

BICYCLES

Choose one of our Best Buy bikes and you can leave the car at home this summer

BEST
ON
TEST

1 Giant Terrago Disc **79%**

MOUNTAIN BIKE £400 from independents

Frame sizes: 14, 17, 19 and 21 inches

This is the most expensive off-road bike we've tested, but your extra cash gets you hydraulic disc brakes that could 'stop on a sixpence', according to one tester. The wheels – in particular the tight spokes – impressed our expert, and changing gear couldn't be easier. It's the only Best Buy mountain bike with a chain guard – handy for avoiding scrapes on the shin.

The Giant Terrago is a great buy if you intend to stay off-road but it's not ideal for a daily commute as there's no way to attach front mudguards and the chunky tyres aren't at their best on smooth surfaces.

The first 10,000 miles of the National Cycle Network are nearing completion, cyclists in Scotland are enjoying new off-road access rights, and the congestion charge is clearing traffic from the streets of London. Now could be the ideal time to get on your bike.

Wherever you are in the country, the chances are you could easily make any local journey by bike. Amazingly, three quarters of all our personal journeys are less than five miles – that's just half an hour on a bike. If you do that on a regular basis – as part of a daily commute or cycling to the shops, say – you'll enjoy a fitness level equal to that of a person ten years younger. Not only that, but you'll avoid the frustrations of traffic jams, crowded buses and unreliable trains.

So what are all these fit, stress-free, happy people riding? Modern bikes are lighter and better equipped than ever. Light aluminium frames, suspension and even efficient disc brakes are becoming the norm. And there's a huge variety of bikes for different terrains.

We asked 60 experienced cyclists to follow our gruelling Tour de Milton Keynes – putting eight off-road bikes and 12 bikes for road use through their paces. When our riders had dismounted, a technical expert from the Cyclists' Touring Club took over to assess the quality of each bike. Our five Best Buys impressed the riders and expert alike.

So trade in your gym subscription and forget the scare stories: the health benefits of cycling significantly outweigh the risks on British roads.



1 Giant
MOUNTAIN BIKE

BEST
ON
TEST

9 Marin San Rafael 79%

HYBRID £425 from independents

Frame sizes: Men 15.5, 17.5, 19 and 20.5 inches; Women 15 inches

The Marin is one of a growing breed – a hybrid bike with both front-fork and seat-post suspension. This makes for an extremely comfortable ride, and this bike was our cyclists' favourite on Tarmac. If the ride gets too bouncy on smooth surfaces (and you think your bones are up to it), there's a fork suspension lock. This will make cycling easier on good roads.

The frame is nicely welded, and the angular tube shape could help prevent denting. The wheels – made up of 36 tight spokes, a Shimano hub and good-quality rims – are especially admirable in this price bracket.

We've got only one minor niggle – it would be nice to see replaceable chain rings and metal rather than cheap-looking plastic pedals.

9 Marin
HYBRID

BRAKES

The Marin – like most bikes – has 'V' brakes on the wheel rim (right, below). These worked well in our tests, but they're less effective in wet weather and can wear over time and damage the rim.

The Giant has disc brakes (left, below), which work more consistently across different conditions and won't damage the wheel rim. They weigh a little more but the once-prohibitive cost is falling. Look for hydraulic disc brakes, which are more efficient than the cable type. Many bikes, such as the Muddy Fox Best Buy (see p45), let you upgrade to disc brakes.

Old-fashioned drum brakes are low maintenance but less effective.



NEED TO KNOW

Before you buy a bike, decide where you want to ride.

OFF ROAD

Mountain bikes are designed mainly for off-road use. Their fat knobbly tyres on 26-inch wheels, low gear ratios and suspension offer good stability and grip.

ON ROAD

Hybrid bikes are increasingly popular for road use. They tend to have a wider and higher range of gears than mountain bikes, narrow tyres on larger wheels, and an upright riding position. Some also have suspension, which makes for a more comfy ride but won't suffice if you stray off-road. Variations include trekking bikes and traditional city bikes (both come with mudguards and carrier) and urban mountain bikes. These mimic their off-road cousins in frame and wheel size but have slick tyres and no suspension.

Classic racing and touring bikes have large, narrow wheels, drop handlebars and a more aerodynamic riding position. Racers offer speed while tourers are designed for long-distance practicality.

Foldaway bikes have small 16 to 20-inch wheels and a limited number of gears. They're easy to carry when not in use.

Best Buys

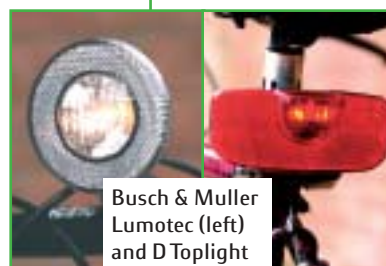
We tested mountain bikes (the most popular type) and variations of hybrids (the biggest growing sector) under £500. The general rule is that you get what you pay for. Spending a little more gives you higher-quality, longer-lasting components as found on our Best Buy bikes. All the Best Buys had to give our cyclists a comfortable ride, too. We didn't come across any really bad bikes, and most non-Best Buys (see p47) were let down by just one or two aspects.

