PARENT NOTES: Levers! SUPER THROWING ARM

Today, we investigated how far we could throw a piece of scrunched up paper and how we could change this by building a super throwing arm. This is a cardboard tube that increases the length from our wrist to where we hold the paper in the palm of our



hand. As our arm is a lever increasing the length of this lever reduces the amount of force needed to throw an object so your child should have been able to throw their paper further with their longer arm. Levers are used everywhere to help us move heavy objects with less effort. You may have seen a lug wrench used to undo the nuts on a car tire, or long plastic thrower for dog balls.

ASK YOUR CHILD

What did you make today? (A super throwing arm)

Does the throwing arm change how far you can throw something, and why is this? (Yes, they should be able to throw further with their tube are. This is because the length between your wrist and the projectile is longer meaning more power can go to the ball)

How far could you throw the paper with and without the arm?

Can you think of other times when you have seen a lever help do more work? (A pair of scissors, a plastic dog ball thrower, a bottle opener, a lug nut wrench, pliers, a spanner)