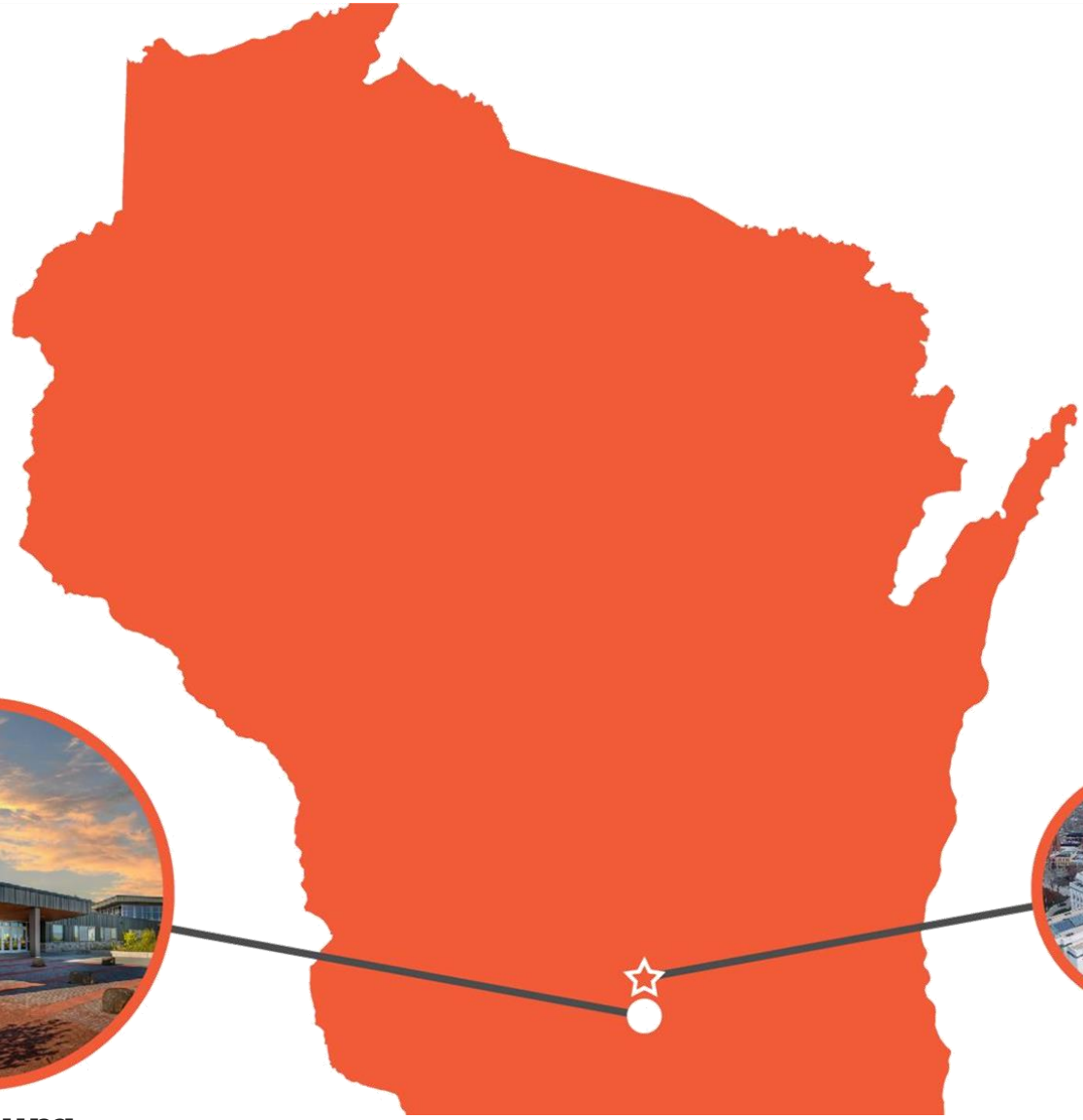


FOREST EDGE ELEMENTARY

*Sustainable and Resilient Design: Schools as
Innovation and Community Hubs*





Fitchburg



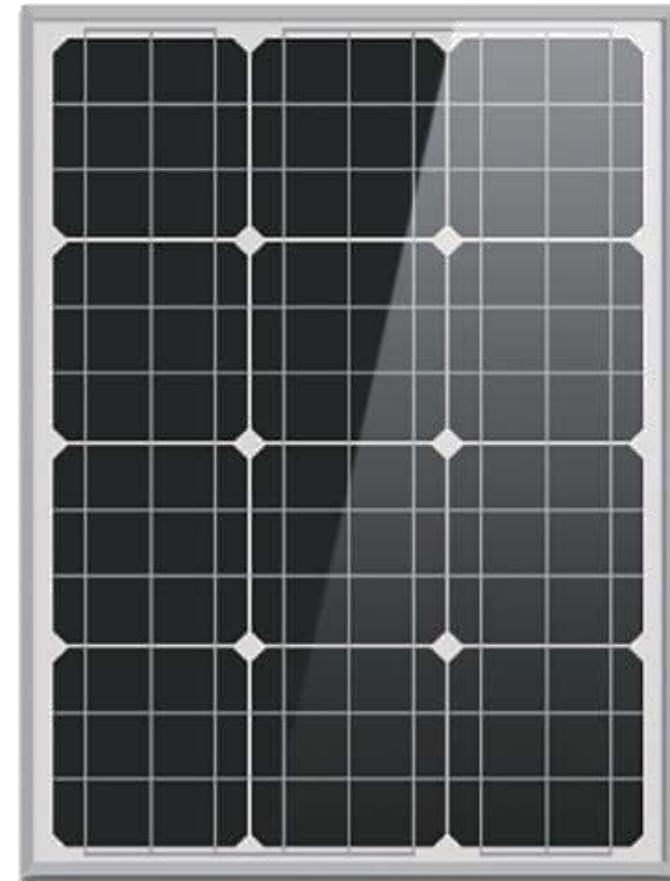
Madison

NET ZERO ENERGY

$$\text{energy} \leq 0$$



It all started with an energy meter and one solar panel...



[Forest Edge Elementary \(egauge.net\)](http://Forest Edge Elementary (egauge.net))

Oregon Sustainability Timeline

Original solar panel!



