

Kids Korner

Which Thing Doesn't Belong?

In each row, there's something that doesn't quite fit. Which one is it?



Snow Without Clouds?

Dear Twig:
Can it snow when there aren't any clouds? The other day was really sunny and really cold and I saw all these tiny snowflakes in the air, wrote Suzy S., Columbus, Ohio.

Yes, it can snow when there aren't any clouds. But it's a special type of snow — whisper-light, twinkling, gently falling — called "diamond dust." It's common in the Arctic and the Antarctic.

Cool.
Diamond-dust snow, like other types of snow, is actually a whole bunch of six-sided ice crystals.

But diamond-dust crystals are small and simple, not big and fancy. Instead of looking like lacy stars — how we usually imagine snowflakes — they're shaped like teensy plates or columns.

Diamond dust forms when it's very cold and there's water vapor (water in invisible gas form) in the air near the ground. The cold makes the vapor condense — turn into a liquid or, in this case, a solid. Clouds, which are simply giant, visible masses of condensed water vapor, may or may not be present.

Other names for diamond dust are ice fog and frost mist. See it (if you can) as a jewel of winter.

Cloudlessly,
Twig

COLD-WEATHER SCRAMBLE

Unscramble these cold-weather words!



How Should We Make Icy Roads Safe?

Dear Twig:
Is ice the only way to make roads safe?

Not necessarily. Salt is a cheap way to melt ice. It melts the first layer of ice into a salt-and-water mixture. The water doesn't refreeze because the salt lowers the temperature it has to be for water to freeze.

That lets the salt melt the rest of the ice. But the excess salt can kill plants and winter wildlife along the road, and it causes rust damage to cars.

So some places have begun melting ice with a product made out of corn.

This special deicer is called Calcium Magnesium Acetate, or CMA. It's made with the minerals calcium and magnesium that are taken from corn or other natural materials, like coal.

Massachusetts is one state using CMA. The corn deicer protects its wetlands, cranberry bogs and natural wildlife habitat from the effects of road salt. (Salt runs off the roads with the melted water, and too much salt can kill plants along the road.)

More than nature benefits from CMA, though; it also helps keep cars and bridges in good shape. The white powder you see along the bottom of cars in the winter is salt from the roads.

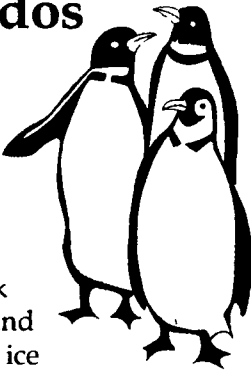
If it stays on the car for a long time, it can damage the paint and metal. The same thing happens to metal bridges. Because CMA is non-corrosive, it will cut through ice and snow — but it won't cause rust!

Scientifically yours,
Twig



Birds in Tuxedos

Even though they don't fly, penguins are still birds that move around in a variety of ways. Their short legs and tall bodies cause them to waddle when they walk; however, they actually walk almost as fast as humans. And they know how to move on ice and snow—by sliding on their bellies.



In addition to getting around on land, penguins are great swimmers. They swim about 8 miles an hour for long periods, and they can go more than 20 miles an hour in short bursts.

The feathers that cover penguins' bodies are short, thick and waterproof. What makes them look like they are wearing tuxedos is that most of their feathers are black or bluish-gray, except on their belly and chest where they are white. Some penguins have bright orange or yellow feathers on their necks and heads, and some have red, purple and orange beaks.

To keep warm, penguins have thick layers of blubber. Some also have long, long feathers beneath their top ones.

Of the 17 kinds of penguins, the largest is the emperor, which grows to 4 feet tall and can weigh 100 pounds. Most penguins range from 1½ to 3 feet tall and weigh up to 15 pounds.



Smart Stuff

with Twig Walkingstick

Dear Twig: OK, here's a good one: What's "stinking tofu"? My brother told me it's a delicacy. But I don't always believe my brother.

Stinking tofu is a Chinese dish that is, in fact, a delicacy, at least among people who like its taste and smell.

What's surprising (to my own limited palate, at least) is that there are people who like its taste and smell. Because its taste and smell are usually compared to moldy socks and sewage and armpits.

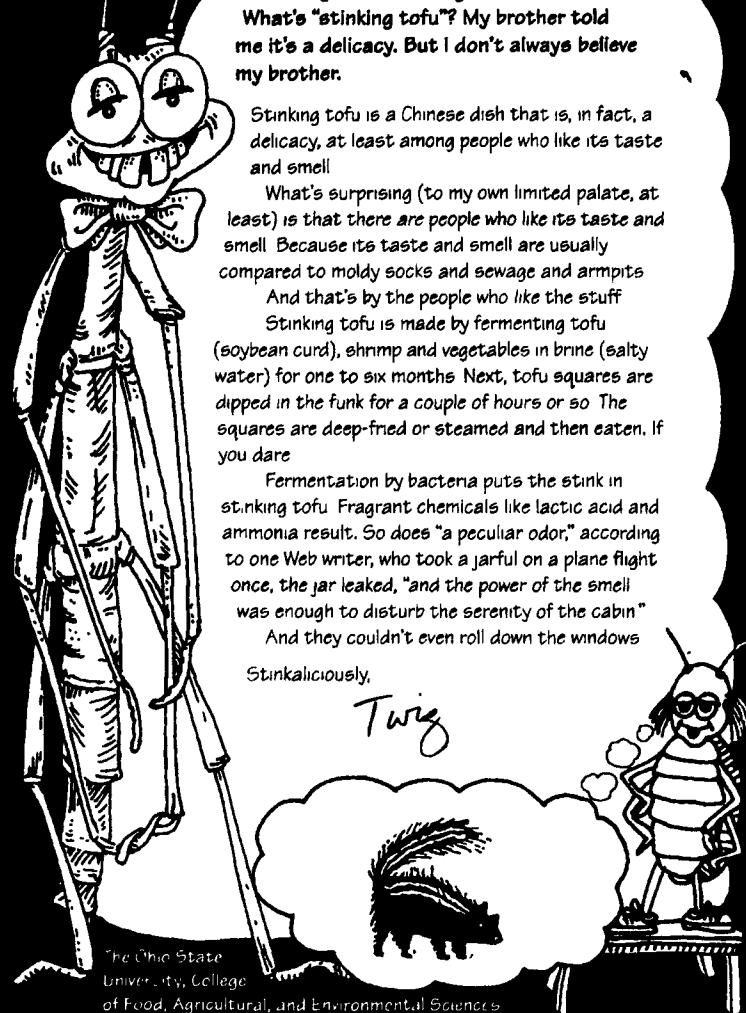
And that's by the people who like the stuff.

Stinking tofu is made by fermenting tofu (soybean curd), ehmp and vegetables in brine (salty water) for one to six months. Next, tofu squares are dipped in the funk for a couple of hours or so. The squares are deep-fried or steamed and then eaten. If you dare.

Fermentation by bacteria puts the stink in stinking tofu. Fragrant chemicals like lactic acid and ammonia result. So does "a peculiar odor," according to one Web writer, who took a jarful on a plane flight once, the jar leaked, "and the power of the smell was enough to disturb the serenity of the cabin."

And they couldn't even roll down the windows.

Stinkaliciously,
Twig



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