The “Class A” Fire Engine Challenge is designed to create a career awareness by helping students understand one piece of equipment firemen use in fighting fires.

Participating students will also experience building and learning about a realistic fire engine.

Judges will travel to look at all fire engines! *dates TBD

Students Must:

**CREATE** a realistic fire engine by:
- Duplicating color
- Creating all gauges and knowing their purpose
- Creating all hoses (metal and rubber and knowing their purpose and function)

**MAKE** their fire engine at least **10ft long and 3ft wide** (consider creating it in multiple parts that you put together to make for easier storage/transport)

**UNDERSTAND** the purpose (what it does) of each component of the fire engine

**USE** a minimum of three materials

**HAVE** at least one working component

**CREATE** the inside dashboard

**DUPLICATE** the number of seats inside and outside of the fire engine

**ADD** one thing to your fire engine that you think would make it better

**DOCUMENT** the process with photos (taken by students)

Fire Engines to Be Designed by Students!
**THINK BIG!**

*How can you guide your students to expand their thinking?*

Do we want to use *real* tires? Who might give us old tires?

What community resources can we ask to support our project with supplies?

How do we make our engine easy to store and transportable?

Should we invite a fireman to consult?

When adding one new thing to your fire engine that you think would make it better, be able to explain:

- What the new feature is
- Why you think it is important
- What made you think of it
- How you designed it
- How this new feature makes your fire engine unique?

---

**Documentation & Submission**

Students must document the process with photos (taken by students). Documentation must be submitted via email (dates and contact info tbc).