2 Trek 4300 77%

MOUNTAIN BIKE £300 from independents

Frame sizes: 13, 16, 18, 19.5, 21, 22.5 and 24 inches

This Trek boasts a great pair of wheels that tick all the right boxes for good-quality hubs, spokes, rims and tyres. The nicely welded frame impressed our expert, and our cyclists found it easy to adjust the riding position. It comes in a variety of sizes, so finding the right fit should be easy. For an extra £60 you can buy a version with disc brakes but the existing V brakes worked well. On the downside, the chain set lacks replaceable rings. And watch your calves – there's no front chain guard.



Busch & Muller Lumotec (left) and D Toplight

Accessories

These Best Buys from our last test of bike accessories (April 2004) are still in the shops.

LIGHTS

The Busch & Muller lights were the brightest dynamo-powered lights on test. They boast corrosion resistance, but we found the rear light isn't as water resistant as the front. The Madison works as both a flashing LED or a traditional halogen, but isn't waterproof.

Busch & Muller Lumotec Original

79%

Dynamo halogen £15

Busch & Muller

D Toplight 75%

Dynamo LED £21

Madison Electron

LED & Halogen 65%
Battery-powered halogen/LED £15

LOCKS

This Kryptonite lock should offer moderate security from dedicated thieves and deter the opportunist. However, it's very heavy at nearly 2kg – almost twice as much as other good locks.

Kryptonite New York 3000 £60 78%

PANNIERS

Our Best Buy panniers are durable and easy to use, with strong seams. They can be used with all bikes – if you have the relevant carrier attachments.

Altura Arran 36 84%

32 litres £40

Ortlieb Bike Packer Plus F251 77%

45 litres £100

Ortlieb Back Roller Classic F532 80%

44 litres £80

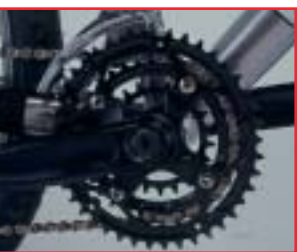
Ortlieb Front Roller Classic F635 83%

24 litres £65

SUSPENSION

Suspension lets the wheels move up and down to absorb bumps while the tyres stay on the ground. It makes the ride more comfortable but saps more of your energy when riding on smoother surfaces. Extra parts also mean more maintenance. This Trek, along with all the off-road bikes we tested, has front-fork suspension, which makes the bumps easier on your hands. A few also have seat-post suspension, which cushions the ride for your bottom.





GEARS AND CHAINS

It's not just the number of gears that matters. Look at the size of the chain rings,

too. As a guide, the bigger the front chain ring, the higher the top gear and the faster you can go. A smaller front chain ring (as on mountain bikes) means a lower bottom gear – and easier uphill travel. The chain and chain ring are usually among the first parts of a bike to wear out. Look for replaceable chain rings, which save you from having to replace the whole crank set.

Most of the bikes we tested use Shimano-branded gears. There are four types: Tourney (the cheapest), Acera, Alivio, and Deore (the most expensive).

For reliability, opt for enclosed hub gears as on the Best Buy Kettler (see p46). These are protected from dirt, water and impact, and rarely need maintenance. However, they tend to have fewer gears and a higher bottom gear so can be tough on the incline.



FRAMES

Most frames in our price bracket are made of welded aluminium, which is light and strong. Look for neat, uniform welding: holes will quickly corrode. On

mountain bikes, check for a strengthening plate where the frame meets the forks (as on this Muddy Fox). Some cheaper bikes are made of heavy steel, but the Pashley Tube Rider (17) uses light, high-quality steel with a better strength-to-weight ratio than aluminium.

Most bikes come in a range of frame sizes. These are based on inside-leg measurements. It's hard to give an exact formula for finding the right size – see 'Hints and tips', below, for ways to check fit. Some manufacturers design different frames for men and women. Women's frames are generally smaller with a lower crossbar.



Hints and tips

BUYING

Insist on a test ride to be sure of the right frame size. You should be able to straddle the bike and lift the front wheel a few inches off the ground. Raise the saddle till your outstretched heel just touches the pedal at its lowest point and you can touch the ground with your tiptoes. Make sure you can raise the handlebars to about the same height as the saddle.

If you don't mind last year's colours, buy in autumn, when a lot of prices are dropped as new ranges are launched.

