MATCHING

Match each word on the left with the group of words on the right that you think it best belongs with.

ship blow, breeze, fan, swoosh

electricity sailors, deck, boat, navy

ocean turbine, light bulb, generator, cable

wind waves, whales, blue, sea

Now write four words at the right to go with each word on the left.

sky

gasoline

journey

river

DRAW YOUR OWN ISLAND

Imagine that you could have your very own island to live

on. Draw your island. Name it. Draw the places, buildings, and other things on it. Draw the people, animals, and other living things on your island. Don't forget to label everything important.





presented by **Science a-z** a division of Learning A-Z

WIND ON A LEASH

By Ron Fridell

Imagine dozens of huge windmills flying high in the air. Most windmills pump water or grind grain. But these flying windmills would spin wind energy into electrical energy. Sounds like magic, doesn't it?



Flying windmills would send power through cables.

But it's really technology at work. Wind would turn huge blades that spin a turbine. The turbine would power a generator, and the result would be electrical energy.

These flying windmills would be miles in the air. Way up there, winds blow hard, day and night. Could there be enough energy in these winds to meet the world's electricity needs? We will find out someday. But right now flying windmills are still in the planning stage.

See Wind on page 2

4

Continued from page 1

What would a flying windmill look like? One plan looks like a great big kite on a long, thick string. The electricity it makes would travel down through a cable back to earth.

A California company wants to make a flying windmill and test it. What if the company succeeds? Then one day you may look up to see a vast power station spinning in the sky.



The U.S. has enough wind farms to power 4.9 million homes.



This windmill pumps water.

WOWSER

The world's largest wind turbine is in Hawaii. It is as high as a 20-story building, and its rotor blades are as long as a football field.





A Kite Boat

Could a kite help pull a boat across the ocean? In 2008, a big cargo ship made a long journey. The ship had gasoline engines. But this time it was also powered by wind energy. A huge kite on a long rope sailed high above the ship.

The kite-sail was a new idea. A group of engineers had just created it. Could wind energy really help power the ship? The test worked. Thanks to wind power, the cargo ship used less gasoline. Engineers are now working on a bigger kite-sail for testing in the future.



WOONS

The first boat to use an engine was built in 1807. It used steam power. Before that time, river and ocean going ships were powered by rowers

and by wind.

Write About This!

Become a sea bird that can talk. Land on the kite-sail to rest a while. What do you see from way up there? How do you feel? Now fly down to the ship and talk with some of the sailors. Close your eyes and imagine these things. Then tell about your sea bird adventures in writing.

Clipart.

© Learning A–Z, Inc. All rights reserved. 2 www.sciencea-z.com