



IF YOU WERE AN ENGINEER WHAT WOULD YOU DO?®

East England Leaders Award 2019
 Winner, Year 9

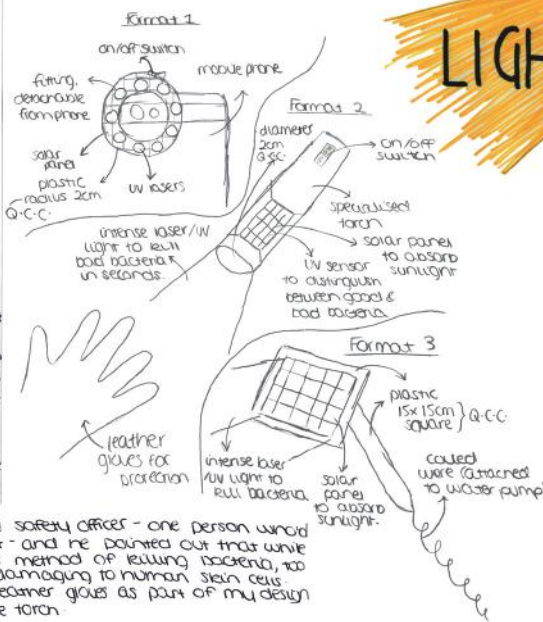
UV Torch

ELLEN DREAU
 YEAR 9
 ORMISTON SUDBURY
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The engineer I spoke to was Tony Bocking, who is a training instructor for apprentices at a company called MEL Aviation. At the moment he is taking on the role of project engineer at a new factory that was previously falling into disrepair. As part of his job he must make sure the factory is safe for workers and customers, and make sure things run smoothly. He explained that it was vital for engineers and workers to cooperate to get jobs done and progress quickly. Also, he said that quality control checks are built in a design, which is why I have tried to include manufacturing processes in mine.

I also interviewed a food safety officer - one person who'd benefit from this product - and he pointed out that while UV light is a very efficient method of killing bacteria, too much UV light can be damaging to human skin cells. Therefore I have included leather gloves as part of my design to protect people using the torch.

KILL BACTERIA WITH



Pitch letter & and a sensor in the UV light - which when UV light is used by more and bacteria. This product is most likely to be used by more specialised people like chefs or food safety inspectors. Equally, members of the general public could also use this device to increase the intensity of the UV light. Finally, there is a Format 3 - perhaps the most significant design - which is a first port attached to a water pump which in turn can attach to a water pump. This means people in the same place as this method of killing bacteria, in the same place as fresh water - this mechanism to reduce disease next to each other. I feel my idea could open many doors for people who use UV light or disease-fused places and change the course of diseases globally.

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Which engineer inspired you?	Tony Bocking
From which company?	MEL Aviation

The 'UV Torch', uses UV light to kill bacteria, identifying the good bacteria from the bad. It uses solar energy which makes the torch environmentally friendly. It comes in three designs; one for smartphones if you're out in public and need to detect bacteria. The second design is more like a traditional torch and the third can be attached to a water pump.