

## Bike sizing guidance

Choosing the correct size of bike is essential if you are to feel comfortable when riding, it will also make the bike more efficient and easier to handle. Within this guide we will attempt to give basic guidance on choosing the most suitable frame size for you.

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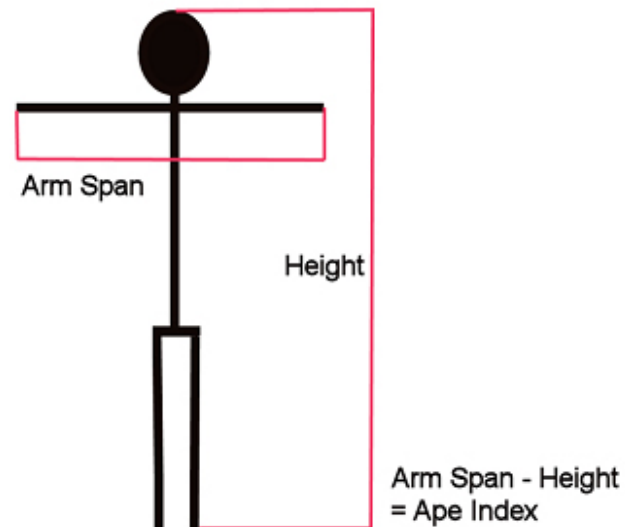
### How do you choose the correct size bike?

A good starting point for you, a new cyclist, is to measure your inside leg which will determine your stand over height. The stand over height is the clearance between your crotch and the top tube of the bike when stood just in front of the saddle and comes into play when you need to dismount quickly; this is more likely on an MTB so we would suggest at least 1", but recommend 2". As well as your inside leg length you should also measure your height, this gives you two points of reference to help choose the size of bike from the bike size charts, which are located near the bottom of this page. Bike frame sizes usually increase in 2cm increments for road bikes and 2" increments for mountain bikes, so get someone else to measure you carefully as accurate measurements are essential.

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### How do you determine your reach?

As a bike seat tube length, or frame size increases so does the top tube and head tube length to keep the bike in proportion. So, if you find yourself in between sizes based on your height and inside leg length the upper body should be the deciding factor, because your reach to the bars will be affected. To help work out if you have a long or short reach you need to determine your 'Ape Index' this is your arm span (finger tip to finger tip) minus your height. If you have a positive 'Ape Index' (your arm span is greater than your height) then go for the larger of the two sizes. If you have a negative 'Ape Index' (your height is greater than your arm span) then go for the smaller of the two sizes.



## Correct frame size

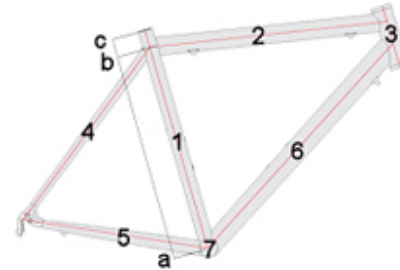
If you already have a bike that you are comfortable on you can measure the frame size.

The two most commonly stated frame measurements are centre to top (a to c on the diagram to the right) or centre to centre (a to b).

These measurements refer to the centre of the bottom bracket axle to either the top of the seat tube or middle of top tube in line with the seat tube. Other dimensions to take into account are

the top tube and head tube, these determine your reach and your handlebar height. All dimensions have a certain amount of adjustment, saddle height and set back is adjusted via the seat post, handlebar reach is adjusted with stem lengths and saddle fore/aft adjustment, whilst handlebar height can be adjusted via spacers or different angle stems. But, it is essential you get the most appropriate frame size so that all these dimensions can be achieved. Manufacturers can state either measurement on your frame, so always check which they have used when viewing their range. When comparing frame sizes you should also take into account the style of frame, especially road bikes which come in traditional, semi compact or compact geometries

- 1, Seat Tube
- 2, Top Tube
- 3, Head Tube
- 4, Seat Stays
- 5, Chain Stays
- 6, Down Tube
- 7, Bottom Bracket



## Glossary of frame terms

- Seat tube: The frame tube that the seat post fits into and runs from the bottom bracket to the top tube and seat stays. Will often feature bottle cage bosses and have the front derailleur mechanism attached.
- Top tube: The frame tube that runs from the head tube to the seat tube.
- Head tube: The shortest frame tube on the bike which the forks steerer tube fit through
- Seat stays: The two frame tubes which run from the top of the seat tube to the rear drop outs and chain stays.
- Chain stays: The two frame tubes which run from the bottom bracket to the rear drop outs and seat stays.
- Down tube: Usually the largest of all the frame tubes and runs from the bottom of the head tube to the bottom bracket. Will often feature gear cables and bottle cage bosses for fitting a bottle cage.
- Forks: The two tubes that run through the head tube and attach to the front wheel.

