construction of a Vertical Axis Wind Turbine model.

MATERIALS

All About Learning Wind Turbine Kit (Students build, then keep it!)

Assorted Instructor's notes and learning aides