

# SPORTOPEDIA

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**H**umans have been taking part in sport for as long as they have walked the planet. Whether competing individually or as part of a team, people have always had a desire to test themselves against one another.

And with hundreds of sports now on offer, there is something for everyone. Each is unique, demanding a wide range of different skills – some might require speed and power, others intelligence and mental strength. But there is one trait that links them all: anybody can take part.

Sport rarely discriminates; it does not care who you are, where you come from or what you have. In fact, some of the most recognisable sports stars have come from the poorest parts of the world. Pelé – the greatest footballer who ever lived – was born into extreme poverty in Brazil but lifted the World Cup as a 17-year-old, while Jamaican sprinter Usain Bolt is the fastest man on earth and has won eight Olympic gold medals despite growing up without easy access to drinking water. Even disabilities have not stopped people achieving sporting greatness. It is the ultimate level playing field, where natural talent alone is not enough. Athletes spend years trying to reach the top, honing their craft through dedication and hard work.

But it is not just about winning or being the best. Sport promotes physical well-being, teamwork and discipline. It has provided us with some of history's most memorable moments – from opposing soldiers laying down their weapons to play a game of football on Christmas Day during World War I, to American swimmer Michael Phelps winning a record 23rd Olympic gold medal in 2014 – at the age of 31.

This book is a celebration of sport and a reminder that you can take part in any of them. Ultimately, it is about playing. Just look out of your window on any given day. Your local park will be full of people doing just that and there is nothing to stop you joining the fun.

**Who knows, maybe you will lift the World Cup or win an Olympic gold medal one day!**

BALL



SPORTS

# FOOTBALL

## Football is the world's most popular sport!

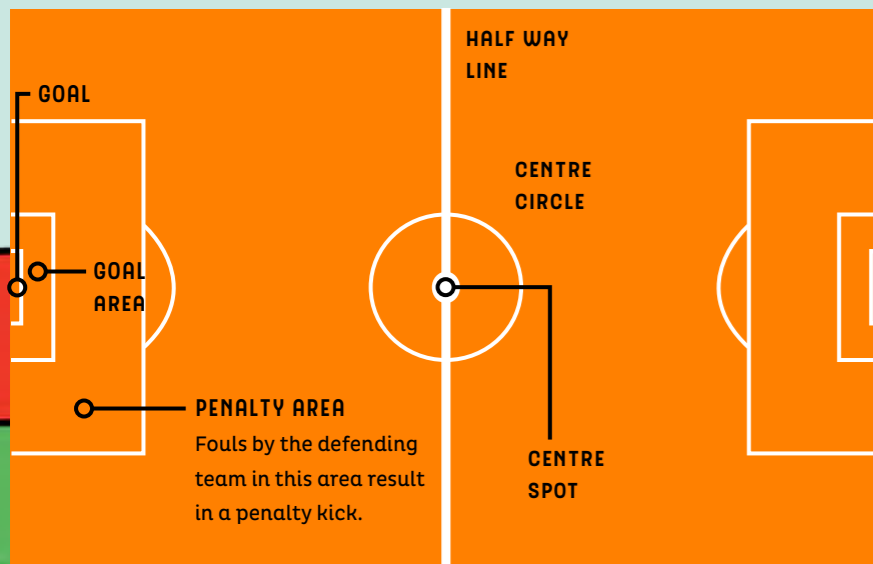
Known as 'the beautiful game', it is played by more than 200 million people in over 200 countries.

People have playing football since around 2 BC but the modern game was created in England when the Football Association formed in 1863. They laid down the basic rules and founded the English Football League, a competition which is still going strong today.

It requires skill, strength and fitness but can be played by anyone with a ball and a bit of space. That is why it is loved by millions!

Games at the top level might be played in mega stadiums and feature some of the best-paid athletes in the world. But many of them grew up playing football on the street or in parks on Sunday mornings. The basic aim of the game is to score more goals than the opposing team. Players kick - or 'head' - the ball around a grass pitch and try to score by putting it in the opposing net. Goooooooooooooallll!

## THE PITCH



## PITCH

Not all pitches are the same size. A grass pitch must be between 90-120 metres long and 45-90 metres wide.

