

i0: Define the Problem

By rewatching the situation video and/or doing your own research on the internet, try and answer the questions below. Your teacher will discuss the answers with you at the end, so don't worry about getting them wrong. Write a one to two sentence answer in your learning journal under the first Define section.



1. We know from the situation that a fire is spreading throughout the warehouse!
 - a. **What do you think could have been done to avoid the fire?**
 - b. **What do most buildings have to detect fires?**
 - c. **What do most buildings have to automatically put out a fire?**
2. We saw that there was an explosion when the firefighters tried to enter the warehouse.
 - a. **Why did this explosion occur?**
 - b. **How could this situation have been avoided?**
3. We don't want to purposefully send human firefighters into highly dangerous situations (at least, more dangerous than normal fires).
 - a. **Should we just leave the fire alone? Why or why not?**
 - b. **If we can't send a *human* into the warehouse to put out the fire, and any automatic systems to put out the fire aren't working, what could we send in to find and put out the fire instead?**
4. **If we want to replace a human firefighter with a device, what functionalities is that device going to need to have?** For example, one functionality is that it needs to be able to move from the warehouse entrance to the fire.