



NATURE DETECTIVES

WINTER 1994

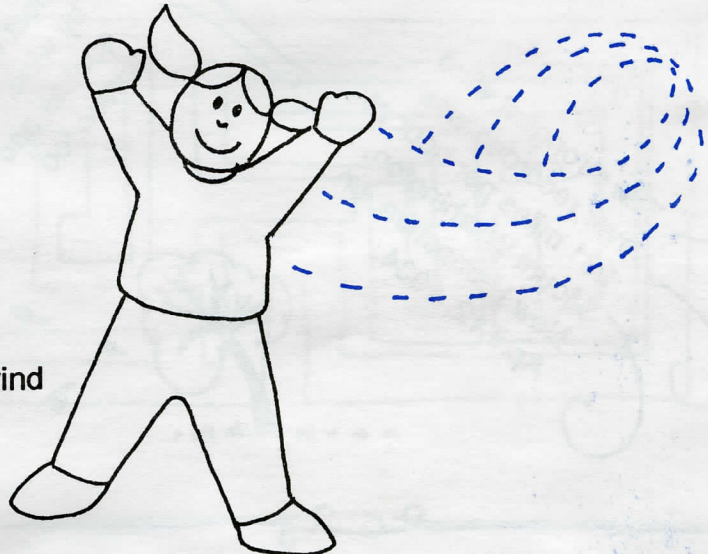
WIND

Feel the wind on your face. Is it warm or icy cold? Is it strong enough to make your hair fly out behind you, or is it a gentle breeze? Listen to the wind rustling the leaves and dried grasses. Watch it whirl leaves into the air and make tree branches wave. Smell the wind. Does it carry the fragrance of pine trees or sage or dry, dusty earth?

Pretend you are wind. Blow on a blade of grass, softly at first, then as hard as a hurricane. Pretend the wind is blowing you like a feather. Whirl and twirl! Land and then take off again.



Fly a kite on a windy day. Watch a pin-wheel spin. Listen to wind chimes and watch a weather vane move when the wind changes direction. Is the wind from the north, south, east, or west?



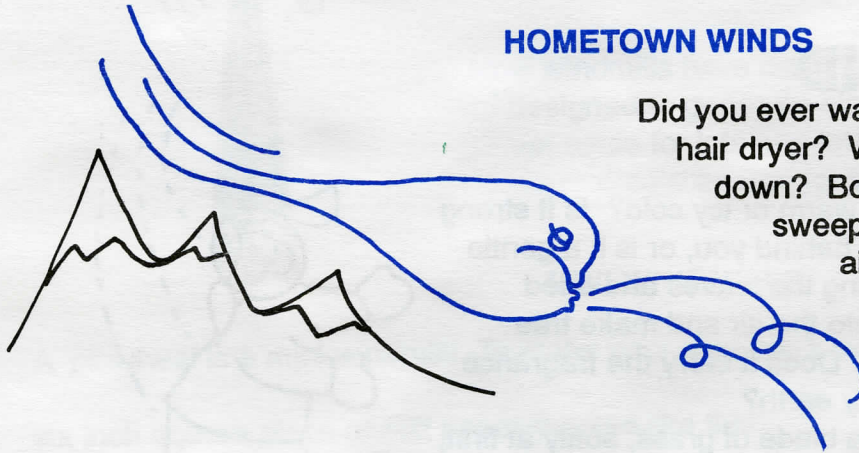
Think about wind. Do you know what wind is? What causes it?
Read on to find out more!

WHEN IS AIR WIND?

Wind is moving air. Differences in temperature make air move. When air is heated, by the warm earth or a warm body of water, it expands and grows lighter. It rises away from the earth. Cool air contracts and is heavy. It sinks, pressing down on the earth.

Warm air rises, cold air rushes in to take its place. This is wind! As air moves up over mountains, it cools. When it is very cold and heavy it rushes back down again. This is wind!

HOMETOWN WINDS



Did you ever warm-up your snowman with a hair dryer? What happened to him? Melt down? Boulder's warm Chinook winds sweep down the mountains like the air from a hair dryer and melt the layers of snow crystals on the hillsides.

Some other Boulder winds blow high in the sky. Their icy breath forms lens shaped clouds called lenticular clouds. They look like space ships. Watch for them this winter.



WINDFACTS

The strongest wind ever recorded was 231 miles per hour at Mount Washington, New Hampshire, on April 12, 1934.

Most water waves are caused by wind. Underwater earthquakes and landslides cause waves too.

The windiest place in the world is George V Coast in Antarctica where wind blows at 198 miles per hour regularly.



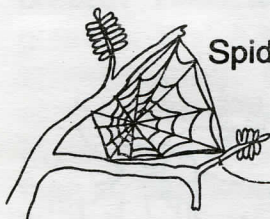
BUNDLE UP!

Here's a chilly riddle. When does 25 degrees not really feel like 25 degrees? When it's windy outside! Wind can make cold temperatures seem much colder. This effect is called wind chill.

Wind chill factor tells you how the temperature feels to your nose on a windy day. If it's 25 degrees outside and there is just a 10 mile an hour wind, the wind chill factor drops to a frosty 9 degrees. If there's a 20 mile an hour wind, the wind chill factor plummets to -4! So when you ask someone if it's cold out, don't forget to ask if it's windy, too.