RIDING

The most efficient way to cycle is to maintain a constant pedal rhythm. It's much better to work through the gears steadily rather than clatter through a

handful at a time – disturbing your rhythm and belting out that familiar clanking sound.

Being visible is the best way to avoid problems. Give clear hand signals and make eye contact with other road users, especially when manoeuvring. It's amazing how people notice a good stare. If a junction looks too busy and intimidating, you can always push the bike and walk across.

Don't ride in the gutter, as drains and debris could damage both you and the bike. Avoid drain covers and shiny Tarmac sealing lines as they're extremely slippery in the wet.

MAINTENANCE

Keep tyre pressure at the recommended levels (check the manual, or see the maximum level on

the tyre wall) with a quick pump every few weeks. Properly inflated tyres are more comfortable to ride on and less likely to puncture. And remember that up to 70 per cent of the weight is carried by the rear tyre. Take your bike back to the shop after a month or so. Most stores will carry out some fine-tuning such as truing wheel spokes and checking gears and brakes.

Dirt and water can cause premature wear of components so keep the bike clean and use mudguards.

To avoid that sad walk home, pack the following simple tools:

- three tyre levers
- puncture repair kit
- spare inner tube
- pump
- Allen key tool
- bike spanner.

3 Muddy Fox Midas 73%

MOUNTAIN BIKE £350 from independents

Frame sizes: 16, 18, 20 and 22 inches

Muddy Fox certainly seems to have found its golden touch with this eye-catching machine. Our expert reckoned the frame and forks are 'as good as you're going to get at the price'. The components are generally very good quality. It uses Shimano Alivio gear mechanisms and decent metal pedals, and it's the only Best Buy with replaceable chain rings. There are no disc brakes but it does have mountings for an upgrade. This bike's also lacking a chain guard – something our riders missed.

BEST
BUY2 Kettler
CITY BIKE

10 Kettler City Tour 72%

TRADITIONAL CITY BIKE £395 from Kettler
Frame sizes: Men 20; Women 18.5 inches

This traditional-looking city bike is Kettler's best seller – and it's easy to see why. It comes equipped with a host of extras – mudguards, carrier, stand, dynamo lights and even a pump – all on a well-finished frame. According to our testers, the sweptback handlebars give it a 'very European look' and the ride is akin to 'travelling on a sofa'. It's great for town cycling and its superb array of extras make it an 'ideal bike for errands', according to our expert. There's a limited range of gears, though, so make sure those errands aren't at the top of a steep hill.

FURTHER INFORMATION

www.ctc.org.uk

The Cyclists' Touring Club has information for cyclists of all levels, plus details of lessons.

www.sustrans.org.uk

Sustrans is responsible for the National Cycle Network. Check the website for events.



EXTRAS

In the absence of mudguards and carriers, look for the necessary eyelets to attach your own (you'll pay around £50 for a full set). The on-road bikes all came with mountings for at least one carrier and mudguards. Of the mountain bikes, only the Saracen and Falcon offer as many options.

All new bikes must be sold with a bell but those on the bikes we tested were a bit feeble. If you want more than a subdued 'plink, plink', you can buy a healthier-sounding bell for under a fiver.



SAFETY

Make sure your bike has a chain guard to protect your legs from the front chain ring. It could literally save your skin if your foot slips.

Check that mudguards have safety releases. Without them, plastic mudguards can get jammed in the wheel – a potential problem with the Ridgeback Speed (20).

On larger-wheeled bikes, make sure your toe doesn't overlap the front wheel when your foot's on the pedal. We found both the Dawes (12) and Specialized (13) had poor toe clearance. This can be a particular problem when manoeuvring at low speed with mudguards attached, and it can interfere with steering.

WHEELS

The bikes we've looked at have either 26-inch wheels (standard on a mountain bike) or larger wheels known as 700c.

Wheels are made from three components – rims, hubs and spokes. Everything else being equal, a smaller rim and more spokes make for a stronger wheel. Look for at least 32 spokes on a 26-inch wheel, and 36 on a 700c version. Check the calibre of spokes by pinging them: tight, good-quality spokes give off a higher note. Avoid anything with variations of notes and tension.

The hub holds the wheel together. A Shimano-branded hub (as on the Trek 4300) is a good sign of quality on a bike that costs less than £500, but most hubs on the bikes we tested are unbranded.

Bikes

OFF ROAD

1 Giant Terrago Disc

2 Trek 4300

3 Muddy Fox Midas

4 Mongoose Tyax Elite

5 Saracen Rufftrax

6 GT Avalanche 3.0 disc

7 Diamondback M10

8 Falcon Nomad

ON ROAD

9 Marin San Rafael

10 Kettler City Tour^b

11 Schwinn Sierra GS

12 Dawes Discovery 501

13 Specialized Crossroads Sport

14 Ridgeback Nemesis

15 Trek Navigator T30^b

16 Scott Sub 30

17 Pashley Tube Rider

18 Giant Cypress SE

19 Ideal Crosser

20 Ridgeback Speed^b

^a Comes with mountings for disc brakes

The rest on test

OFF ROAD

The **Saracen** (5) and **Diamondback** (7) are more affordable than our Best Buys. The Saracen in particular is a good-value, versatile choice. For a little more money, the **GT** (6) and **Mongoose** (4) give you the benefit of cable disc brakes.

