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Problem: How does the height of drop affect the size of the splatter?

Hypothesis: The higher the droplet of blood is dropped from, the larger the splatter it will make.

Methods: Set up a ring stand above a white sheet of paper. Clamp the dropper lid in the ring stand so that the end of the dropper is five centimeters away from the paper. Drop one droplet of “blood” onto the paper and measure and record how wide the splatter is, in millimeters. Repeat the experiment at zero, ten, fifteen, twenty and twenty- five centimeters from the paper. Make sure the same dropper is used every time to keep the size of the drops as consistent as possible.

Results:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Width of splatter | Trial | Height of drop (cm) | 0 | 5 | 10 | 15 | 20 | 25 |
| 1 |  | 9 | 10 | 11 | 14 | 15 | 16 |
| 2 |  | 6 | 11 | 12 | 13 | 15 | 17 |
| 3 |  | 7 | 9 | 13 | 13 | 15 | 17 |
|  | average |  | 7.3 | 10 | 12 | 13.3 | 15 | 16.6 |

Conclusion: The hypothesis was correct because the width of the blood spatter went up by about two millimeters every time the height from the paper was increased by five centimeters. There could have been error in that the height might not have been measured accurately, and each drop may have been a different size.