

### **CLEANER PENNIES**

M1-20 PHYSICS

# QUESTION

# •What cleans pennies better Colgate toothpaste or dove soap?

### ABSTRACT

• As you see in the television you can clean pennies with many things. The experiment was to determine what can clean pennies the best Colgate toothpaste or dove soap. To determine which one cleans the pennies better the shininess was tested. The hypothesis that toothpaste cleans pennies better supported by the shininess

## HYPOTHESIS

• If I scrub toothpaste on a penny then it will clean the penny better than the dove soap because the toothpaste is thicker and has better ingredients to help make the penny cleaner

## MATERIALS

- Colgate toothpaste
- dove soap
- 40 pennies
- Shoe box
- Paper
- Tape

## PROCEDURE

- Make 2 boxes to put your pennies one for the soap and one for the toothpaste.
- Place 20 pennies in each box to represent 20 trials.
- In one box cover every penny with toothpaste and in the other box cover every penny with soap.
- Leave it drying for a day.
- After drying wash off the toothpaste and soap from every penny on both box.
- See which one cleaned the pennies better.

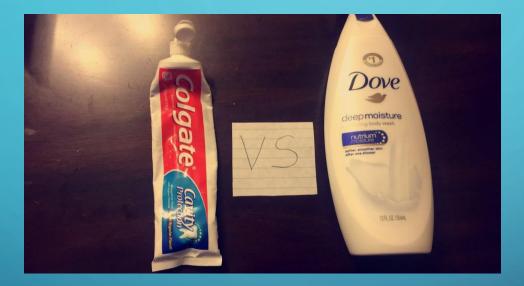
### VARIABLES

Independent variable - Colgate tooth paste and dove soap

• Dependent variable - How clean the pennies will turn out

• Constant variable – The pennies

#### EXPERIMENTAL PICTURES



Products we used to clean the sets of pennies

#### SET OF PENNIES WITH DOVE SOAP ON



#### SET OF PENNIES WITH COLGATE TOOTHPASTE ON



#### SET OF PENNIES AFTER WASHED WITH DOVE SOAP



#### SET OF PENNIES AFTER WASHED WITH COLGATE TOOTHPASTE



#### RESULTS

The results for my experiment was when I cleaned both sets of pennies both came out clean and shinny but after comparing them, the pennies that I cleaned with Colgate toothpaste came out cleaner and shinier.

#### CONCLUSION

• The independent variable Colgate toothpaste cleaned the pennies better than the dove soap. The shinnies between the dove soap and the Colgate toothpaste were close but the Colgate came out a little stronger. Based on the data, my hypothesis that the Colgate Toothpaste would clean better was correct.

# WORK CITED

- http://www.colgate.com/app/Colgate/US/Corp/LivingOurValues/Sustainability/Ingredients.cvsp
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