



Building a Fire

“Good job setting up your tents, Forest Friends! Who wants some s’mores?” called Mr. Griffin.

“Me!” shouted several Forest Friends as they huddled around their pack leader.

“Okay, then,” said Mr. Griffin. “Who knows how to safely build a fire . . .”

Several hands in the group shot up.

“. . . by using friction?” added Mr. Griffin with a smile on his face.

All the hands but one went down.

“Jen, how can we make a fire using friction?”

“By rubbing two sticks together?” said Jen, though she didn’t sound at all sure.

“That’s right!” said Mr. Griffin. “Rubbing two objects together makes them both heat up because of friction. That’s why rubbing your hands together on a cold day warms them up. Here, I’ll show you.”

Mr. Griffin picked up two dry sticks and began to rub them together lightly. He rubbed them together faster and faster but couldn’t get the sticks to catch fire. Finally, he fell off his log and lay on the ground, exhausted.

“I’m okay!” he laughed as the kids huddled around him. “I’m just a little out of shape,” he panted.

“I said I would show you how to start a fire using friction, and I will.” He pulled out a book of matches from his jacket pocket. “Friction is also what causes the chemical coating on the head of a matchstick to catch fire,” he said.

He dragged the match across the friction strip on the matchbook. *Fwoosh!* The match burst into flame.

“Hooray!” shouted the Forest Friends.

Do You Know?

Friction happens anytime two objects rub together. Friction is the resistance of an object to motion. Friction slows down the objects as they rub together and changes some of the rubbing energy into heat.