Biomechanics Of A Baseball Bat

Biomechanics examines forces acting on the body, and the effects of these forces CITATION Aus16 l 3081. The materials that make up the perfect baseball bat have been developed quite rapidly over the years dating way back to the very first MLB game early in the 19th century. Throughout my analysis I will be discussing the bio mechanics behind a baseball bat and how it has changed through the materials it is created from and the dimensions of the bat itself and how the modifications have impacted the way they play the game on a national level.

Baseball bats in the 1800's were hand crafted by the batters themselves so there was no standard shape, length, or width, for example they had flat bats, skinny bats, round bats and fat bats which has changed immensely to the bats in today's age. All baseball bats are designed differently and are made out of different materials and different types of wood. Some bats are made out of Aluminium others are made out of wood. The wood composite bat is the most complex bat with the most materials giving it that A class standard. When using this baseball bat you would notice that when the baseball connects with the bat it gives a great amount of force through the swing due to the weighted end. Once the ball makes contact with the bat, the foam plastic core and the fibre resign material acts as cushion so that the impact of the ball hitting the bat is softened so it doesn't travel up the bat and cause harm to the batters hands due to vibration it may give.

During the early 1800's the only bats that were used were ones batters made themselves. These ranged from basically any bit of hard wood they could find. Hardwood bats are non-shock absorbent so when the baseball makes contact with the bat it has no "cushion" on the inside of the bat, reducing the chance of hitting a good ball and increasing the chance of harming the batters hands due to the vibration carried throughout the bat. Hardwood bats were very brittle and would snap easily, especially when they hit and incoming 100mph fast ball. Not only were the hardwood bats uncomfortable and dangerous to hit with but on baseball history there were less home runs due to big hits then there are in today's games.

The amount of home runs from the bats used in the 1800's has dramatically increased over the years this is mainly due to the improvements in the materials and wood used over the years. It is very important when using a baseball bat that you are able to control the bat easily and be able to swing the bat with great power and speed. Nowadays bats have been streamlined and fine-tuned to enable players to get bigger and faster hits due to their design. Some have been designed with a weighted end and made using light woods. This improvement to the bats has made the sport not only more exciting due to faster play but also and very importantly safer for the batter. In conclusion baseball bats have changed in size, weight and shape over the history

of baseball. They have changed the different types of woods the bat is made out of and what materials make up a good baseball bat.

As a result of this more homeruns are being hit leading to better gaming results. Having more homeruns during a game of baseball makes it more exciting for the spectators to watch and also for the players. I believe that over the years the improved technology and design of baseball bats has not only improved, the game itself, but it is now more fun to play and more exciting to watch.