## RULES

- » Teams of 11 players - ten outfield players and one goalkeeper - move a ball around a pitch with their feet or head and try to score goals.
- » A goal is scored when the ball crosses the goal line, between two posts and under a crossbar.
- » Only the goalkeepers can touch the ball with their hands - and only in their own penalty area.
- » Matches last 90 minutes, divided into two 45-minute halves. Teams switch sides at half-time.
- » Free-kicks are awarded for fouls or if players touch the ball with their hands outside the penalty area. A penalty kick is awarded for fouls and handballs inside the penalty area.
- » A player is offside and a free-kick called if the ball is passed and there are not at least two players between them and the goal.
- » Extra-time is played in some competitions if scores are level after 90 minutes. If neither team is in the lead after extra time, there is a penalty shootout.

## POSITIONS

### GOALKEEPER

**ROLE:** To stop the opposition from scoring using any part of their bodies, including their hands  
**SKILLS:** Agility, quick reflexes, safe hands

### DEFENDERS

**ROLE:** To stop the opposition from scoring  
**SKILLS:** Strong, good at heading, fast

### MIDFIELDERS

**ROLE:** All-rounders, skilled in defence and attack  
**SKILLS:** Passing, tackling, shooting, setting up goals by 'feeding the forwards'

### FORWARDS

**ROLE:** Mainly responsible for scoring goals  
**SKILLS:** Finishing, positioning, heading, strength

## BALL

Made of leather; 70 centimetres in circumference. The first footballs were made from inflated pig bladders!

## NET

Captures the ball when a goal is scored. There were no nets in football until 1891.

## GOAL

Made of metal; the crossbar is 2.44 metres high, with posts 7.32 metres apart. Football teams used to keep track of the score by making a nick in the post each time a goal was conceded, hence the phrase 'to score a goal'.

## TOUCHLINE

If the ball touches an attacker before crossing the line, a goal kick is awarded, but if a defender touches it last, a corner is given.

## REFEREE

The 'ref' enforces the rules along with two (or four) assistants.

## CARDS

Breaking the rules can lead to a yellow card, while serious fouls result in a red, meaning the player is sent off. Two yellow cards equal a red. Colombian player Gerardo Bedoya holds the record for the most red cards ever received: 46!

## PENALTY SPOT

Penalties are taken here, 11 metres from the goal.

## GOAL LINE

The whole ball must cross this line for a goal to be scored. Goal-line technology was recently introduced to help referees with close calls.

## FACTS OF THE MATTER

- Every four years at the World Cup, international teams battle for the world's biggest prize. Brazil is the most successful nation, with **FIVE WORLD TITLES**.
- Brazilian legend **PELÉ** was just 17 years and 249 days old when Brazil won the World Cup in 1958 - the **YOUNGEST** ever player to do so.
- England's top division, **THE PREMIER LEAGUE**, is the world's most watched league. It formed in 1992 and has more than **4.7 BILLION FANS** today.
- Teams often pay huge fees to buy players from their rivals. In 2017, French giants Paris Saint-Germain paid **£198 MILLION** to buy Neymar from Spanish side Barcelona - the highest transfer fee any team has ever paid.
- More than **700 MILLION PEOPLE** - more than twice the population of America - tuned in to watch a televised Premier League match between Manchester United and Liverpool in 2015.
- The **FIRST** international match ever was played in 1872 between Scotland and England. It ended in a 0-0 draw... but marked the beginning of a hotly-contested rivalry that's lasted to this day.
- Football originated from old English versions of the game. These could be violent affairs - pitches were the size of **ENTIRE VILLAGES** and everyone joined in!
- Argentinian goalie, **AMADEO CARRIZO**, was the first to wear gloves while goalkeeping during the 1940s.

## KIT BOOTS

Football boots have studs that grip the grass.



## SHINPADS

All players are required to wear shinpads for protection.



## SHIRT

Each team has its own unique strip featuring particular colours that are worn season after season. Often, they carry the label of their sponsor.



## BALL

Footballs used to be made exclusively with leather, which could become soggy and heavy. Today's modern synthetic balls keep their shape - and 'bounce' - much better.



## GLOVES

Gloves help the goalkeepers grip the ball and protect their hands.



