



Tug of War Friction

You will need:

- tug of war rope
- three people
- a tree



Steps:

1. Play a game of tug of war with one person versus two people on the other side of the rope. The team with two people will win because they have the advantage of creating a stronger pull force together.
2. Play another game of tug of war with the same teams. This time wrap the middle of the rope once around the trunk of a tree.
3. Now each team can pull on the rope and find out if they still have the advantage.

Explanation:

Friction is created when two textured surfaces are rubbed together under pressure. The harder the team of two pull on the rope the tighter it becomes around the tree trunk. This means there is more friction helping the team of one resist their pulls.

