Question #78944

Which is which?

1. Propanone a. Reacts with carbonates and the products are salt, carbon dioxide and H2O 2. Aniline. b. Contains a benzene ring 3. Cyclohexane. c. Normally written as CH3COCH3 4. Methanal d. Is a product of catalytic hydrogenation of benzene 5. Ethanoic acid e. Is an aldehyde

The right order/answer is:

1. Propanone	c. Normally written as CH3COCH3
2. Aniline.	b. Contains a benzene ring
3. Cyclohexane.	d. Is a product of catalytic hydrogenation of benzene
4. Methanal	e. Is an aldehyde
5. Ethanoic acid	a. Reacts with carbonates and the products are salt, carbon dioxide and H2O

(1. c. 2. b. 3. d. 4. e. 5. a.)

Proofs from Internet sources:

Acetone (systematically named propanone). [1]

Aniline is an organic compound with the formula $C_6H_5NH_2$. Consisting of a phenyl group attached to an amino group, aniline is the prototypical aromatic amine. [2]

On an industrial scale, cyclohexane is produced by hydrogenation of benzene. [3]

Formaldehyde (systematic name methanal) is a naturally occurring organic compound with the formula CH_2O (H-CHO). It is the simplest of the aldehydes(R-CHO). [4]

Metal acetates can also be prepared from acetic acid and an appropriate base, as in the popular "baking soda + vinegar" reaction [5]:

$$NaHCO_3 + CH_3COOH \rightarrow CH_3COONa + CO_2 + H_2O$$

References:

[1] https://en.wikipedia.org/wiki/Acetone

[2] https://en.wikipedia.org/wiki/Aniline

[3] https://en.wikipedia.org/wiki/Cyclohexane

[4] https://en.wikipedia.org/wiki/Formaldehyde

[5] https://en.wikipedia.org/wiki/Acetic_acid