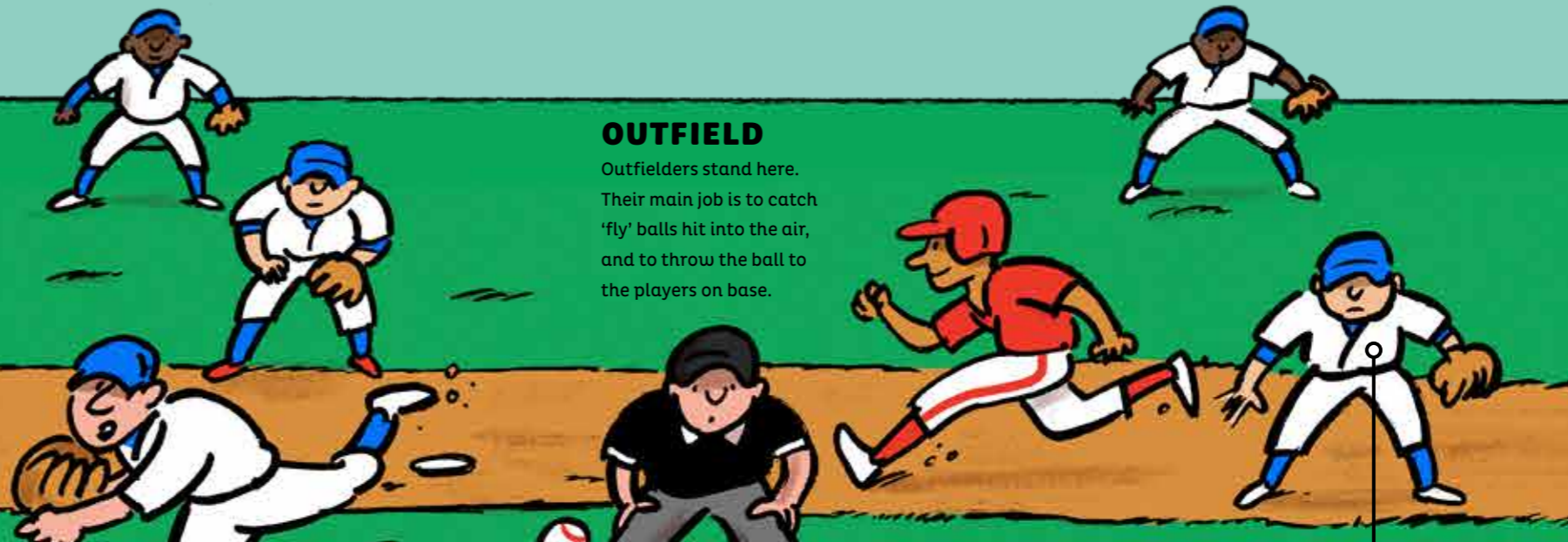
# BASEBALL

## 'America's pastime', his one of the oldest professional sports.

Its roots can be traced back to 18th-century England, where it probably evolved from older bat-and-ball games such as cricket, rounders and stoolball. But the USA is responsible for the way the sport is played and organised today. American baseball teams were some of the first in any sport to start paying their players and the game's

present-day rules were invented there. America's Major League Baseball (MLB) is also the biggest competition in the world and its influence has spread to countless other regions, most notably Central and South America, and East Asia.

Baseball is played by two teams of nine, who take turns to 'bat' (hit a ball) and 'field' (defend the field). They try to score runs by hitting the ball and then running around four bases without being caught or fielded out. Swing like you mean it!



### OUTFIELD

Outfielders stand here. Their main job is to catch 'fly' balls hit into the air, and to throw the ball to the players on base.

### DIAMOND

The name for the field where the game is played. 'Father of Baseball' Alexander Cartwright was the first to draw this diamond shape back in 1845.

### FIRST BASEMAN

Ideally tall and left-handed so they can easily throw the ball in-field, the first baseman fields the area near first base.

### PITCHER

The pitcher throws a pitch overarm from a raised mound to the home plate 18.4m away. Cleveland Indians pitcher Bob Feller is credited with throwing a record fastball at 173.6 km/h back in 1946!

### BALL

Just 23 centimetres in diameter, the stitching on a baseball can measure up to 1.5 kilometres long!

### BAT

League bats are made from wood, whereas college bats are metal.

### CATCHER

One of the toughest jobs in baseball! The player crouches behind home plate to catch the ball from the pitcher and direct defensive play.