**How do you choose the correct size kids bike?**

Choosing the correct size of bike is classed by age as opposed to height. Kids are still learning to ride, so it's important the bike you buy them fits correctly and is not too big! This is a common mistake in parents wanting to stretch out the life of a bike. The fact remains that when a child is learning, they often need to step forward off the saddle, so they straddle the top tube. It's important the frame isn't so big they risk hurting themselves when this happens.

Our [guide table](#) below suggests which wheel sizes are most suitable for which age range. You know your child best. If he/she is tallest in the class and is at the top of a size range, then go for the next wheel size up. If your child's age is in the middle of the range, try and resist the urge to 'upsized' them to get extra life out of the bike. This will be counter-productive to the child's enjoyment of learning to handle a bicycle.

### Time Trial (TT)/Triathlon bike positioning

Time Trial and Triathlon bikes are slightly different with regards to sizing, the aim of a TT/Tri frame is to get a flat back and reduce your aerodynamic drag. A TT or Tri bike will have a slightly steeper seat tube angle; this moves your saddle position forward so the angle between your torso and thighs is not reduced excessively. The reason for this is because if your thighs come up too high you will lose power, so by moving the saddle position forward and your bars being lower you do not lose any power, but gain an aerodynamic benefit. The diagram (right) shows the two positions, notice how the TT/Tri position results in lower front end whilst retaining the angle between thigh and torso, you will also see how the point of contact with the saddle is further forward while the reach to the handlebars is more or less the same.



### Bike Sizing Charts

MTB - Off Road (Hardtail)			MTB - Off Road (Full Suspension)		
Height	Inside Leg	Frame Size	Height	Inside Leg	Frame Size

4'10" - 5'0"	26" - 28"	13"	5'4" - 5'7"	28" - 30"	14", 15"
5'0" - 5'3"	27" - 29"	14", 15"	5'8" - 5'9"	29" - 31"	16", 17", 18"
5'4" - 5'7"	28" - 30"	16", 17"	5'10" +	30" - 32"	19", 20", 21"
5'8" - 5'9"	29" - 31"	18", 19"			
5'10" - 5'11"	30" - 32"	20"			
6'0" - 6'2"	32" - 34"	21"			
6'2" - 6'4"	33" - 35"	22"			

Hybrid - Leisure/Comfort			Hybrid - Sport/Commuter		
Height	Inside Leg	Frame Size	Height	Inside Leg	Frame Size
4'10" +	26" - 28"	13", 14"	4'10" +	26" - 28"	13", 14"
5'0" +	27" - 29"	15"	5'0" +	27" - 29"	15"
5'2" +	27" - 29"	16"	5'2" +	27" - 29"	16"
5'4" +	28" - 30"	17"	5'4" +	28" - 30"	17"
5'6" +	28" - 30"	18"	5'6" +	28" - 30"	18"
5'8" +	29" - 31"	19"	5'8" +	29" - 31"	19"
5'10" +	30" - 32"	21"	5'10" +	30" - 32"	21"
6'0" +	32" - 34"	22"	6'0" +	32" - 34"	22"

Road - Standard		
Height	Inside Leg	Frame Size
5'1" - 5'3"	27" - 29"	48cm
5'3" - 5'5"	28" - 30"	50cm
5'5" - 5'7"	29" - 31"	52cm
5'7" - 5'9"	30" - 32"	54cm
5'9" - 5'11"	31" - 33"	56cm
5'11" - 6'2"	32" - 34"	58cm
6'1" - 6'3"	33" - 35"	60cm
6'3" - 6'5"	34" - 36"	62cm

Road - Compact			Road - Compact - Ladies		
Height	Inside Leg	Compact Frame Size	Height	Inside Leg	Compact Frame Size
5'2" - 5'4"	27" - 29"	XS	5'0" - 5'2"	26" - 28"	2XS

5'4" - 5'7"	29" - 31"	S	5'2" - 5'4"	27" - 29"	XS
5'7" - 5'10"	31" - 32"	M	5'4" - 5'6"	28" - 30"	S
5'10" - 6'0"	32" - 33"	M/L	5'6" - 5'8"	29" - 31"	M
6'0" - 6'3"	33" - 34"	L	5'7" - 5'10"	30" - 32"	L
6'3" - 6'6"	34" - 36"	XL			

Kids	
Age	Wheel Size
2-5 yrs	12"
4-8 yrs	16"
7-10 yrs	20"
10-15 yrs	24"

We hope you have found this guidance useful