* **[Mountain bikes](http://en.wikipedia.org/wiki/Mountain_bike%22%20%5Co%20%22Mountain%20bike)** differ from other bikes primarily in that they incorporate features aimed at increasing durability and improving performance in rough terrain. Most modern mountain bikes have some kind of [suspension](http://en.wikipedia.org/wiki/Bicycle_suspension), 26, 27.5 or 29 inch diameter tires, usually between 1.7 to 2.5 inches in width, and a wider, flat or upwardly-rising [handlebar](http://en.wikipedia.org/wiki/Bicycle_handlebar) that allows a more upright riding position, giving the rider more control. They have a smaller, reinforced [frame](http://en.wikipedia.org/wiki/Bicycle_frame), usually made of wide tubing. Tires usually have a pronounced [tread](http://en.wikipedia.org/wiki/Tread), and are mounted on rims which are stronger than those used on most non-mountain bicycles. Compared to other bikes, mountain bikes also tend to more frequently use [hydraulic disc brakes](http://en.wikipedia.org/wiki/Hydraulic_disc_brakes). They also tend to have lower ratio [gears](http://en.wikipedia.org/wiki/Bicycle_gearing) to facilitate climbing steep hills and traversing obstacles. [Pedals](http://en.wikipedia.org/wiki/Bicycle_pedal) vary from simple *platform* pedals, where the rider simply places the shoes on top of the pedals, to *clipless*, where the rider uses a specially equipped shoe with a sole that engages mechanically into the pedal. **MANY STORE BRAND BIKES ARE NOT SAFE FOR TRAIL RIDING, make sure to use a "mountain bike" not an "off road" bike for the Bristol MTB program.**
* [**Gloves**](http://en.wikipedia.org/wiki/Cycling_gloves) differ from road touring gloves, are made of heavier construction, and often have covered thumbs or all fingers covered for hand protection. They are sometimes made with padding for the knuckles.
* **Glasses** with little or no difference from those used in other cycling sports, help protect against [debris](http://en.wikipedia.org/wiki/Road_debris) while on the trail. Filtered lenses, whether yellow for cloudy days or shaded for sunny days, protect the eyes from strain. Downhill and freeride mountain bikers often use goggles similar to motorcross or snowboard goggles in unison with their fullface helmets.
* [**Shoes**](http://en.wikipedia.org/wiki/Bicycle_shoe) generally have gripping soles similar to those of hiking boots for scrambling over un-ridable obstacles, unlike the smooth-bottomed shoes used in road cycling. The [shank](http://en.wikipedia.org/wiki/Shank_%28footwear%29) of mountain bike shoes is generally more flexible than road cycling shoes. Shoes compatible with clipless pedal systems are also frequently used.
* **Clothing** is chosen for comfort during physical exertion in the backcountry, and its ability to withstand falls. Road touring clothes are often inappropriate due to their delicate fabrics and construction.
* [**Hydration systems**](http://en.wikipedia.org/wiki/Hydration_system) are important for mountain bikers in the backcountry, ranging from simple water bottles to water bags with drinking tubes in lightweight backpacks (e.g., [Camelbaks)](http://en.wikipedia.org/wiki/CamelBak).