

## Question / Problem

What is the strongest kind of wood in a two point fluncture test?

## Hypothesis

I think that OSB (Oriented Strand Board) will be the strongest because it is a mix of hard wood, softwood and adhesive.

## Background Research

The woods most used in house framing are softwood and engineered wood because they are usually easy to work with, don't warp as badly, and are easy to stain/paint. Engineered wood is more preferable as these products are less likely to warp or shrink, making them a reliable option. Hardwood is normally used for floors because it is easy to work with and resistant to dents and scratches.



# Breaking Boards and Breaking News

By Juliet Underwood

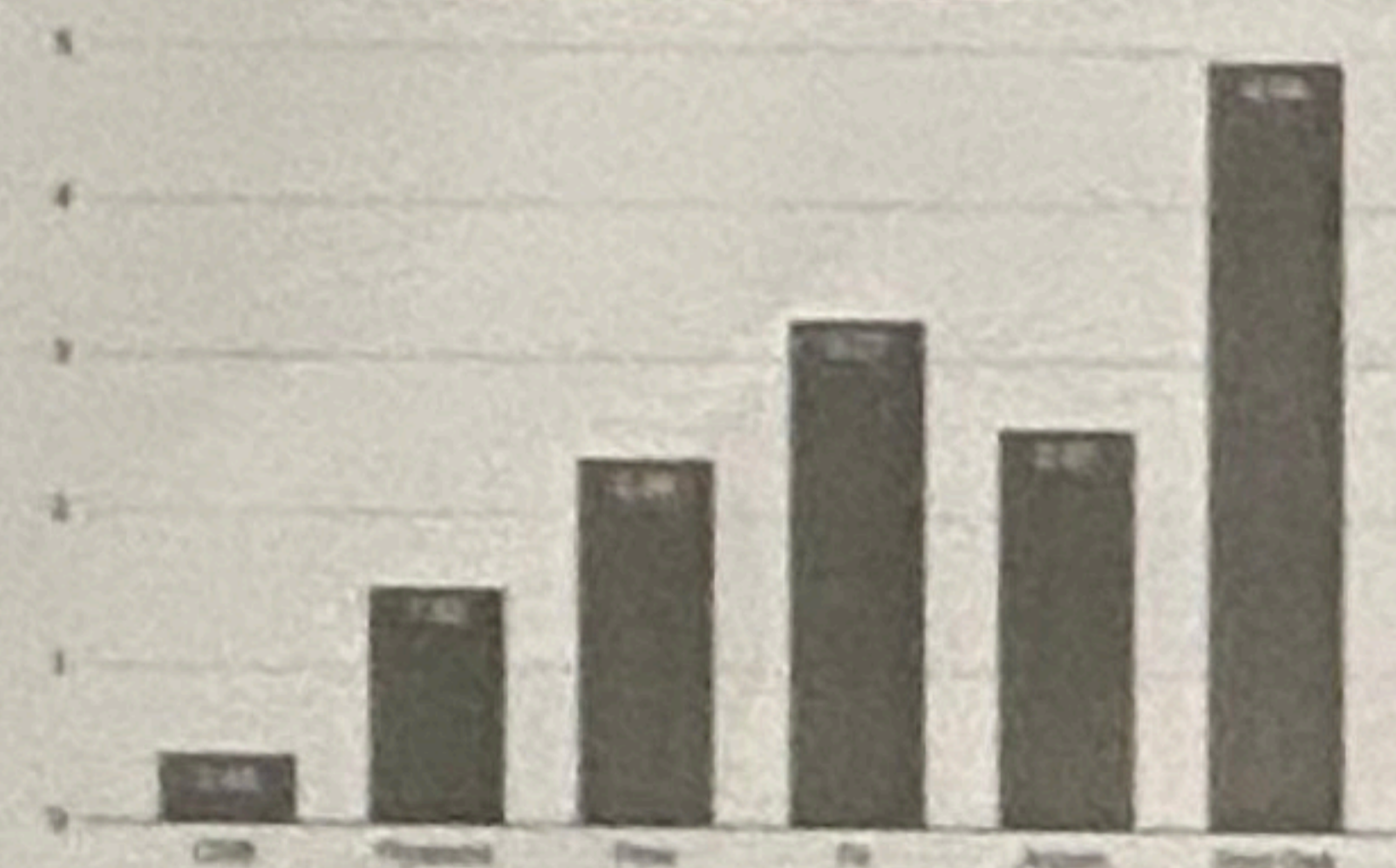
## Materials

- Planer
- Tape measure
- Table saw
- Cardboard box
- Scale
- OSB board
- Plywood board
- Red Oak board
- Aspen board
- Fir board
- Pine board
- Sidewalk salt
- 3 clamps
- Bucket
- Safety gear
- Caliper

## Procedure

1. Prep wood (Makes all boards the same size.)
2. Place wood into clamps
3. Place bucket on end of the board and clamp it to the board
4. Put salt in the bucket until the wood breaks
5. Put the bucket and the clamp from the end on the scale
6. Record weight
7. Repeat steps 2-6 for the remaining pieces of wood

## Data Averages



## Data

OSB Test 1	0.58 kg	
OSB Test 2	0.23 kg	
OSB Test 3	0.53 kg	
		0.44 kg
Ply Test 1	1.17 kg	
Ply Test 2	1.23 kg	
Ply Test 3	0.94 kg	
		1.17 kg
Pine Test 1	0.72 kg	
Pine Test 2	2.40 kg	
Pine Test 3	1.80 kg	
		2.30 kg
Fir Test 1	0.00 kg	
Fir Test 2	3.44 kg	
Fir Test 3	2.31 kg	
		3.27 kg
Aspen Test 1	2.65 kg	
Aspen Test 2	2.50 kg	
Aspen Test 3	2.55 kg	
		2.57 kg
Oak Test 1	4.73 kg	
Oak Test 2	4.86 kg	
Oak Test 3	5.15 kg	
		4.94 kg

## Results

This experiment shows that Oak is the strongest wood. Also that OSB is the weakest.

## Conclusion

My hypothesis was wrong because OSB was the least strong wood. OSB had an average of 0.44 kg. Red Oak was the strongest with a average of 4.94 kg. One problem that I encountered was that one of the clamps that I was using broke because of stress.

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