### HOME RUN!

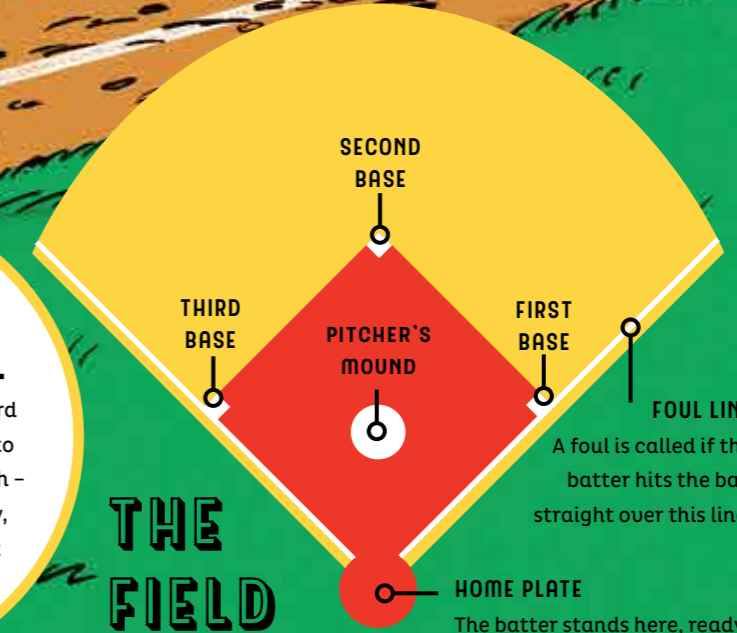
A home run is the best shot in baseball. It happens when the batter blasts the ball so far – usually over the outfield wall – they are able to run around all four bases.

Each runner 'on base' also advances to the home plate, so some home runs can result in a whopping four runs being scored for the batting side.

### PRESIDENTIAL FIRST PITCHES

In 1910, President William Howard Taft became the first president to throw out a ceremonial first pitch – a tradition that lasts to this day, although declined by President Trump in 2017.

### THE FIELD



## FACTS OF THE MATTER

- The U.S. military designed **GRENADERS** during World War II to be the same size and weight as a baseball. The sport was so popular, they believed any young American would be able to throw it properly.
- One of baseball's earliest recorded games involved members of the **PRINCE OF WALES'** (later to become King Edward VII) family, at an indoor match played in London back in 1748.
- References to early baseball were made in Jane Austen's 1798 novel **NORTHANGER ABBEY**. The main character, Catherine Morland preferred 'cricket, base ball, riding on horseback and running about' – not very ladylike for an Austen heroine!
- The rules of modern-day baseball were set down by the **KNICKERBOCKER CLUB** of New York – one of the first-ever organised baseball teams. For example, until 1872, pitchers used to pitch underarm.
- Approximately **70 BASEBALLS** are used per game. Just think how many that adds up to in a season!
- The final game of America's Major League Baseball is the **WORLD SERIES**. The New York Yankees have won it a record 27 times.
- African American players were banned from playing in the Major League for the first half of the 20th century. That led to 'Negro leagues' being formed, where some of the **WORLD'S BEST PLAYERS** could be found.
- Hot dogs are the most popular food eaten by baseball fans. In fact, America's Hot Dog and Sausage Council estimated **21,357,316 HOT DOGS** were eaten in the 2014 Major League season!

## RULES

- » Both teams bat for nine innings. An inning ends when three players on the batting team are out.
- » The pitcher can get the batter out by throwing three strikes.
- » If it's a tie after nine innings, extra innings are played until a team wins.
- » The pitcher 'delivers' the ball overarm.
- » The batter tries to hit the ball to 'get on base', and then become a runner.
- » Runners stop at bases and advance when the next batter hits the ball.
- » A run is scored when a runner reaches home plate.
- » If the batter hits the ball over the outfield wall, the batter and any runners automatically advance to the home plate. This is called a 'home run'.
- » The pitcher can get the batter out by throwing three strikes.
- » A 'strike' is when the batter swings and misses or fails to swing at a legal pitch.
- » A pitch is illegal if it is thrown outside the strike zone. If four illegal balls are pitched, the batter walks to first base.
- » The batter is out if a fielder touches the base before they can run to it.
- » The batter is also out if they hit ball in the air and it is caught by a catcher.
- » If the batter hits the ball over the outfield wall, the

### KIT



### FIELDING GLOVE

Has separate fingers and a deep 'pocket' with open webbing on the side for trapped dirt to fall through.

