



Source 2

Task

- 2a** How many explosions had taken place during this period?
- 2b** Does the inspector appear to be pleased with this number of explosions?
- 2c** Who does the inspector believe was to blame for the explosion at Washington? Was it the miners or the management?
How did he reach his decision?
- 2d** Draw a diagram to show how the ventilation of the mines would have worked? Was this a safe method of ventilating mines?

Source 2

**This is part of a report made by the mines inspector for the north of England in 1851. This inspector also compiled the list of accidents in source1.
(PRO ref: 87/53)**



The English portion of my district

It will be seen by reference to the list of deaths that only two explosions of any moment have occurred, viz^d at Washington in the County of Durham, and at Killingworth Co. of Northumberland.

In both Cases I have recommended and pointed out the adoption of ordinary measures, such as increased furnace-power, and enlarged air courses, whereby a great accession could be made to the ventilation; for in both Cases, the accumulation of Gas in the parts of the Mine which exploded, might be attributed to the want of an ample current of air; notwithstanding which at Washington, the people were permitted to continue working with candles until the explosion took place; altho some individual bollicers (acting upon their own sense of danger) left the pit and saved themselves. therefore it is impossible to deny that great mismanagement attended this Case, -



At Willingworth the want of a sufficient quantity of ventilation, had produced some unimportant fires which induced the managers to remove the bundles, and cause the workings to be carried on entirely with Safety Lamps; but some informality having taken place regarding the introduction of naked lights, contrary to orders, produced ^{the} ~~an~~ explosion. —

Now in both these cases it was quite within the compass of ordinary practice to double the amount of ventilation, whilst amendments might also be made with regard to the arrangement and subdivision of the air columns; each of these Collieries had ^a separate downcast and upcast Shaft, and each of the upcast Shafts was furnished with two furnaces; whilst a remarkable coincidence existed between them, with respect to the amount of the Ventilating Current which was nearly 30,000 Cub feet p minute.