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KEY ICONS TO LOOK FOR



Words to Understand: These words with their easy-to-understand definitions will increase the reader's understanding of the text, while building vocabulary skills.



Sidebars: This boxed material within the main text allows readers to build knowledge, gain insights, explore possibilities, and broaden their perspectives by weaving together additional information to provide realistic and holistic perspectives.



Research Projects: Readers are pointed toward areas of further inquiry connected to each chapter. Suggestions are provided for projects that encourage deeper research and analysis.



Text-Dependent Questions: These questions send the reader back to the text for more careful attention to the evidence presented here.



Series Glossary of Key Terms: This back-of-the-book glossary contains terminology used throughout this series. Words found here increase the reader's ability to read and comprehend higher-level books and articles in this field.



Educational Videos: Readers can view videos by scanning our QR codes, providing them with additional educational content to supplement the text. Examples include news coverage, moments in history, speeches, iconic sports moments and much more!



Going Down!

t's a looooong way down the mountain. The path—
if you can find it—is steep, narrow, and twisty.
Some places are muddy and ripped through with

tree roots. Other places are peppered with gravel—and those are the smooth spots! The rough ones are blocked by large, jagged rocks that seem to guard the way against trespassers. Sometimes the trail reaches a ledge and the only way forward is to jump. Sometimes it runs down the side of a mountain in almost a straight vertical drop. It's so gnarly that most cyclists would probably have trouble staying upright at a snail's speed, but the riders on these courses are not going slowly.



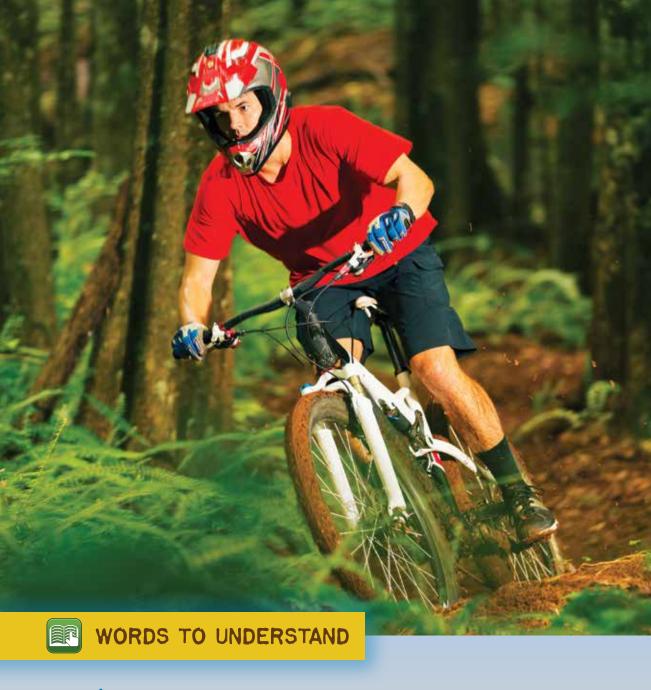
For competitive mountain bikers, a downhill race is a breakneck ride that can reach 60 miles per hour (97 km/hour). Best-case scenario? Sore muscles, a face full of mud, and a



race time that's fractions of a second shorter than the other riders.

Professional mountain biking can get extreme. But there's lots more to mountain biking than barreling down a hill at full speed. A good mountain bike can take you to some spectacular places, and riding with friends is a great way to have fun (and get some great exercise). Riding a mountain bike is a very different experience than riding a road bike—and the places you can ride a mountain bike would shred your old ten-speeder! Inside, find out the basics of this fun sport, learn how to pick the right bike for you, and read about some of the superstars you can aim for!

With a decent bike and an understanding of some basic skills, anyone can enjoy the fun of going off-road on two wheels.

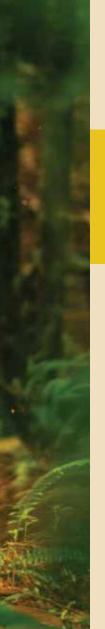


epic a long ride filled with physical and technical challenges

suspension the support or cushioning in a bike

technical in mountain biking, describes the difficulty and required skill level of a particular section

traction the grip or contact a tire has with a road surface



Into the Great Outdoors!

ountain bikes are truly "go-anywhere" vehicles. They have sturdy frames and thick, knobby tires that give riders good

traction. They are ideal for riding on off-road trails that are muddy or rocky. In some places, mountain bikers also build their own trails made of wooden planks, like an old-fashioned roller coaster. Sometimes these hang high in the air, over dense terrain below. Many mountain bike trails are single tracks, only wide enough for one bike. That's why mountain bikers are sometimes called singletrackers.

Of course, mountain bikes can also be ridden on pavement. Lots of people use their mountain bikes to commute to school or work during the week, and then tackle the trails on the weekend.