### BASEBALL CAP

This unique style was first worn in the 1860s. The peak protects the player's eyes from the sun.



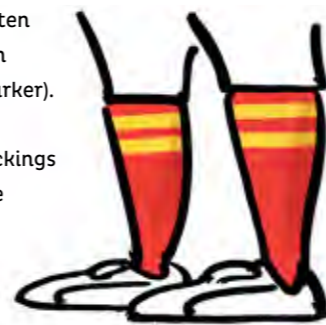
### BATTING HELMET

Worn to protect the batter's head. Ear 'flaps' were introduced in 1983.



### UNIFORM

Teams have a 'home' kit (often white) and an 'away' kit (darker). Originally, coloured stockings identified the teams.



### CATCHER'S MITT

This is much deeper than other fielders' gloves, almost bucket-like to help catch the batter 'out'.



### PITCHER'S GLOVE

No holes in the webbing hide the pitcher's grip, and the direction of pitch, from the batter.



# FIELD HOCKEY

The ancient Greeks were among the first to play hockey, back in 510 BC.

It was revamped and modernised in Scotland during the 19th century and has developed into one of the fastest team sports around, often drawing comparisons with football. In fact, it is sometimes called 'football with sticks'!

Two teams of 11 players use hooked sticks to hit, push and 'dribble' a hard ball around a

pitch and try to score goals by getting it past the goalkeeper. The team with the most goals at the end of the game is the winner.

Hockey has been an integral part of the Olympics since 1928, and nowadays, it is thought that more than three million people play hockey across five continents. Jolly hockey sticks indeed!

## GAELIC ROOTS

An old version of field hockey, called 'shinty', is still played in the Scottish Highlands. The rules are closer to Irish hurling, as players are allowed to use the two sides of their stick, and play the ball in the air, both of which are illegal in field hockey.

## POSITIONS

### GOALKEEPER

**ROLE:** To stop the ball from going in goal!  
**SKILLS:** Bravery and quick reflexes

### DEFENDERS

**ROLE:** Split into centre-backs or full-backs, defenders stop opposition attacks and set up counter-attacks.  
**SKILLS:** Positioning and strength

### MIDFIELDERS

**ROLE:** Linking play between defence and attack  
**SKILLS:** All-rounders. They often set the tempo.

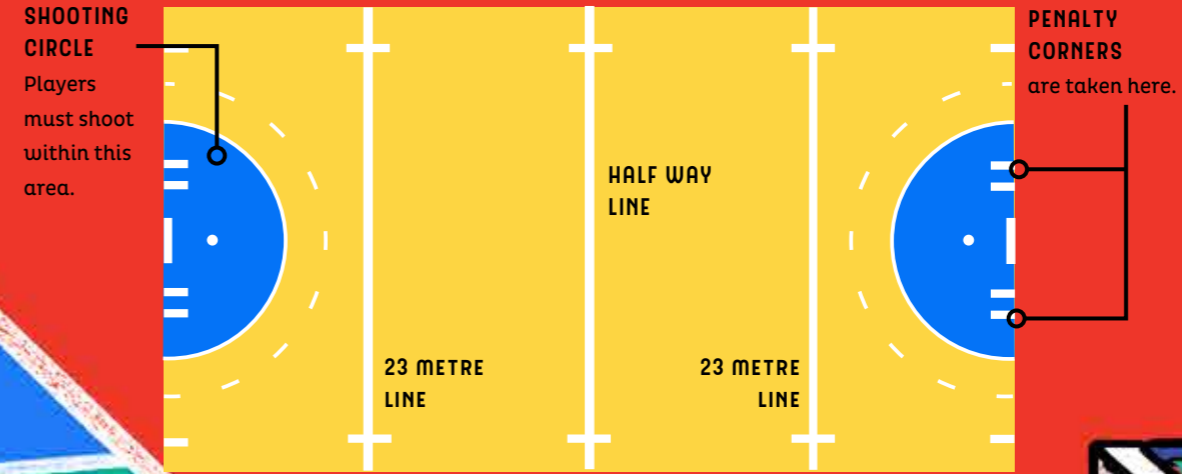
### FORWARDS

**ROLE:** To score goals!  
**SKILLS:** Wingers are often very fast and good at crossing to the central attackers, who score

## FIELD

At 90 x 55 metres, players can find themselves running long distances in a game.

