

Patrick McHugh's

## STEM CAR CARE CLINIC CURRICULUM

- Introduce Instructor, highlight shop and what we're all about
- Signup sheet and Roll call kids, "where do you go to school, what sort of car does you parent have? What sort of fuel does it use?"
- Discuss Safety, eyes, hands, hearing, fall, lifts, burns
- Talk about chemical, mechanical, heat and light energy as well as friction
- Demonstrate four stroke process on whiteboard and on tables, Firing order
- UNDERCAR Identify & inspect Engine, transmission, brakes, suspension, steering, exhaust
- Tires, rotation, inflation
- UNDER HOOD Identify & inspect dipstick, coolant, brake fluid, steering fluid, washer fluid, battery, belts, hoses, air filters
- Jump start a car
- BREAK
- Oil service
- Point out fuel injection, ignition
- Discuss airbags
- Discuss emissions
- Discuss an electrical circuit and demonstrate what a fuse does
- Find the owner's manual and find what fuse protects the stereo
- Identify service intervals on a parent's car
- Explain Virginia State Safety inspection
- WARNING LIGHTS red yellow green
- Safely change a tire on a parent's car
- Research Careers on indeed, discuss career paths
- Research [www.rvaschools.net/ratc](http://www.rvaschools.net/ratc)