

## Grade 5 Informational

### There's Still Gold in Those Hills

America experienced a "gold rush" in the middle of the nineteenth century. Gold was discovered in the California mountains in 1848, and thousands of people hurried there. These gold seekers were called *forty-niners*—named after the year 1849. Gold rushes also took place in the present-day states of Colorado, Nevada, Montana, Arizona, New Mexico, Idaho, Oregon, and Alaska.

Now, 150 years later, the mining operations have long since been abandoned. But, that doesn't mean that *all* the precious metal is gone. In fact, there's still gold in those hills. And with a little luck and a bit of work, people can find it. They can pan for gold like the forty-niners did so many years ago.

#### Where to Look

Although gold has been found in all fifty states, the best places to search are the states in the western third of the country. Because the metal gets washed out of the mountains by water, a gold seeker looks for a stream. A smaller creek is usually the best place to find gold. A stream that fills with rain water from time to time will have seen a good deal of erosion. It is in these types of streams that gold travels most easily.

With much luck, gold can be found in nugget form, but most often it appears as small flakes. Gold is very heavy and sinks. A miner might look for a little waterfall in the stream. Gold may be below it. Also, gold gets trapped deep down along the banks where the creek bends. It might also be found immediately downstream of a boulder or rock formation in the stream.

#### Getting to the Gold

A shovel is needed to dig up the rocks in the stream where there might be gold. Also needed is a pan that looks like a pie plate. Gold-panning pans are still sold at sports stores and hobby shops. Knowing how to care for the pan is important.

Any grease or oil in the pan needs to be removed. If there's anything slick in the pan, the flakes of gold will be washed out. The oil from a person's fingers is enough to make this happen. Heating the pan on a fire or the stove is the suggested way to get rid of the oil. Now, it is ready to be used for panning!

A gold seeker digs up a shovelful of gravel from the stream and puts it into the pan. He then dips the pan into the stream and allows the water to soak the material. He shakes the pan a few times to let the heavier bits settle to the bottom. Then, the pan is tipped slightly so that the grass, leaves, pine needles, and any other material float out. The gold will begin sinking to the bottom of the pan.

The panner will want to get rid of the remaining rocks and gravel, but he doesn't want to use his hands. The oil left behind by fingers will wash the gold out. Instead, using a stick, he scrapes out the top inch or so of gravel.

### **More Water**

Unless a gold seeker spies a nugget in the pan (what luck!), he needs to add more water to the mix. He swishes the material in the pan in a slow, circular movement. The pan is tilted slightly so that the lightweight sand slips over the edge. Water is added as needed, and the process is repeated.

Soon, only a small part of the pan will be covered with concentrated material of what appears to be black sand. The swishing motion will spread the sand out in a feather pattern. The bits of material at the tail end of the feather are called *tailings*. This is where the gold bits can be found.

### **Is It Gold?**

The black sand is called magnetite because of its magnetic properties. By using a magnet, the sand can be picked up and moved out of the pan. What gold panners hope to see left behind are flakes of gold. These can be tiny specs or larger flakes the size and shape of breakfast cereal. But people can be tricked by the stuff that twinkles like a crystal. This is probably "fool's gold." The gold they want is yellow with a sheen to it.

Tweezers are used to pick out the gold flakes and place them into a container. Now the gold miner is ready to dig up another shovelful of gravel and begin the process all over again.

What if he didn't find any gold? He shouldn't give up. Even the best miners didn't find precious metal in every pan. But like the miners of today who enjoy panning, the forty-niners knew that there was still gold in those hills.

## Grade 5 Narrative

### The Bread Lesson

My dad has watermelon-size biceps, a neck like an inner tube, and enormous, muscular hands that make him seem like he's always wearing baseball mitts. He doesn't seem like the kind of guy who would bake great bread, but he is and he does. Every Saturday he puts on his chef's apron, rolls up his sleeves, breaks out a bag of flour, and produces two loaves of homemade bread. When he's done, the whole house smells delicious, and I can't wait for a hot slice smothered with yellow, melting butter.

The rest of the week, Dad is a car mechanic, which involves lots of heavy lifting, tightening, unscrewing, shoving, shaking, yanking, and banging. People tend to think of their cars as metallic members of the family, so there's lots of pressure on Dad to make sure pumps pump, steering steers, and brakes brake. The shop where Dad works is understaffed, so he's under a lot of stress. Sometimes I worry he's going to overheat and blow a gasket or something, like some old car. I think Dad began baking bread to help him relax. I see him in the kitchen, working on a spongy hunk of dough—punching and pounding it into submission.

I've been feeling kind of stressed out myself since I found out I didn't qualify for the swim team. Now I'll have to wait a whole year to try out again; that might as well be a million years. Plus, I'm taking some tough classes this year, and my best friend moved away.

I think Dad knew I was feeling pressure. He sat next to me on the sofa last Saturday and asked me how things were going. I said OK, even though I didn't feel OK at all. He looked at me for a moment, then he said it was time for me to help. He got up from the sofa and headed to the kitchen.

I couldn't imagine what help I could offer. Still, I followed right behind him. Once we were standing by the counter, Dad gave me one of his old aprons. He slipped it on over my head and tied it in the back with such obvious pride that you'd think I was being knighted, which felt kind of silly but also kind of nice. I was being initiated as a bread-baker.

Next Dad got out his enormous stainless-steel mixing bowl, handed me a large wooden spoon, and told me to stir while he added the ingredients. He threw in a large handful of flour from a sack. A haze of flour dust began to hover in the air like fog. He then sprinkled salt into the bowl. Dad isn't big on measuring. He instinctively knows exactly how much of each ingredient to use, and the bread always turns out great. The entire operation was accomplished as if we were part of a NASA space launch. Flour? Check. Yeast? Check. Milk? Check. Sugar, shortening, and salt? Check, check, check.

When I had stirred the flour and milk mixture into a thick, gooey lump, Dad had me turn it over onto the countertop, which had been dusted with flour. Then he showed me how to knead the dough—repeatedly pushing away at the rubbery glob, stretching it out, pounding it,

and folding it in on itself. As I kneaded it, I felt the dough come to life beneath my hands. It took ten minutes and a surprising amount of energy to corral the unruly blob into a neat, round mass.

Next came the most difficult, and surprising, part: doing nothing. We put the dough back into the metal bowl. Then we waited for more than an hour for the dough to slowly swell up and double in size. Next we deflated the risen dough by punching it down. We divided it in two and waited for it to rise again. Afterward, we put the dough into pans and waited another hour for the dough to rise and double one last time. Dad said the waiting is always the hardest part because of the sharp, sweet smell coming from the yeast.

“It’s hard to resist putting the dough directly into the oven, but if you do, the loaves will be small, and the bread will be tough. The most important lesson of all is learning to be patient,” Dad explained.

While we waited, we sat and talked. Silence is a blank space that begs to be filled. It’s like the dough—it swells up and fills a room with emptiness unless you punch it down with words. It felt good to be still and listen to each other. It felt good to open up and share our thoughts. As the flour dust in the kitchen quietly settled, time seemed to slow down. The dough was going to rise at its own pace. We could do nothing to make it rise faster. As I accepted that, I stopped watching the clock and drumming my fingers on the tabletop. I started enjoying the quiet time with Dad. My father taught me how to bake bread, but I think I learned something more. I learned to appreciate the slowly ticking rhythm of time. I learned to relax and let the bread rise.