

ENERGY

ACTIVITY SHEET

Hydroelectric and wind power are on full display in Central Montana. The Judith Gap Wind Energy Center was built in 2005 between Harlowton and Judith Gap. There are 90 towers and each turbine is capable of producing 1,500 kilowatts of power. According to a wind power map for Montana, the wind farm is in a Class 4 and Class 5 wind area, with average wind speeds from 15.7 to 17.9 miles per hour at 50 meters (162.5 feet). The Missouri River not only provides beautiful, scenic views, it is also home to many falls that have hydroelectric powered dams to generate electricity and provide economic stimulus to the area.

Can you name the original five falls of Great Falls?

Circle the ones that have hydroelectric power dams on the falls to generate electricity.

Why do you think hydroelectric and wind power are important sources of energy?

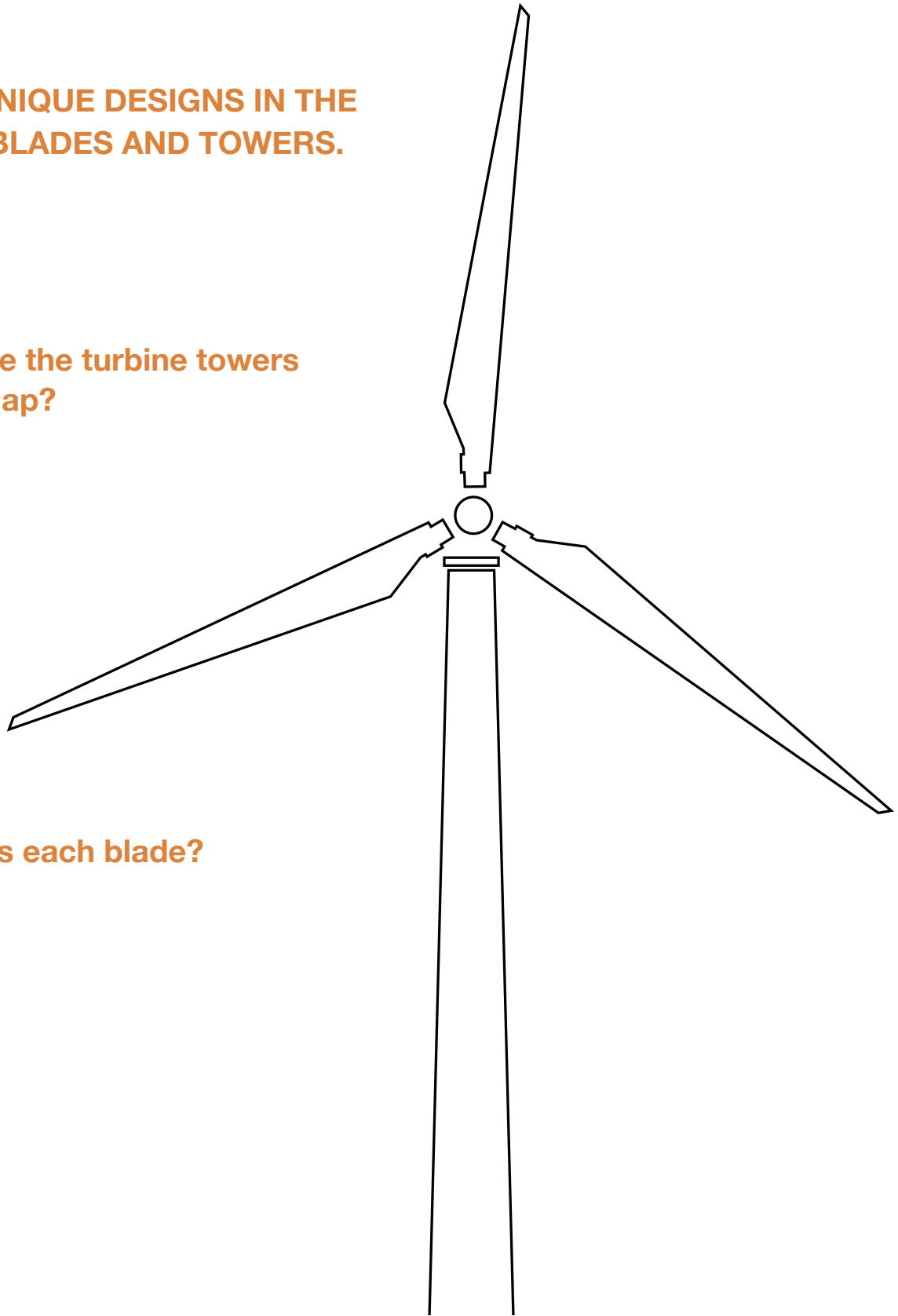
**CREATE UNIQUE DESIGNS IN THE
TURBINE BLADES AND TOWERS.**

**How tall are the turbine towers
at Judith Gap?**

- 117 feet
- 202 feet
- 262 feet
- 453 feet

How long is each blade?

- 126 feet
- 167 feet
- 210 feet
- 233 feet



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Name the original five falls of Great Falls. The Great Falls/Ryan Dam, Crooked Falls, Rainbow Falls/
Rainbow Dam, Cotter Falls, Black Eagle Falls/Black Eagle Dam • How tall are the turbine towers of
Judith Gap? 262 feet • How long is each blade? 126 feet