Oregon Middle School



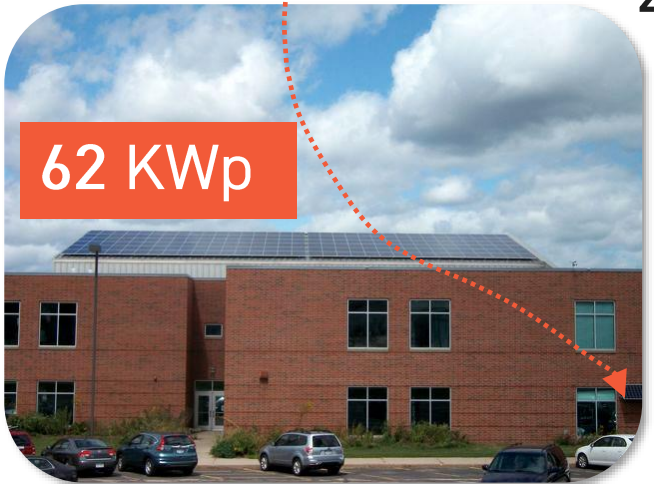
Brooklyn Elementary School



Forest Edge Elementary School

2014 Referendum

2018 Referendum



Oregon High School

Forest Edge Active Systems



geothermal

90 geothermal wells

extend **406** feet into the ground



battery

125kW battery



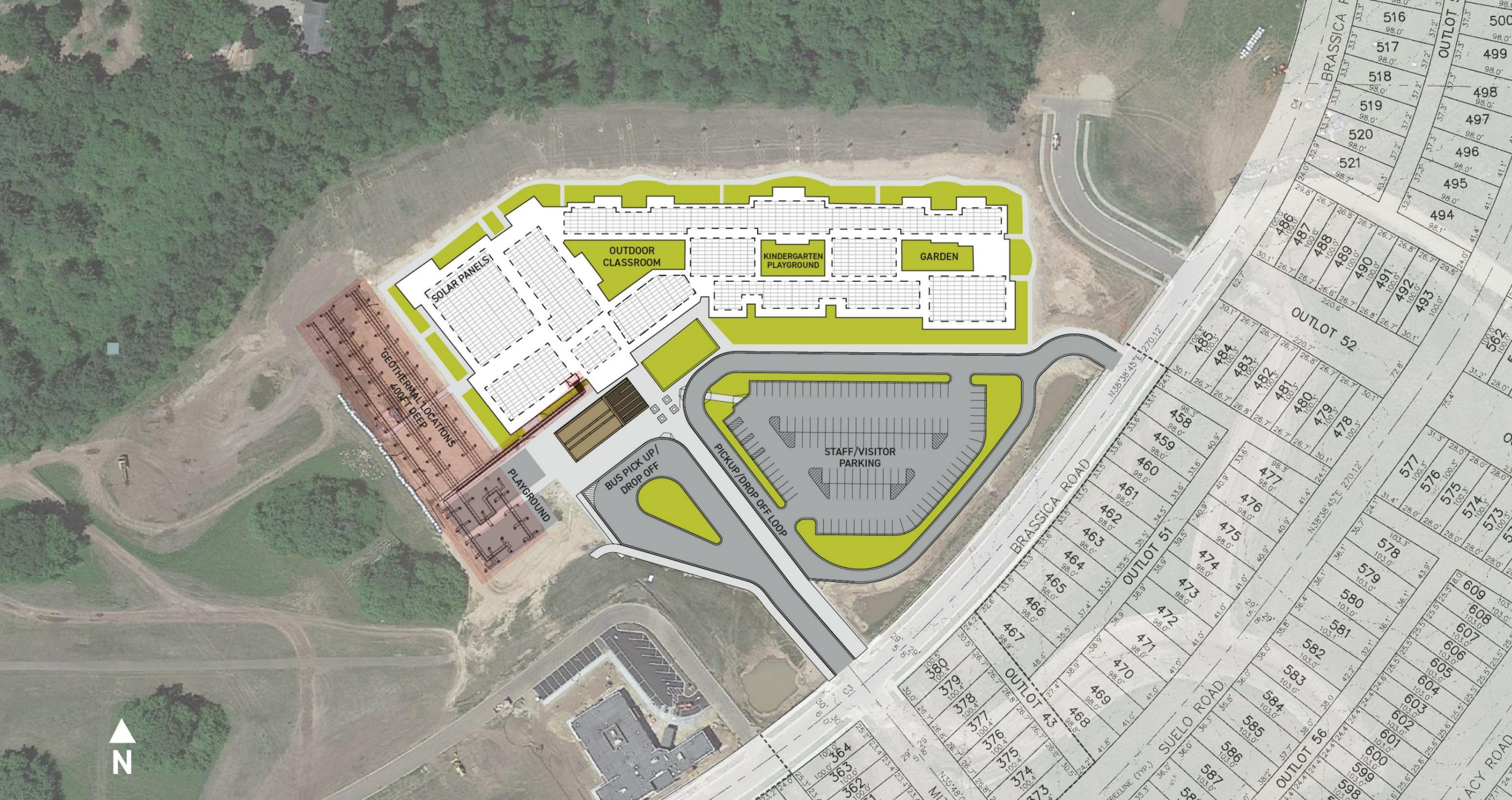
**electrochromic
glazing**



solar power

1704 solar panels

Produces **646kW**

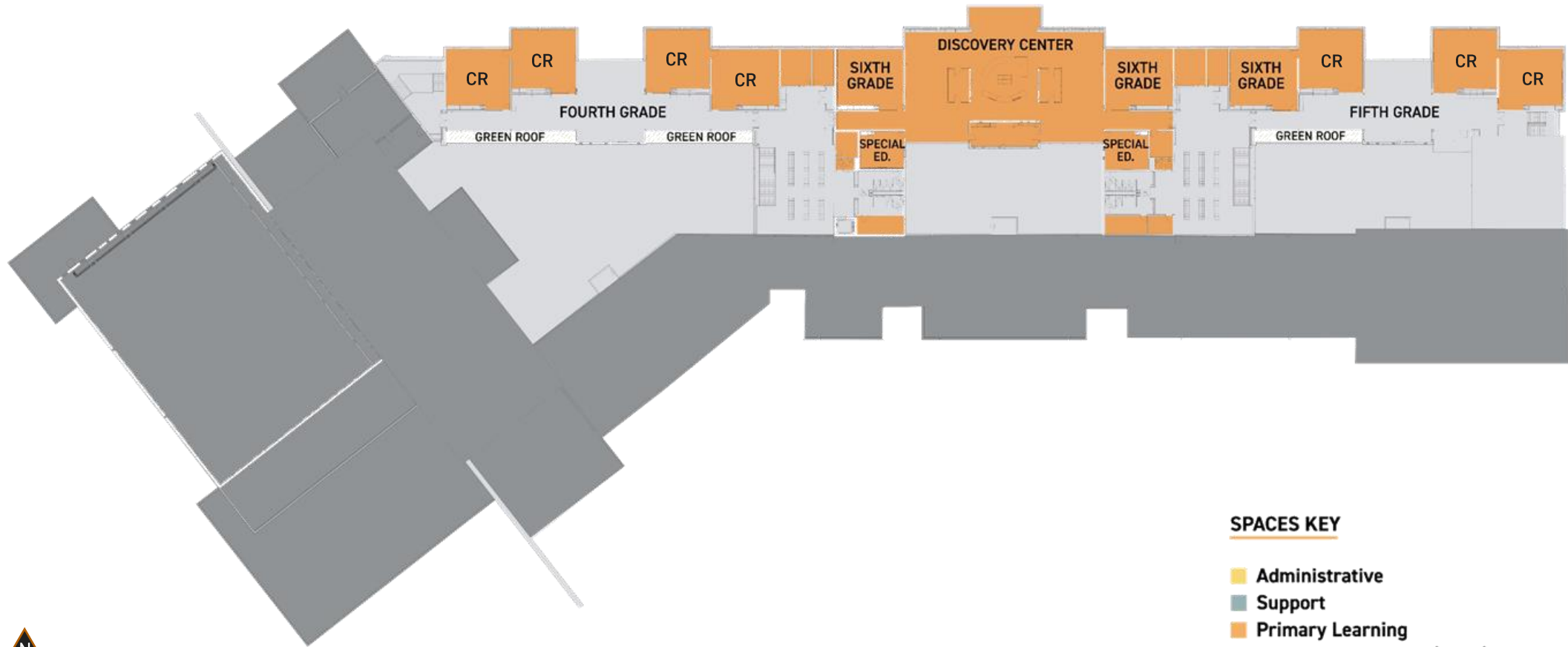




first floor





SPACES KEY

- Administrative
- Support
- Primary Learning
- Secondary Learning/Play/Outdoor



 **second floor**

SPACES KEY

-  **Administrative**
-  **Support**
-  **Primary Learning**
-  **Secondary Learning/Play/Outdoor**











WHAT CAN WIND DO?



DEFINITION
Wind is the movement of air. The force of wind depends on the amount of pressure difference between two areas. Wind is caused by uneven heating of the earth's surface and the atmosphere. Wind is the result of air moving from high pressure to low pressure.



WIND ENERGY
Wind energy is a clean, renewable source of power. It is produced by wind turbines that convert the kinetic energy of the wind into electricity.

