Build Your Own Cyanoacrylate Fuming Chamber Project

Cyanoacrylate Fuming, also known as super glue fuming, is one way to process latent fingerprints. This method uses the cyanoacrylate found in superglue to adhere to oils in the fingerprint. For this project you will be creating your own fuming chamber, making an instructional video on how to use it, and demonstrating the results.

Safety Concerns: Cyanoacrylate should not be inhaled or come in contact with your eyes. Lab goggles must be worn when working on your fuming chamber (may be purchased or signed out from teacher.) Fuming chambers must be worked on in a well-ventilated area. Do not operate your fuming chamber without proper ventilation. Do not open your fuming chamber with your face directly above it.

Assignment: There are two parts to this assignment

- 1. Create a functioning cyanoacrylate fuming chamber.
- 2. Produce and record an interesting and engaging instructional video describing and showing the parts of your fuming chamber, how your fuming chamber successfully functions, and the results your chamber is able to produce.

Submission: Upload your video to YouTube and submit the link using the submission site on my website. Turn-in your rubric with your (and your partner's) name on it by the due date.

Due Date: September 18th, 2019 at the beginning of your class period. This will not be accepted late for any reason.

Rubrics:

Fuming Chamber

	5 points	4-3 points	2-1 points	0 points
Clarity	Developed print is	Developed print is	Developed print is	No visible print is
	very clear and could	mostly clear and	unclear and mostly	developed
	be easily used to	could possibly be	would not be able to	
	identify an individual	used to identify an	be used to identify	
		individual	an individual	
Function	The purpose and	The purpose and	The purpose and	The purpose and
	function of all	function of all	function of all	function of materials
	materials in the	materials in the	materials is not	is not included
	fuming chamber are	fuming chamber are	included. Only some	
	clearly explained.	partially explained	materials are	
			explained	
Construction-	Appropriate	Appropriate	Appropriate	Inappropriate
Materials	materials were	materials were	materials were used	materials were
	selected and	selected but were	but not modified	selected and
	creatively	only minorly		contributed to a
	used/modified in	modified		product that
	ways that made			performed poorly
	them even better			
Construction- Care	Great care taken in	Construction was	Construction has 3-4	Construction appears
Taken	the construction	careful for the most	details that could	careless and
	process so that the	part but 1-2 details	have been refined	unattractive
	structure is neat and	could have been	more	
	attractive	refined more		

Video

	5 points	4-3 points	2-1 points	0 points
Length	Video is between 5-	Video is one minutes	Video is two minutes	Video is three
	10 minutes in length	more or less in length	more or less in length	minutes or more
				more or less in length
Content	Content is engaging,	Content is average.	Content is below	Content does not
	interesting, and	The watcher mostly	average. The	educate the watcher.
	results in the	understands how the	watcher gains little	The watcher does
	watcher fully	chamber was built,	understanding of	not learn about the
	understanding how	how the chamber	how the chamber is	chamber nor is able
	the chamber was	functions, and is able	built, how the	to see the results (a
	built, how it	to see the results (a	chamber functions,	fingerprint)
	functions, and is able	fingerprint)	and is not clearly	
	to clearly see the		able to see the	
	results (a fingerprint)		results (a fingerprint)	
Explanation	Video fully explains	Video mostly	Video doesn't fully	Very little to no
	the process from	explains the process	explain the process	explanation is
	start to finish how	from start to finish	OR doesn't fully	provided in the video
	the chamber works.	how the chamber	include an	
	Includes an	works. Includes an	explanation of all the	
	explanation of all the	explanation of all the	parts, why they are	
	parts, why they are	parts, why they are	included, and what	
	included, and what	included, and what	they do.	
	they do.	they do.		
Quality	Video shows high	Video shows some	Videos shows little	Video was very poor
	quality editing and	effort went into	effort went into	quality and shows no
	organization. There	editing and	editing and	effort went into
	are no long boring	organization. Video	organization. Video	editing or
	periods.	could have benefited	was boring and	organization
		from additional	disorganized.	
		editing or		
		organization		
Safety	All safety protocols	All safety protocols		Safety protocols
	were adhered to in	were adhered to in		were not followed in
	the video and	the video, but no		the video
	explained. No unsafe	explanation was		
	procedures are	provided.		
	used/shown.			