

## 0: Firefighting

It's a firefighter's job to deal with fires and minimize any possible damages. Try doing a bit of research on the internet, then try to answer the questions below in your learning journal.

1. **What are some dangers a firefighter might come across when doing their job?** Discuss with your neighbours and list three different dangers.
2. **For each of these dangers, could we use a robot to make things safer?** Give an example if possible.



3. Fires come in many different types. Here is a table of some different types of fires. **Give one extra example that is not listed in the table for each type of fire.**

Type of fire	Extinguisher Colour	RED	CREAM	BLUE	BLACK	YELLOW
		Water	Foam	Dry Powder	CO <sub>2</sub>	Wet Chemical
<b>CLASS A</b> Combustible materials (e.g. paper & wood)		✓	✓	✓	✗	✓
<b>CLASS B</b> Flammable liquids (e.g. paint & petrol)		✗	✓	✓	✓	✗
<b>CLASS C</b> Flammable gases (e.g. butane & methane)		✗	✗	✓	✗	✗
<b>CLASS D</b> Flammable metals (e.g. lithium & potassium)		✗	✗	✓	✗	✗
<b>ELECTRICAL</b> Electrical equipment (e.g. computers & heaters)		✗	✗	✓	✓	✗
<b>CLASS F</b> Deep fat fryers (e.g. chip pans)		✗	✗	✗	✗	✓
Additional Information		Not for use on liquid or electrical fires	Not suited to domestic use	Can be used safely on electrical items up to 1000 volts	Safe on both high and low electrical voltage	For use on extremely high temperatures

4. Class A, B and Electrical have multiple options for extinguishing those kinds of fires. **For each one, is there a “best” option?** Why or why not?



5. In our warehouse fire situation, what do we think is the most likely cause of the fire?  
6. What type of extinguishing method should our solution use?