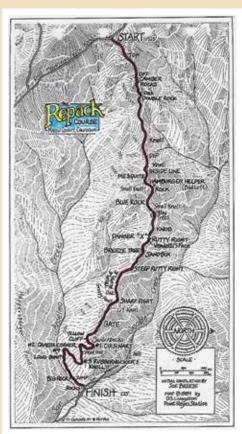
The History of Mountain Biking

he history of mountain biking can be traced to the late 1960s in Northern California. A group of kids called the Larkspur Canyon Gang would fix up old bikes, and then ride them down the slopes of Mt. Tamalpais in Marin County (near San Francisco).

Early mountain bikers went just one direction—down. They barreled down hills as fast as they could, using simple beach cruiser bikes. These bikes had fat tires, wide handlebars, and just one gear. They were nicknamed "clunkers." These bikes usually had coaster brakes, a type of brake that was activated by pedaling backward. These brakes were fine for a quick ride down the beach or to the store. However, they were not

up to the stopping power needed on a fast, downhill ride.

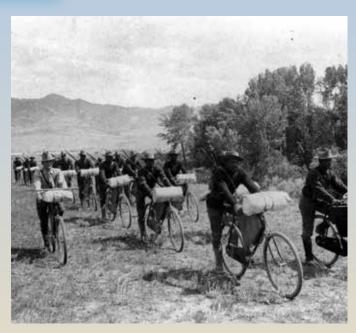
One of these early races was called the "Repack." It was held on a dirt road in Marin County. The road twisted down for about two miles (3.2 km), with a vertical drop of 1,300 feet (396 meters). Riders had to brake a lot on the way down. The constant pressure burned through the grease that was used to lubricate their coaster brakes. After just a couple of trips, new grease had to be repacked onto the brakes to keep them running smoothly. That's how the race got its name! The first Repack race was held in 1976, with ten riders. The winner, Alan Bonds, was the only one who didn't crash. As the race became more popular, various landmarks were added to the course. They had names that sounded like they came off a treasure map. Places were marked as "Danger X,"



A map of the original Repack ride.

THE BIKE BRIGADE

Mountain biking was not always a leisure activity. In 1896, the U.S. Army tested bikes as a form of transportation. They wanted to see if they would work better than horses in some places. For their test run, eight soldiers rode 126 miles (202 km) in four days. Loaded with gear, their bikes weighed 76 pounds (34 kg) each. The trip was a success, and the following



summer more soldiers made a bicycle journey of almost 2,000 miles (3,218 km). The commander concluded, "The trip has proved that the bicycle has a place in modern warfare. An Army Bicycle Corps can travel twice as fast as cavalry [horses] or infantry [foot soldiers] under any conditions, and at one third the cost and effort."

"Hamburger Helper," and "Vendetti's Face." They were references to difficult spots and wipeouts that had occurred along the way.

By the mid-1970s, mountain bikers were realizing they needed to soup up their bikes to withstand the punishment of downhill rides. They added more gears to make it easier to ride up hills, as well as speed down them. They switched to brakes that did not burn up before they got to the bottom of the hill. Bike frames got stronger and the **suspension** systems got sturdier. With better bikes, riders could try more things. Mountain biking was becoming a real sport.



Styles of Mountain Biking

he handful of people who started mountain biking in the 1970s has grown into a fan base of millions. Most people do it for fun, but there are also competitions. The sport has also become broader. There are several categories of mountain biking that use different skills and appeal to different people. Some types of mountain biking include:

Downhill Downhill riding grew out of those first rides in California, but the thrill factor has gone up even more. Riders take on steep and rocky terrains, using bikes built to go fast and handle a lot of punishment. In competitive downhill mountain biking, riders race down a

track that is only a couple of feet (.5 m) wide. If the rider makes a mistake and leaves the track, he must come back in at the same place he went off. This costs valuable time.

Cross Country Cross country tracks combine different types of ground. Some is steep and rocky, like the downhill slopes. Other parts are relatively flat. Cross country riders do a lot of uphill riding, as well as down. Cross country bikes are not designed to take on the abuse dished out by a fast, downhill ride. Instead, these bikes are more lightweight and versatile, so they can handle a variety of types of riding.

Enduro Enduro mountain biking is more rigorous than cross country. It involves steep drops and obstacles. These **technical** sections are more difficult and require more skill.

Freeride Freeride mountain bikers can do elaborate tricks and jumps, like acrobatics in the air. They might do midair twists and handstands on the handlebars before they come back to earth.





Getting Started

ost mountain bikers do not want to do death-defying tricks in the air, of course. They just want to get outside, enjoy the scenery, and get a little exercise. Although it's called "mountain biking," this kind of biking goes way beyond mountains. It includes all kinds of off-road environments, from dry deserts to dense, woodsy trails. Different people like different types of rides. Some like to take on technical challenges, handling rocks or logs in their path. Others like smoother paths that will let them go faster. Still others like to take epic rides. These are long-distance rides that last several hours, or even several days.