ON ROAD

The **Schwinn** (11) was a favourite for comfort but lost marks due to its cheap chain set. The **Dawes** (12) has the best components on test, and the **Specialized** (13) has great wheels. Both could have been Best Buys but for problems with toe clearance (see 'Safety', opposite).

The **Ridgeback Nemesis** (14) and **Scott** (16) are both urban mountain bikes, with smaller wheels than most hybrid bikes. The Scott is the lightest bike on test and the Ridgeback has button-fire gears that were popular with our cyclists.



But we found both bikes difficult to adjust for a comfortable ride.

The **Trek Navigator** (15) comes with a range of accessories but has poor brakes. The **Pashley** (17) has good metal pedals and a leather saddle, but its five gears aren't up to climbing hills. The **Ridgeback Speed** (20) is a great commuting bike, let down by fairly basic wheels and a cheap chainset.

TABLE NOTES

We selected some of the best-selling models from leading brands of mountain and hybrid bikes.

Specification

Brakes See 'Brakes', p43. **Wheel** The two sizes are commonly referred to as 26 inch (559mm rim diameter) and 700c (622mm rim diameter).

Performance

Gears Our assessment of the gear ratios, speed and uphill effort. **Brakes** Ease of use and effectiveness.

Ride Stability and suspension of the bike while in use.

Construction

Frame Quality of finish, and construction of frame and forks. **Wheels** Quality of build and wheel parts (hubs, rims and spokes).

Parts Quality of the components, including chain set, front and rear gear mechanisms, brakes and pedals.

Ease of use

Adjust How easy it is to adjust the saddle and handlebars. **Comfort** Our assessment of the comfort of the saddle, grips, pedals and ride position.

KEY

★ ☆ ○ ● ●
Best —————> Worst
■ Best Buy

SCORE

This ignores price and is based on:
Performance 35%
Comfort and ease of use 30%
Construction 30%
Versatility (fittings for attachments plus use on various surfaces) 5%

Specification					Suspension		Performance			Construction			Ease of use		Score
Price (£)	Weight (kg)	Gears	Brakes	Wheel	Seat	Fork	Gears	Brakes	Ride	Frame	Wheels	Parts	Adjust	Comfort	(%)
400	14	24	Disc brake	26-inch		✓	★	★	☆	☆	★	☆	☆	☆	79
300	13	24	V brake	26-inch		✓	★	★	☆	★	★	○	★	☆	77
350	13	24	V brake ^a	26-inch		✓	☆	★	☆	★	☆	☆	☆	☆	73
260	14	24	Disc brake	26-inch		✓	☆	★	★	☆	☆	○	☆	☆	69
200	13	21	V brake	26-inch		✓	☆	☆	★	☆	○	●	○	☆	69
270	13	24	Disc brake	26-inch		✓	☆	★	☆	☆	☆	☆	☆	☆	67
200	15	21	V brake	26-inch		✓	☆	★	☆	☆	○	●	☆	☆	64
170	14	21	V brake	26-inch		✓	○	☆	☆	○	○	●	○	○	48
425	13	24	V brake	700c	✓	✓	☆	★	☆	★	★	☆	○	☆	79
395	15	7 ^c	V brake	700c		✓	○	★	☆	★	☆	☆	☆	☆	72
230	14	21	V brake ^a	26-inch		✓	☆	☆	★	○	○	○	☆	☆	71
400	13	27	V brake ^a	700c			☆	☆	☆	☆	☆	★	○	☆	70
300	13	24	V brake	700c	✓		★	☆	○	☆	☆	☆	○	☆	69
450	13	8 ^c	Drum brake	26-inch			★	☆	○	☆	★	☆	○	○	67
250	15	21	V brake	700c	✓		☆	○	○	☆	☆	☆	☆	☆	66
340	11	24	V brake	26-inch ^d			☆	☆	○	☆	★	☆	○	○	65
400	13	5 ^c	Drum brake	26-inch			○	☆	○	○	☆	☆	☆	○	59
209	14	18	V brake	700c	✓	✓	☆	☆	☆	●	○	●	☆	☆	56
250	14	24	V brake	700c		✓	☆	☆	☆	○	●	○	☆	☆	56
200	14	21	V brake	700c			☆	☆	○	○	○	●	○	☆	56

^b Comes with mudguards and rack ^c Hub gears ^d Also available with 700c wheels