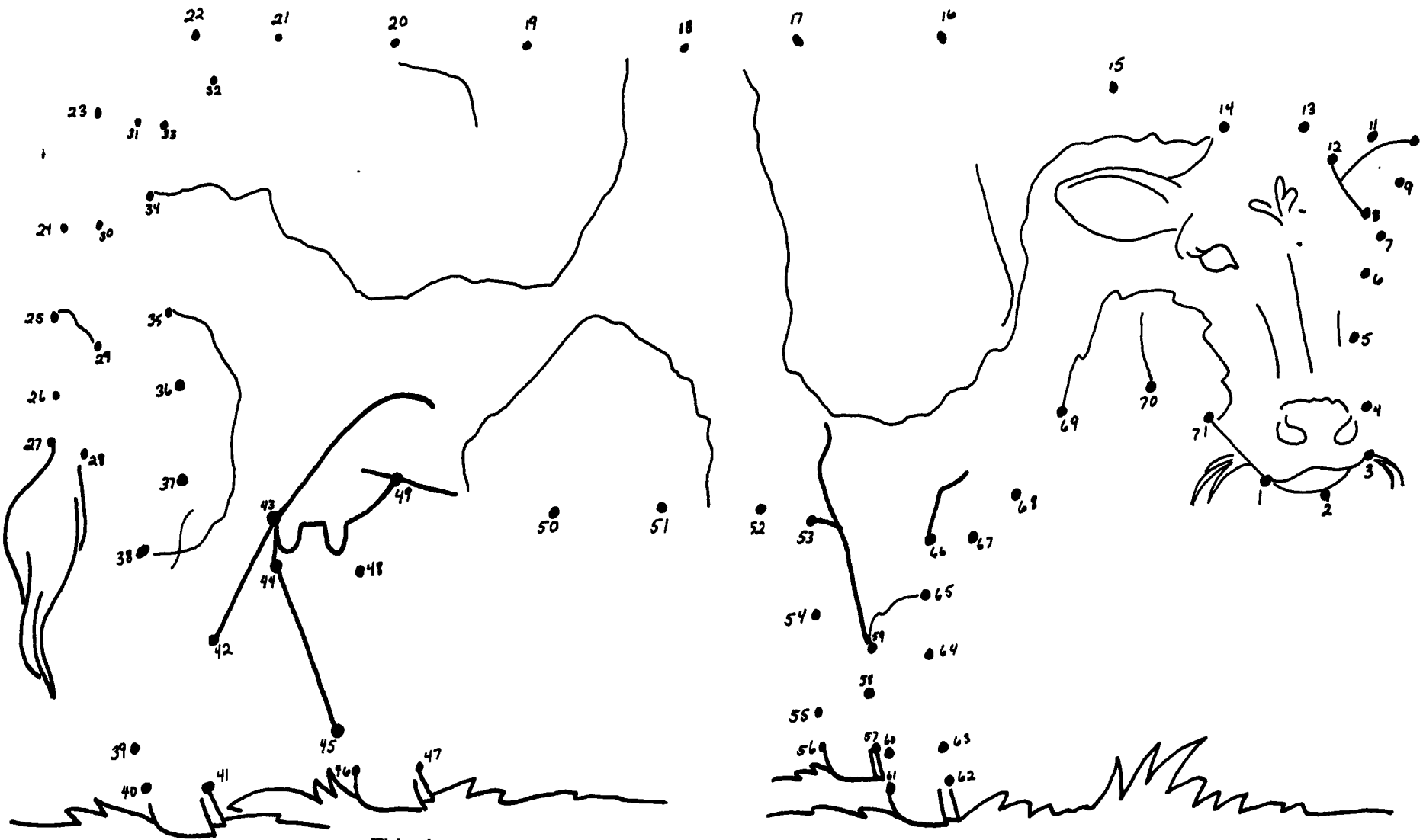
Kids Korner

Connect The Dots And Color This Picture



This dot to dot activity is in a coloring book provided by local cattle producers through Beef check-off dollars. For a free coloring book, send your name and complete address to the Pennsylvania Beef Council, 4714 Orchard St., Harrisburg, PA 17109-1739. Ask for the coloring book, "Beef, From the Farm to You.

Smart Stuff

WITH TWIG WALKINGSTICK

Why do dogs' eyes glow at night?

Fido's glowing eyes doesn't mean he's taking lessons from Casper the Ghost. Those yellow-green reflections are how he sees at night!

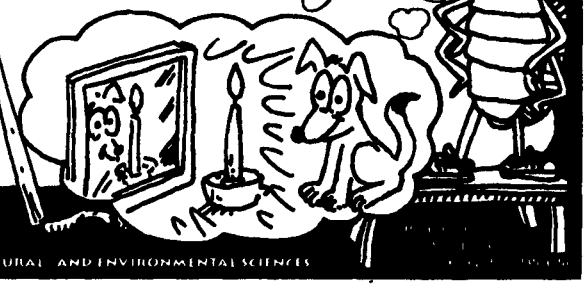
Dogs (and cats and a lot of other animals) have a special structure, called a tapetum, inside their eyes. The tapetum (say tah-PEA-tum) helps animals see when there isn't much light.

For the most part, dogs see the same way you do. Light goes in their eyes. The cornea and lens — two parts of the eye — focus the light into a picture. The picture goes up on the retina, another part of the eye. The retina tells the brain what it's seeing. (Think of the cornea and lens as a film projector and the retina as the movie screen.)

When there's not much light, the tapetum really helps out. The picture shines through the retina and onto the tapetum underneath. The tapetum works like a big mirror and reflects the picture back through the retina a second time. This way the brain gets twice as much information from the same picture.

Think about it — before there was electricity, people often put candles in front of mirrors to reflect more light into the room. Fido's just doing the same thing with his eyes!

Scientifically yours, Twig



OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL AND ENVIRONMENTAL SCIENCES

Smart Stuff

WITH TWIG WALKINGSTICK

Can woolly worms really predict winter weather?

Sorry, friends. No woolly worm could have predicted this winter's blustery blizzards.

Woolly worms (they're also called woolly bears) are large, furry, active caterpillars that turn into tiger moths. They have alternating bands of black and brown hair, with a black tip. The folk tale says the wider the black part, the colder the winter will be. And if the brown stripe is wider, winter is supposed to be pretty tame.

Our entomology specialists say there are all kinds of woolly worms with all different widths of bands, thanks to genetic variation. Every living thing has its own chemical recipe written on special molecules inside each cell. Those special molecules are called DNA. Because each woolly worm has its own unique DNA, each caterpillar has a distinctive set of characteristics. It's just like two people who have different shades of blue eyes.

Tiny genetic variations, like the width of color bands, are important because they mean the species changes over time. Some DNA variations are more successful than others, so eventually the "better" genes become more common.

So if you still want to believe you can judge the winter by looking at woolly worms, your chances of a correct prediction all depend on what you find!

Scientifically yours, Twig

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