TASK 4

The Stanier 5000 was a real workhorse type of locomotive. It pulled all sorts of different loads, passengers, goods, livestock and much besides. However, to keep this huge boiler working it needed a lot of coal, around a ton an hour. However, it could only hold seven tons so needed to be refuelled and refilled with water quite often. The hard work of shovelling a ton an hour of coal was also backbreaking and the crew needed changing as often as the water. Even with these limitations, it was an amazing machine, all that was needed was careful planning about how and when to stop to keep it running. Can you work out the logistics below?

The Stanier 5 could travel at an average speed of 70 miles per hour. How far could it go in two days? Wait! It isn't as simple as that! There are some limitations:

Half an hour to refuel after every 7 hours of running

Half an hour to refill with water after every 4 hours of running

Both jobs done at the same time if possible

How far can it go in 2 days?

How much coal did it use?

Try using a table to work out out:

Time (hrs)													
Water													
Coal													

Distance:

Coal used: