### **Student Worksheet**

LSM 1.4-1

# **Identification and Naming of Organic Compounds, Extra Exercises**

pounds are provided. Draw a structural diagram for each compound and identify the organic family to which it belongs.	
(a) 2-bromopentane	(b) 1,4-dichlorobenzene
(c) butanoic acid	(d)ethyl methanoate
(e) 1-butanol	(f) propanal
(a) 1.1 diablara 2.2 diffuonacthana	(b) twins other lassing
(g) 1,1 dichloro-2,2-difluoroethane	(h) trimethylamine
(i) 2-methyl-2-propanol	(j) propanamide

1. In the following questions, the IUPAC names of a variety of organic com-

2. Give the IUPAC name for the following organic compounds represented by the given structural formula.

(a) 
$$CH_3-CH_2-CH-CH_3$$

(a) 
$$CH_3-CH_2-CH-CH_3$$
 (b)  $Cl-CH_2-CH_2-CH_2-Cl$  OH

(c) 
$$CH_3 - C - OH$$
 (d)  $CH_3 - C - O - CH_3$   $\parallel$  O

#### **Student Worksheet Solutions**

#### LSM 1.4-2

## Identification and Naming of Organic Compounds, Extra **Exercises, Solution**

- 1. In the following questions, the IUPAC names of a variety of organic compounds are provided. Draw a structural diagram for each compound and identify the organic family to which it belongs.
- (a) 2-bromopentane

(b) 1,4-dichlorobenzene

organic halide

(c) butanoic acid

(d) ethyl methanoate

$$O$$
 $\parallel$ 
 $H-C-O-CH_2-CH_3$ 
ester

(e) 1-butanol

(f) propanal

$$\begin{matrix} & & & & \\ & & \parallel \\ CH_3-CH_2-C-H \\ \text{aldehyde} \end{matrix}$$

(g) 1,1 dichloro-2,2-difluoroethane

(h) trimethylamine

$$CH_3 \\ | \\ CH_3 - N - CH_3$$
 amine

(i) 2-methyl-2-propanol

$$CH_3 \\ | \\ CH_3 - C - CH_3 \\ alcohol$$

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(j) propanamide

$$\begin{matrix} & & & O \\ \parallel & & \parallel \\ CH_3-CH_2-C-NH_2 \\ amide \end{matrix}$$

2. Give the IUPAC name for the following organic compounds represented by the given structural formula.

2-butanol

ethanoic acid