WHERE THE WIND BLOWS
Wind energy is most abundant in coastal areas and mountain passes. It is also a good source of power in rural areas.

CAN THERMAL ENERGY DO?



WHAT CAN LIGHT DO?



DEFINITION
Light energy is needed to help us see. Our bodies use light energy to help us see. Light energy is also needed to help us grow. Light energy is also needed to help us stay warm. Light energy is also needed to help us stay healthy. Light energy is also needed to help us stay happy. Light energy is also needed to help us stay safe. Light energy is also needed to help us stay strong. Light energy is also needed to help us stay smart. Light energy is also needed to help us stay kind. Light energy is also needed to help us stay brave. Light energy is also needed to help us stay honest. Light energy is also needed to help us stay respectful. Light energy is also needed to help us stay responsible. Light energy is also needed to help us stay caring. Light energy is also needed to help us stay compassionate. Light energy is also needed to help us stay empathetic. Light energy is also needed to help us stay understanding. Light energy is also needed to help us stay tolerant. Light energy is also needed to help us stay patient. Light energy is also needed to help us stay calm. Light energy is also needed to help us stay peaceful. Light energy is also needed to help us stay harmonious. Light energy is also needed to help us stay balanced. Light energy is also needed to help us stay centered. Light energy is also needed to help us stay grounded. Light energy is also needed to help us stay connected. Light energy is also needed to help us stay united. Light energy is also needed to help us stay together. Light energy is also needed to help us stay as one. Light energy is also needed to help us stay in harmony. Light energy is also needed to help us stay in balance. Light energy is also needed to help us stay in peace. Light energy is also needed to help us stay in love. Light energy is also needed to help us stay in hope. Light energy is also needed to help us stay in faith. Light energy is also needed to help us stay in trust. Light energy is also needed to help us stay in kindness. Light energy is also needed to help us stay in generosity. Light energy is also needed to help us stay in compassion. Light energy is also needed to help us stay in empathy. Light energy is also needed to help us stay in understanding. Light energy is also needed to help us stay in tolerance. Light energy is also needed to help us stay in patience. Light energy is also needed to help us stay in calmness. Light energy is also needed to help us stay in peacefulness. Light energy is also needed to help us stay in harmoniousness. Light energy is also needed to help us stay in balancedness. Light energy is also needed to help us stay in centeredness. Light energy is also needed to help us stay in groundedness. Light energy is also needed to help us stay in connectedness. Light energy is also needed to help us stay in unitedness. Light energy is also needed to help us stay in togetherness. Light energy is also needed to help us stay in oneness. Light energy is also needed to help us stay in harmony. Light energy is also needed to help us stay in balance. Light energy is also needed to help us stay in peace. Light energy is also needed to help us stay in love. Light energy is also needed to help us stay in hope. Light energy is also needed to help us stay in faith. Light energy is also needed to help us stay in trust. Light energy is also needed to help us stay in kindness. Light energy is also needed to help us stay in generosity. Light energy is also needed to help us stay in compassion. Light energy is also needed to help us stay in empathy. Light energy is also needed to help us stay in understanding. Light energy is also needed to help us stay in tolerance. Light energy is also needed to help us stay in patience. Light energy is also needed to help us stay in calmness. Light energy is also needed to help us stay in peacefulness. Light energy is also needed to help us stay in harmoniousness. Light energy is also needed to help us stay in balancedness. Light energy is also needed to help us stay in centeredness. Light energy is also needed to help us stay in groundedness. Light energy is also needed to help us stay in connectedness. Light energy is also needed to help us stay in unitedness. Light energy is also needed to help us stay in togetherness. Light energy is also needed to help us stay in oneness.









NEW
NONFICTION

THIS IS HOLLY
ROLL

Want to learn more about
Forest Edge Elementary?



thank you.



OREGON SCHOOL DISTRICT

BRAYARCHITECTS