

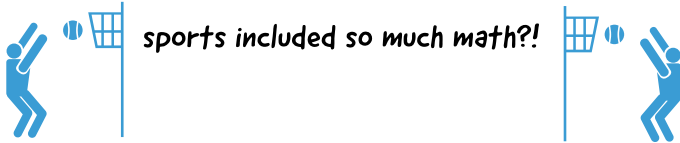
# Did you know: You can create your own sporting event!

## Engineering new ideas in sports!

### Hoops

The basketball hoop emerged from the simple idea that tossing a ball into a ring and scoring points could provide hours of fun on a cold wintry day.

Basketball was basically invented to keep students active during long chilly months. The first hoop consisted of a peach crate attached to a ten-foot-high railing and players aimed a ball into it. There was no "basket ball" yet, per se. Modern basketball hoops measure 10 feet in height above the ground. Regulation backboards are 6 feet wide and 3.5 feet tall. The rim of the hoop is 18 inches in diameter. Who knew

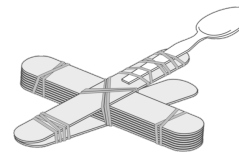


### Everyday Science: Basketball History

The game was the brain child of one school-aged Canadian boy in the latter half of the nineteenth century. Dr. James Naismith, a cleric, physician and physical education teacher, filled his spare time as a youth playing a game called "duck on a rock". The rules were simply this: Toss a rock at a makeshift "duck" and try and knock it off a larger rock. Inspired to make physical education part of his life work, Naismith attended McGill University in Montreal where he served as athletic director, and afterwards went on to an athletic training school in Springfield, Mass., in 1891. Students were confined to cozy indoor quarters during the winter, so Naismith was asked to come up with a game of skill to keep them occupied. Combining elements from popular games already in existence, such as American football, soccer, and hockey, all of which involved getting the ball or object into a "goal" to score points, he invented a new game that had students tossing soccer balls into peach crates attached to walls.

### Ball Launcher!

Since you can't use your hands to slam dunk the ball into the hoop—create the next best thing: a catapult!



### Catapults:

Catapults have been used in ancient and medieval times. It is a ballistic device that is used to launch a projectile a long distances! A catapult uses the sudden release of stored potential energy to propel its payload. It's physics and engineering!



From there, Naismith was hired to serve as athletic director at the University of Kansas. He gave basketball a set of rules, and the game was on the map. The first basketball games were played in 1892. Eventually the peach crate was replaced with an iron hoop with a loosely-braided pocket attached to it. The problem was that players had to continually retrieve the balls from them, interrupting the game, so the nets became open-ended allowing the balls to drop through. By the turn of the new century basketball was becoming popular in many colleges. The first college games were staged in Madison Square Garden in New York City, in 1934.