## THE PITCH



**SHOOTING CIRCLE**  
Players must shoot within this area.

**PENALTY CORNERS**  
are taken here.

## BALL

This plastic ball (which can have a cork core), is small in diameter at 7 centimetres, but heavy in weight at 155 grams, making it fast-moving on the pitch.

## GOALKEEPER

Wears equipment to protect face, legs and chest. And they need it... Hockey balls can travel over 100 km/h!

## PENALTY SPOT

Penalty shots are taken from here.

## LAW AND ORDER

The referee is known as the umpire in field hockey. They are armed with three cards to punish rule infringements:

**GREEN:** warns the player

**YELLOW:** temporary suspension from the game for a minimum of five minutes

**RED:** permanent exclusion from the game.

## RIGHT WAY ROUND

Hockey isn't a game for left-handers: only right-handed hockey sticks are available - left-handed alternatives are not allowed. And if you're a leftie and tempted to use the stick back to front, think again! Players must only use the flat side of their stick, not the rounded back side.

## STICKS

Made of wood or carbon, hockey sticks have a distinctive hooked head which players use to hit the ball.

## FACTS OF THE MATTER

- Stick and ball games similar to hockey were played in a number of ancient civilisations. Another more recent version, played in 19th century Scotland, went by the name of 'SHINTY'!
- Hockey is the **THIRD-MOST WATCHED** sport in the world, after football and cricket.
- Men's hockey has the **FASTEST SWING SPEED** of any sport, often reaching speeds of more than **160KM/H**. That is faster than a golfer swings his club or baseball player swings his bat.
- Hockey was spread throughout the British Empire by the British army and is extremely popular in **INDIA, PAKISTAN** and **AUSTRALIA** as a result.
- There are four main positions in hockey, and the average player can **FLICK THE BALL** between 80-110km/h.
- LEFT HANDED?** Tough luck! There is no such thing as a left-handed hockey stick. Left-handed players must simply learn to use a right-handed stick.
- The Indian men's team has won the **OLYMPIC GOLD MEDAL** on eight separate occasions - at least four more times than any other nation.
- Hockey players are extremely fit, often travelling more than **8 KILOMETRES** in a single game.

## RULES

» Matches are 70 minutes long, split into two halves of 35 minutes each.

» Goals must be scored within the shooting circle, meaning no long-shots are allowed.

» The goalkeeper is the only one who can touch the ball with their hands.

» Fouls are awarded for various rule infringements such as obstruction or dangerous use of the stick. For fouls around the goal area, a short corner - or penalty corner - is awarded.

» A penalty stroke is awarded for major infringements inside the shooting circle. The attacking player then gets a free shot against the goalkeeper from the penalty spot.

» Most scoring chances in hockey games come from penalty corners.

» Unlike almost every other team sport, hockey players are not allowed to shield the ball with their body.

» Long corners are awarded if the ball hits a defending player and then crosses the end line.

# BASKETBALL

A game of humble beginnings, basketball is now played by more than 25 million people throughout the United States.

And many more are fans of one of this fast-paced, end-to-end team sport. Matches are usually thrilling spectacles, with scores regularly running into the hundreds of points. Two teams of five players try and score points by bouncing

or passing a ball around a hard court and putting it through a hoop.

The idea came from a Canadian P.E. teacher called James Naismith in 1891. He wanted to invent an indoor sport to keep his students from being bored when they could not play sports outside in bad winter weather.

While many of Naismith's fundamental rules are still in place, over time the game has become increasingly sophisticated, quicker and more physically demanding.

## RULES

- » Five players from each team are on court during play. Each team also has seven substitutes they can rotate at any time.
- » Teams have just 24 seconds to make a shot after getting the ball. If they fail to do so, they lose possession to the other team.
- » Players 'dribble' the ball by bouncing it on the court as they run.
- » Once a team is in the attacking half of the court, they cannot go back over the half-way line.
- » A 'travelling' violation is called if players run with the ball without bouncing it.
- » Points are scored every time the ball goes through the hoop. Different plays are worth a different number of points.
- » Professional matches are split into four periods of 12 minutes each, and an extra five minutes is played if the scores are level after this time.

## SLAM DUNK!

To make this crowd-pleasing shot, a player jumps high and puts the ball straight through the hoop.

