Background Info → 30 mins 09/06

I researched the basics of pattern analysis. Began to type out the background info with the information I have learnt.

- types of spatter patterns

→ 45 minutes 13/06

I did more research on BPA and found out how it is used in crime. Added to typed out version.

- How evidence is analysed
- Why different shapes occur

→ 20 mins 15/06

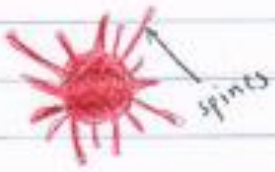
Found out that there is a definite relationship. I will have to change my aim so that I am not repeating an experiment that I already know the results of.

→ 40 minutes 22/06

Finished background information. Added in factors affecting size / shape and explained the relevance to my experiment.

→ 10 mins 23/06.

I should include a diagram:

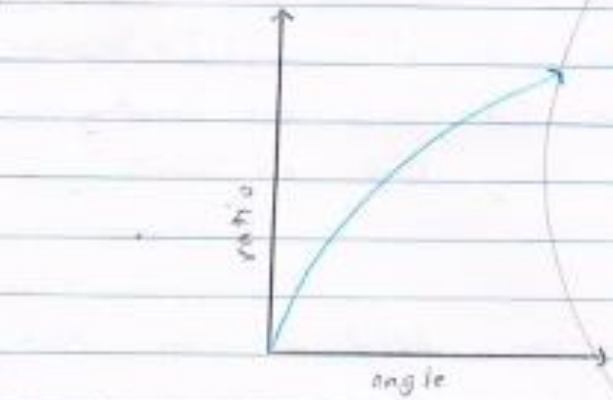


Abstract + Aim → 30 mins 27/06

I wrote out my aim and abstract. This didn't take long - I simply wrote it out - no research needed. I had to change my aim as the information I found whilst researching - it is now to "find a formula or graph to predict results".

Hypothesis → 30 mins 01/07

I spent some time going over my gathered information to make a guess of the results I will get. I think my graph will give a curve of best fit, like so:



After 90°, the ratio will decrease again -

Method → 45 mins 07/07

I have encountered a problem. My original intention was to create spatter patterns by a slingshot - like device. Upon testing it out however, I have found that the spatter marks it leaves behind are too small to be analysed. I have done more research into this and have still found no way to fix this problem.

→ 15 minutes 08/07

I had an epiphanic moment last night. Because the independent variable is the angle that the drop hits the surface on, I can use gravity as the force on any drop. This way, I ~~[illegible]~~ can make large ~~[illegible]~~ spatter stains and still keep my variables controlled.

Method cont.

→ 20 mins 12/07

Upon further research, I am doubting using my above mentioned method. The path of a drop is not straight but curved. I cannot, however, find an easier another, more suitable method, so I will have to use this method.

Risk Assessment, Materials & Variables 13/07

→ 30 mins

I am behind schedule, so I ~~worked on~~ finished the first section of my report - from the abstract to the method.

I have explored a number of options for a suitable liquid to use in my experiment. Whilst paint and water can create a similar viscosity, I still think the best option is real blood.

I have done some research, but will need to further my ~~as~~ explore other options.

Risk assessment → 20 mins 14/07

I realised that using blood causes hazards. Researched proper safety equipment for working with animal blood.

Materials → 20 mins 15/07

Pig or Cow's blood is the best suitable replacement for human blood. According to my research, the main difference is the lack of nucleus in a human's blood cells, which doesn't affect the physical aspect.

I have also found a butcher that is willing to sell pig's blood, so I will buy this when I am ready to complete my experiment.

Discussion → 40 mins 19/07

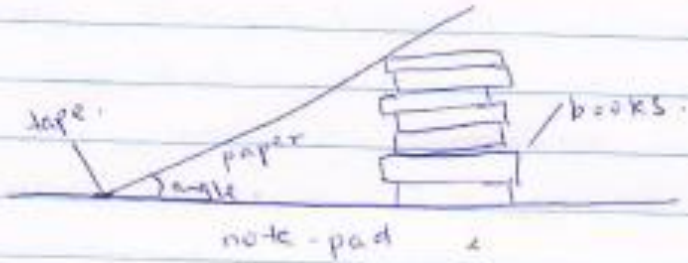
I have began my discussion I have discussed accuracy, reliability and validity, as well as explore possible other investigations after mine. Because I still haven't completed the experiment, I still have not finished my discussion.

→ 30 minutes. 21/07.

I worked on my discussion again, this time discussing my choice of liquid and thinking about the downfalls of the experiment - as the use of gravity as the acting force.

Experiment → 60 mins 16/07

After school I bought a cup of blood from the butcher. When I came home, I completed my experiment. To change the angle of my paper, I constructed a set up like so:



All went well - I was able to see the changing shape. I left the blood to dry on so it would keep it's shape, then I photographed and measured the shape.

diagrams → 10 mins 17/07

I had extra time so I made diagrams this morning, making my report easier to understand.