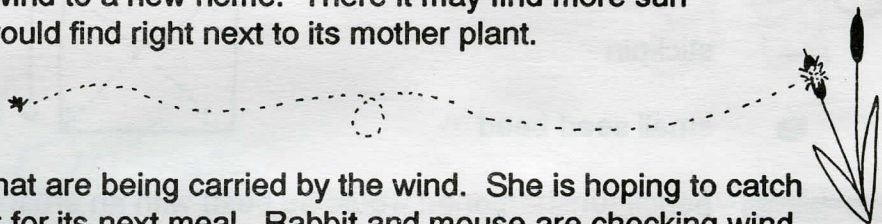
COLD + WIND = WIND CHILL
IT'S COLD!
B.R.R.R.

RIDING THE WIND

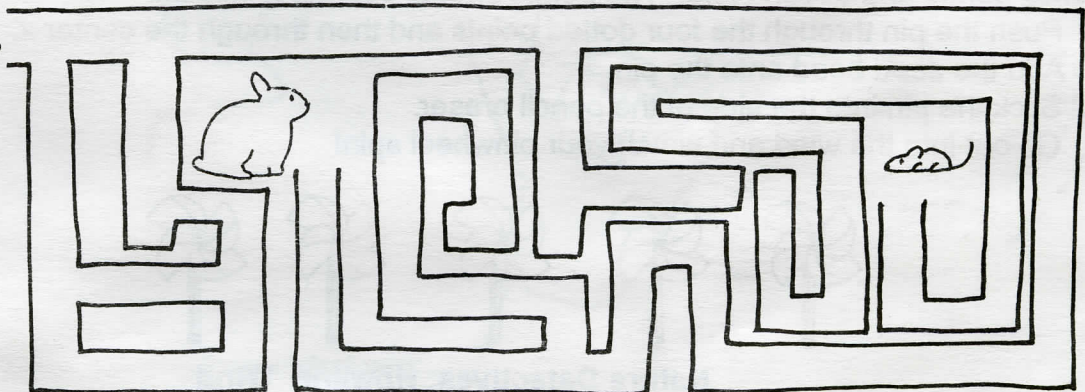


Spider spins a silk thread and rides on the wind from one place to another. This is called "ballooning". What fun!

Cattail seed travels on the wind to a new home. There it may find more sun and space to grow than it would find right next to its mother plant.

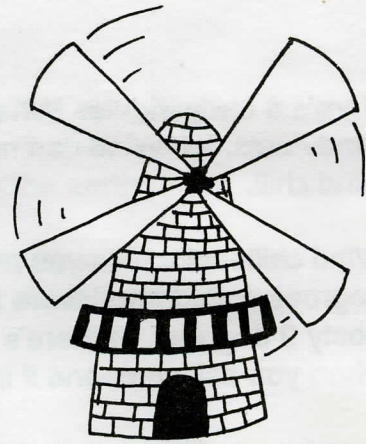
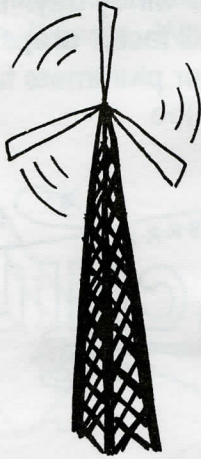


Fox sniff-sniff-sniffs odors that are being carried by the wind. She is hoping to catch a whiff of an animal to hunt for its next meal. Rabbit and mouse are checking wind-carried scents for signs of danger. Can you help fox sniff out a trail to its prey? Will rabbit or mouse be lucky enough to smell fox in time to escape?



WINDMILLS

A long time ago windmills looked like this with blades made of cloth. They were built to grind grain and for pumping water.



Now windmills have metal blades and look like this. They're designed to generate electricity. Some towns have areas set aside for lots and lots of windmills. These wind farms create energy for the city without creating pollution.

MINI WINDMILLS

A pinwheel is a mini windmill! To make your own you'll need:

six inch square piece of stiff paper marked like this:



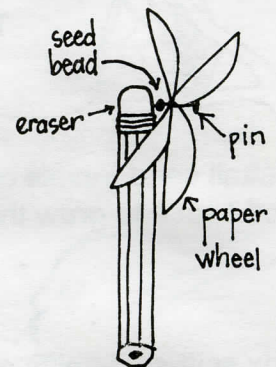
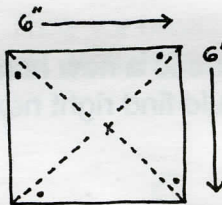
scissors




stickpin

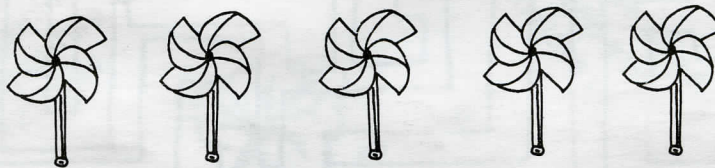


small seed bead



 pencil (unsharpened would be best) with an eraser

1. Cut along the dotted lines toward the center of your square. Stop cutting about an inch before the x.
2. Pull each point that is marked with a dot to the center x. Be careful so the paper just gently bends and doesn't fold. The points should overlap a little bit.
3. Push the pin through the four dotted points and then through the center x.
4. Add the seed bead onto the pin.
5. Stick the pin into the side of the pencil eraser.
6. Go out into the wind and watch your pinwheel spin!



Nature Detectives: Howling Wind

Join us to play in the wind. Find out what's special about Boulder winds. See the Discover calendar for details.

