Detergent & Stains

Intro Paragraph

We were interested in this experiment because we wear pants every day at school and sometimes get them dirty by eating food and spilling on ourselves. The reason we came up with this experiment was because we wanted to know which form of detergent was better at cleaning clothes. Detergents can be a Liquid, Powder, Tile, or Pods that people use for cleaning their clothes in the washer. The most popular Tide form is the Tide Liquid. We also agreed on Tide liquid for this experiment because we use this at home. Also we want to see if our parents are making the right decision of which Tide form they're buying.

Question, Variables and Hypothesis

Question: Which form of Tide removes stains the best?

Independent variable: Types of Tide

Dependent variable: Which Tide product removes stains the best.

Control variable: We controlled the types of stains(pizza grease)

and how many stains we put on each pair of pants(3 swipes of pizza grease)

Hypothesis: The Tide Liquid will remove stains the best.

Materials list

- School pants (3)
- Tide Tiles
- Tide Powder
- Tide Liquid
- Washer & dryer
- Pizza grease

Background research

We researched what type of detergent is the most popular. We found out that liquid detergent is the most popular. Then we researched what brand of detergent is the most popular and our research led to Tide. We also researched the most common stains and those were mud, pasta, Gatorade, syrup and hot chocolate. The fabrics we used were cotton and polyester. We learned that if pants have a small percentage of cotton and more percentage of polyester it's easier to wash. The stains that we are using are grease from pizza. The types of Tide that we are utilizing are Liquid, Powder, and Tide Tiles.

DETAILED procedures

- Step 1: Get your materials.
- Step 2: Grab the pants, then dirty them by making 3 swipes of pizza grease in the upper half on the thigh.
- Step 3: Put the pants in the washer with the powder Tide detergent following the instructions from the bottle.
- Step 4: Start the washer.
- Step 5: Put the pants in the dryer.
- Step 6: Repeat step 1-5 until you get all 3 detergents done.
- Step 7: When you get to Tide Tiles you have to put one tile all the way at the bottom
- Step 8: Record observations

Data table

detergent	observations
Tide liquid	• The liquid barely did anything.The stain didn't really get off the pants. Also it smelled rancid.
Tide Powder	• The Tide Powder was good,but you could still see a little tiny bit of grease.
Tide tiles	• The pants washed with Tide Tiles were the cleanest. It looked almost brand new.

Results

After we washed the pants, we carefully examined which one was cleaner and the results were:

1st place…TIDE TILES

2nd place…TIDE POWDER

3rd place…TIDE LIQUID

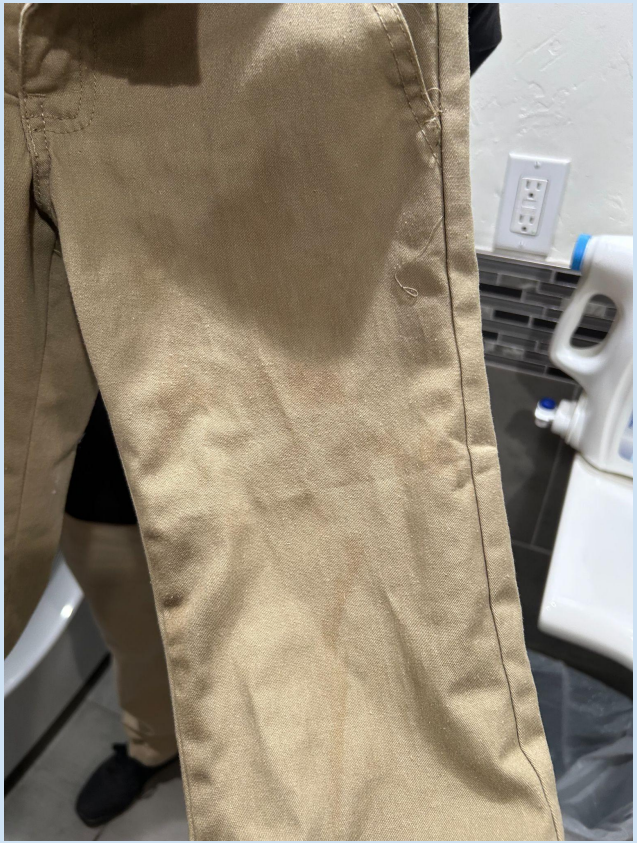
We examined for long to see what Tide type really did better and we found out we got proven wrong and the Tide Liquid did not do the best and the Tide Tiles did the best, we were very shocked when we found out because we never thought that the Tide Tiles would clean the best, because we thought since the most famous is Tide liquid it should clean the best.

Pictures

Tide Tiles

Before

After



Pictures

Tide Powder

Before

After

Pictures

Tide Liquid

Before

After

Pictures

Tide
64
LOADS
100% of common stains
des taches communes
ORIGINAL
EVEN IN COLD
MEILLEUR À L'EAU FROIDE

Conclusion

What we learned from this experiment is that the detergents worked differently even though they were all the same brand. When we used Tide Powder and Tide Liquid we expected the stains to come out because they were the most popular and used. Instead of them completely coming out, the grease came off but left a stain behind. With Tide Tiles the stains on the pants came off really well, like the pants were almost brand new. If you want to make our experiment better, you can use clothes with a similar amount of cotton because we noticed that when we used a piece of clothing with less cotton it worked differently than the clothes that had more cotton. This experiment is useful for us to know about because now we know what detergent to use to remove stains the best. We ranked the ability to clean in this order : 1) Tide Tiles 2) Tide Powder 3) Tide Liquid.

Citations

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