


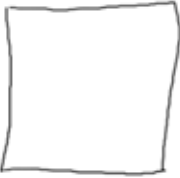
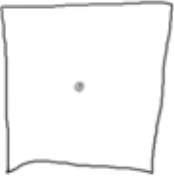






Three Different Fabrics: Wrinkle, Water, and Stain-Resistance

Amy Johnson, Beth Smith, and Charlie Evans

	<i>Fabric A</i>	<i>Fabric B</i>	<i>Fabric C</i>
<i>Wrinkle Resistance</i> Procedure: We crumpled each fabric into a ball for 30 seconds each	 Slightly wrinkled	 Very wrinkled	 Slightly wrinkled
<i>Water Resistance</i> Procedure: We put 5 drops of water in the center of each fabric, let it sit for 5 minutes, then wiped it off.	 Not wet	 Small wet spot	 Large wet spot
<i>Stain Resistance</i> Procedure: We put a swirl of ketchup on the fabric, let it sit for 5 minutes, then tried to wash it off.	 Light ketchup stain	 Dark ketchup stain	 Dark ketchup stain
<i>Conclusions</i>	Could be used for clothes, tablecloths, bedding	Could be used for casual clothes but not nice clothes because it wrinkles and stains too easily	Could be used for things like curtains because they don't really get wet or dirty

Stains on Nano-Tex Fabric

Amy Johnson, Beth Smith, and Charlie Evans

Hypothesis:

Nano-Tex fabric repels liquid stains of all kinds, including oil, but not stains caused by things that aren't liquids.

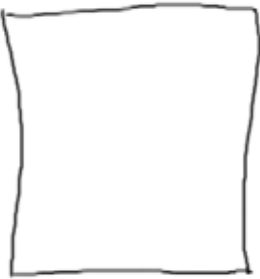
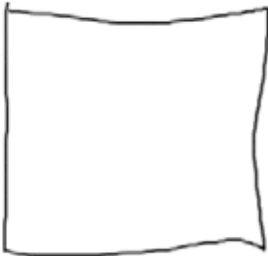

Procedure:

Our independent variable was type of stain used. We used either a liquid or a non-liquid stain. We put a teaspoon of stain on each fabric, let the stain soak in for 5 minutes, then tried to wipe the stain off with a napkin.

We used water as the control, since from our observations we know the fabric repels water. Then we used cooking oil for Condition A because it is another liquid and peanut butter for Condition B because it is oily like cooking oil but it is not a liquid.

Our dependent variable was a stain rating. We scored how stained the fabric was on a scale of 1-5, with 1 being not stained at all and 5 being really dirty.

Results:

Condition	Rating	Observations	Picture of Fabric
<i>Control</i> Water	1	The water beaded up and then rolled off when we tried to wipe it off.	
<i>Liquid</i> Cooking Oil	1	The oil beaded up and then rolled off when we tried to wipe it off, like the water.	
<i>Non-Liquid</i> Peanut Butter	4	The peanut butter smeared when we tried to wipe it off and it didn't come all the way off.	

Conclusion:

The results of our experiment support our hypothesis.

Sources of Error:

We might have accidentally measured out slightly different amounts of stain for the different fabrics.

Also, other people might not rate the stains the same way we did.

Future Studies:

Future studies should try out more liquid and non-liquid stains, like grape juice and ketchup.

There might be a difference between goopy stains like peanut butter and solids like dirt or chalk dust, so future studies should experiment with solids too.