Tug-of-War Video Investigation

What is true of the tension at opposite ends of a rope?

In tug-of-war, can one side pull harder on the rope than the other side?

video#1 Does Strength Win?

The team on the left looks stronger. Why don't they win? Is strength the biggest issue with tug-of-war?

video#2 Slip-n-Slide

What makes tug-of-war difficult on a slip-n-slide? The adult on the team on the right cheats - what does he do?

video#3 Gym Floor Issues

Look closely at the feet of the teams as they try to pull. What makes tug-of-war difficult on a gym floor?

video#4 What Are They Doing??

What are the three guys on the extreme left of the rope doing? (Basketball players do this sometimes as well.) Why are they doing that?

What is the deciding factor in Tug-of-War?

The average person on the street thinks that tug-ofwar is won by strength at the rope. What do you think about that now? Draw in and label the 4 forces on the person person playing tug-of-war.

<u>video#5 UM Seniors vs Juniors 2017</u> (Seniors on the left) ^{-y} video#6 UM Juniors vs Sophomores 2017 (Juniors on the left)

Both of these videos show hard-fought battles. What do you notice about the feet of some of the players on both sides?

How do you think that affects their ability to pull on the rope?

All the tug-of-wars you've seen so far are not really a test of strength - they really are a test of what force?

video#7 British Nationals

Take a look at the video of British Nationals at Tugof-War. This really is a test of strength - why?