## BACK-BOARD

Players use this to bounce the ball off, into the hoop. It was invented to stop spectators from interfering with shots, as the hoop was originally nailed to the viewing balcony!

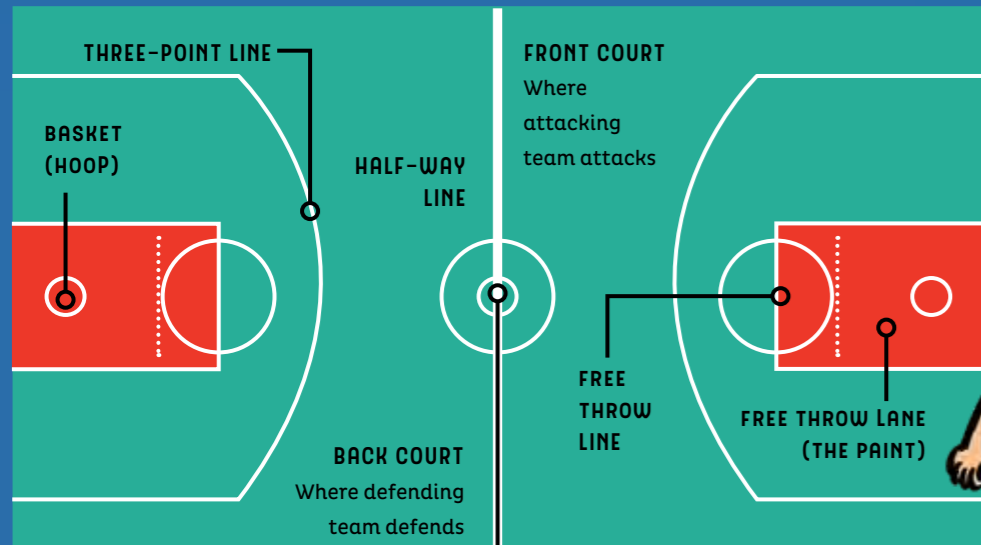
## HOOP

The hoop stands 3.05m from the ground. Corey 'Thunder' Law threw the longest-ever successful shot at a distance of 33.5m.

## BALL

Dimpled for grip, men's are 75-76 centimetres, while the women's are smaller. Originally brown, today's balls are orange.

## THE COURT



**CENTRE CIRCLE**  
Game is started here with a tip-off

## REFEREE

The rule-enforcer wears a distinctive kit of black and white stripes and is usually assisted by two umpires.

## THE COURT

Court sizes can vary, but in the NBA it is 29 metres long and 15 metres wide – twice the original size!

## THREE POINT ARC

Baskets scored from outside this line are worth three points. From inside they are worth two.

## FREE THROW LINE

Free throws, awarded for various infringements, are taken from here (4.6 metres from the hoop) and are worth one point.

## WHEELY GOOD

Wheelchair basketball is played by athletes with disabilities and is just as ferocious and thrilling as the able-bodied game.

This form of basketball places great emphasis on the arms, and athletes need incredible upper-body strength to power up and down the court, as well as impeccable technique when it comes to shooting.

Such is its popularity, able-bodied athletes often play the game too.



## FACTS OF THE MATTER

- The original hoop used was a **FRUIT BASKET!** Games would be halted after every point for a janitor to retrieve the ball from the fruit basket. Eventually people saw sense and removed the bottom!
- Basketball was once played with a football ball, which was not easy to dribble. As a result, **DRIBBLING** did not become a major part of the game until the ball changed in 1950.
- Teams were made up of **NINE PLAYERS** until 1897 because there were nine players on a baseball team.
- The team was reduced to five because teams of **AMERICAN FOOTBALL** players, which used to be made up of 10 players (now 11) would come into the gym when it was **RAINING** and it was easier to split them into two teams of five.
- America's NBA players are among the **BEST-PAID** sportsmen anywhere on the planet. In 2016, LeBron James earned **\$77.2 MILLION** (£61.6 million).
- A lot of basketball players are extremely tall. The tallest-ever professionals are former stars Gheorghe Muresan and Manute Bol – who both stood at a towering 2 metres 31 centimetres.
- The **BOSTON CELTICS** have won 17 NBA Championships – the most of any team.
- The women's counterpart of the NBA, called the **WNBA**, was formed in 1997.