



SK8NG

Life is undoubtedly about having good, clean fun, in whatever form that takes, but for the life of me, I can't get to grips with a sk8board!

The sidewalk surfers of the 50s & 60s had a straightforward mission: Start at the top of a hill and ride down. The primary goal was just to stay on and avoid collisions; given the humble equipment and rough road conditions, it was no small challenge. I remember allsorts of 'Soapbox trolleys' being created with planks of wood and old pram wheels. One piece of wood would carry the front wheels, attached to the main plank by nut and bolt, and a piece of rope to steer with. A piece of old carpet would serve as a kneeling pad. With the trolley made, you would kneel with one knee on the carpet and use the other leg to propel you forward. You used your foot as a brake, dragging it on the floor behind you, and on a downward slope you could get up a good speed, providing that you didn't fall off! We would race round the streets at what we thought was a tremendous speed - although it was probably only about five miles an hour. Trolleys were great fun, especially if you made them yourself from odds and ends.



Now, thanks in part to improvements in design and materials, skateboarders have a higher calling. In a blur of flying acrobatics, skaters leap and skid over and onto obstacles, executing flips and turns of ever increasing complexity—all at top speeds. For onlookers and beginners, it can be hard to follow the action, let alone answer the question that springs naturally to mind: How on earth do they do that? While it may seem that modern skateboarders are defying the laws of physics, the truth is that they're just using them to their advantage.



In researching the vocabulary needed just to communicate with the exponents of the sport, I discovered something called an 'Ollie'.

Invented in the late 1970s by Alan "Ollie" Gelfand, the ollie has become a skateboarding fundamental, the basis for many other more complicated tricks. In its simplest form, the ollie is a jumping technique that allows skaters to hop over obstacles and onto curbs, etc. What's so amazing about the ollie is the way the skateboard seems to stick to the skater's feet in midair. Seeing skaters performing soaring 4-foot ollies, many people assume that the board is somehow attached to the skater's feet. It's not. What's even more amazing about the ollie is that to get the skateboard to jump up, the skater pushes down on the board!

Just before a skater performs an ollie, there are three forces acting on the skateboard. One of these forces is the weight of the rider, another is the force of gravity on the board itself and finally, the force of the ground pushing up on the skateboard. These three forces balance out to zero. With no net force, the skateboard doesn't accelerate, but rolls along at a constant speed.

To get a good result the skater must crouch down. A low center of mass is crucial to getting a high jump. (Don't believe it? Stand perfectly straight and try jumping without crouching . . . you didn't get very high, did you?) The skater then accelerates himself upward by explosively straightening his legs and raising his arms. During the jump, his rear foot exerts a much greater force on the tail of the board than his front foot does on the nose, causing the board to pivot counterclockwise about the rear wheel.

As the tail strikes the ground, the ground exerts a large upward force on the tail. The result of this upward force is that the board bounces up and begins to pivot clockwise, this time around its center of mass. With the board now completely in the air, the skater slides his front foot forward, using the friction between his foot and the rough surface of the board to drag the board upward even higher.

The skater then begins to push his front foot down, raising the rear wheels and leveling out the board. Meanwhile, he lifts his rear leg to get it out of the way of the rising tail of the board. If he times this motion perfectly, his rear foot and the rear of the board rise in perfect unison, seemingly "stuck" together.

The board is now level at its maximum height. With both feet touching the board, gravity eventually wins out and the skater bends his legs to absorb the the impact of the landing.

Getting this one right, apparently allows the Sk8ter into a whole realm of other 'tricks' & with the list that follows, you can now impress those around you with your 'in-depth' knowledge of their sport.