MINISTRY OF EDUCATION

SECONDARY ENGAGEMENT PROGRAMME

GRADE 11

CHEMISTRY

WEEK 9 **WORKSHEET**

1. What is the characteristic smell of esters?

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2. What is the name of ester produced via the reaction between ethanoic acid and methanol?

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3. Which two substances would be needed to make the ester methyl ethanoate

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4. define the term hydrolysis

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5. Name the two methods of hydrolyzing esters

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5 cm^3 of ethanol was mixed with an equal volume of ethanoic acid

A few drops of concentrated sulphuric acid were then added and the mixture was heated.

6. Name the type of reaction

   ---

7. Write a balanced chemical equation for the reaction

   ---

8. Give the names of the products formed

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9. Draw the structural formula of the main product formed

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10. State two reasons for using the sulphuric acid

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CHEMISTRY

Week 9 **Lesson: Worksheet - Answers**

1. What is the characteristic smell of esters?

   Fruity, aromatic or pleasant

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2. What is the name of ester produced via the reaction between ethanoic acid and methanol?

   Methyl ethanoate

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3. Which two substances would be needed to make the ester ethyl propanoate

   Ethanol and propanoic acid

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4. define the term hydrolysis

   hydrolysis is the splitting of a compound using water

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5. Name the two methods of hydrolyzing esters

   Acid hydrolysis and alkaline hydrolysis

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5 cm^3 of ethanol was mixed with an equal volume of ethanoic acid

A few drops of concentrated sulphuric acid were then added and the mixture was heated.

6. Name the type of reaction

   esterification

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7. Write a balanced chemical equation for the reaction

$C_2H_5OH + CH_3COOH \rightarrow CH_3COOC_2H_5 + H_2O$

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8. Give the names of the products formed

Ethyl ethanoate and water

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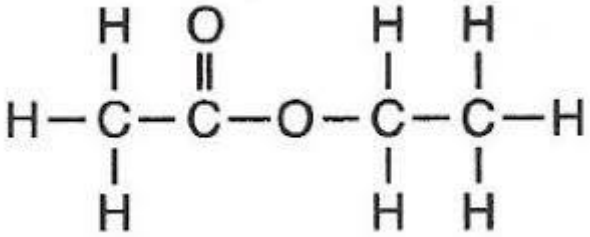
9. Draw the structural formula of the main product formed



10. State two reasons for using the sulphuric acid

Catalyst and dehydrating agent
