

Welcome to:

# Rockin' Robotics Penny Cleaning

Day 5



# INTRODUCTIONS!!

**YOUR TURN!!!**



**Which Coin is this?!**



**A DIME!**

**Which Coin is this?!**



**A QUARTER!**

**Which Coin is this?!**



**A NICKEL!**

**Which Coin is this?!**



**A PENNY!**

# Penny Press Machines!



They can be  
found basically  
**EVERYWHERE**  
when you're on  
a trip!



**Shiny pennies make  
shiny designs**

HOW DO WE DO THAT??





# Pennies!

What are pennies made of?

# MATER from CARS!!

How are these two cars different?



**Let's take a closer look at Mater!**



Notice how Mater's  
paint is peeling?

Look at how he  
turns brown.

What is that?!

# What is rust?!



When iron sits outside, it reacts with oxygen and water to form rust, a reddish brown layer on the outside of an object

**Did you know ...**

**The Statue of Liberty wasn't always green?!!!**



Why did the  
statue of  
liberty change  
color?

# Corrosion!





# What is corrosion?

When metal mixes with air and water, after some time, it **CORRODES**. A type of corrosion is **RUST**.





# Cleaning!

How do you guys wash your hands?  
What do you use?



# So how do we clean pennies and get rid of the rust?



## The obvious?

Will soap and water work?



## Or a different way?

Or could we use different things to clean?

# Let's get cleaning!



**Ketchup!**



**Vinegar!**



**Baking  
Soda!**

And more!! See what other materials you can use  
to clean the pennies



**Record your  
observations on  
your paper!**



**How did  
that go?**







# Observations

What worked best? What didn't work so well?

**It's cleanup  
time! Thanks  
for coming!**

