

Abstract

What is the effect of friction on the distance that an object moves? Friction causes the object to slow down and eventually stop. It is the resistance of motion when one object rubs against another. Rolling friction occurs when a round surface rolls over a surface, like a ball or wheel. This experiment tested different surfaces to see which has the most friction by measuring how far a toy car rolls on each surface. I conducted this experiment to compare the friction of a hardwood floor, carpet, and tile. My hypothesis was that the race car would go the furthest on tile, meaning the tile would have the least amount of friction. The results of the experiment were that the car on hardwood went the furthest, which means my hypothesis was not correct. The car rolling on tile was next and the carpet car travelled the shortest amount of distance. This experiment shows that smoother surfaces have less friction and slow down a car less which allows the car to travel further.