

Perfume Smells Survey

Ingredients in Common Perfumes and Colognes

Chanel No 5	J'dore by Dior	Nautica Voyage	Nautica Blue
Water Benzyl alcohol Benzyl benzoate Benzyl cinnamate Citronellol Benzyl salicylate Courmarin Geraniol	Water Benzyl salicylate Citronellol Limonene Benzyl benzoate Benzyl cinnamate	Water Benzyl salicylate Limonene Geraniol Propylene glycol Citral	Water Ethylhexyl Methoxycinnamate Benzyl Salicylate Linalool Ethylhexyl Salicylate Limonene

Part 1.

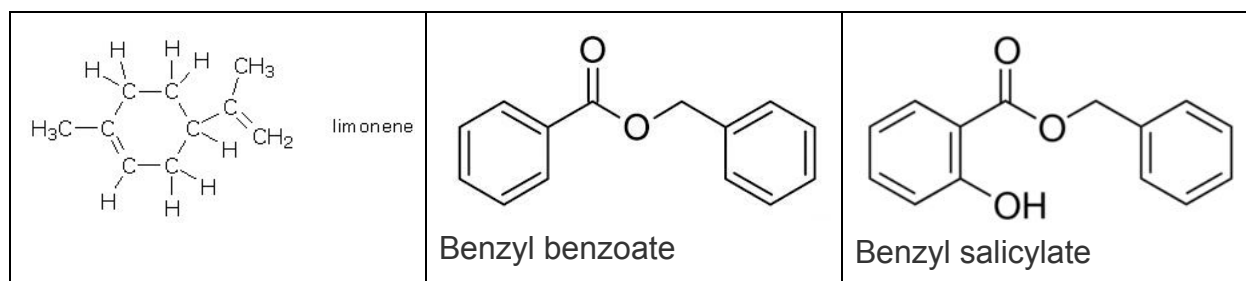
List 4 patterns you see in the list of ingredients for the perfumes/colognes.

Which molecule do you think has the greatest effect on the smell of perfume/cologne?

Explain your thinking.

Part 2: Here are the structures of three molecules from the above perfumes/colognes.

Note:



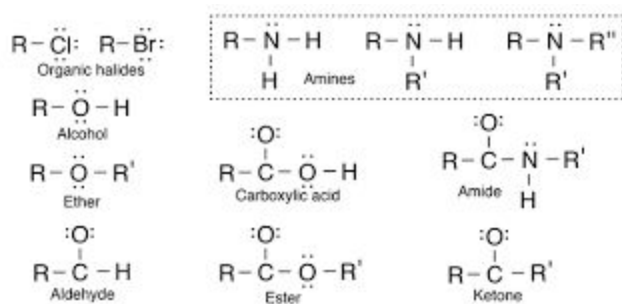
Name 3 patterns you see among the three molecules

What part of the molecule might cause it to have the greatest effect on the smell?

Explain your thinking.

Part 3.

Here is a picture of organic molecule functional groups.

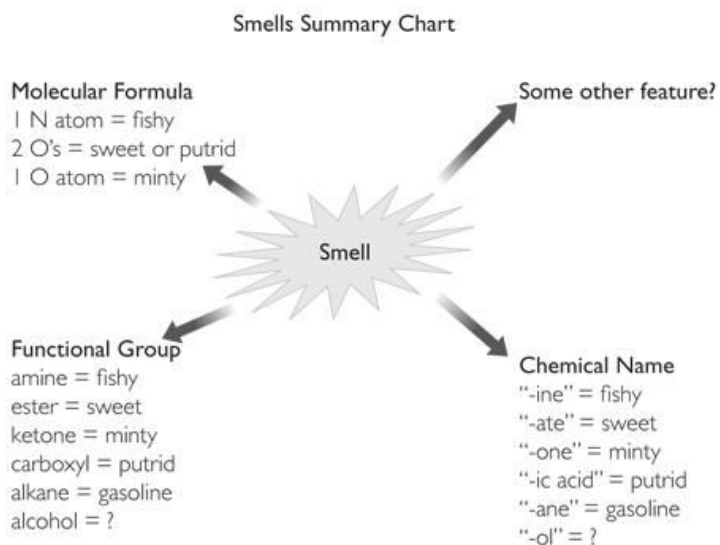


What functional groups can you find in the perfume ingredients from part 2?

Explain your thinking.

Part 4:

Perfumes often contain **esters** to give pleasant aromas. The graphic below shows patterns that occur between smells and molecular structure.



1. What functional groups are similar to esters? Explain your thinking.
2. What functional groups can combine to make an ester? Explain your thinking.
3. Propose a molecule that would make an unpleasant smell? Explain your thinking.