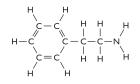
# Molecule A L-carvone, C<sub>10</sub>H<sub>14</sub>O Molecule D

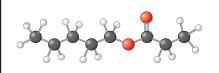
### Molecule B



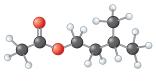


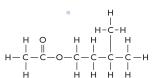
phenylethylamine,  $C_8H_{11}N$ 

#### Molecule C



pentyl propionate,  $C_8H_{16}O_2$ 





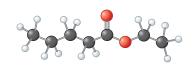
isopentyl acetate,  $C_7H_{14}O_2$ 

#### Molecule E



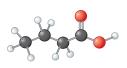
menthone,  $C_{10}H_{18}O$ 

#### Molecule F



ethyl pentanoate,  $C_7H_{14}O_2$ 

#### Molecule G



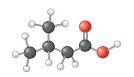
butyric acid,  $C_4H_8O_2$ 

#### Molecule H



ethyl acetate,  $C_4H_8O_2$ 

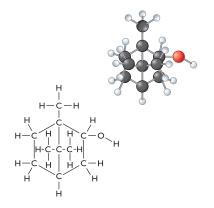
#### Molecule I



isopentanoic acid,  $C_5H_{10}O_2$ 

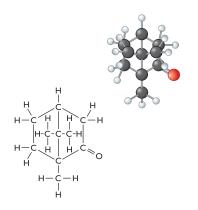
## Molecule J Molecule K Molecule L hexyl acetate, $C_8H_{16}O_2$ pulegone, C<sub>10</sub>H<sub>16</sub>O diisobutylamine, $C_8H_{19}N$ Molecule M Molecule N Molecule 0 pentyl pentanoate, $C_{10}H_{20}O_2$ hexanoic acid, $C_6H_{12}O_2$ citronellol, $C_{10}H_{20}O$ Molecule Q Molecule P Molecule R fenchol, C<sub>10</sub>H<sub>18</sub>O geraniol, C<sub>10</sub>H<sub>18</sub>O menthol, $C_{10}H_{20}O$

#### Molecule S



borneol,  $C_{10}H_{18}O$ 

#### Molecule T



camphor,  $C_{10}H_{16}O$ 

#### MOLECULE

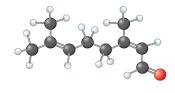
#### Card sort activity

Sort the compounds into categories: sweet, minty, camphor, putrid, and fishy.

- 1. What features did you use for sorting?
- 2. Which cards are you not 100% sure about?
- 3. Which group did you put these cards into? Card M  $\,$  Card S  $\,$  Card R  $\,$
- **4.** Which compounds did you sort mostly by looking at shape?
- **5.** Sort the cards that you are unsure about by shape. Where does each one end up?
- **6.** What functional groups are present in the camphor-smelling compounds? In the minty-smelling compounds?
- **7.** To decide which smell category a compound belongs in, what chemical characteristics would you look for first? Second?

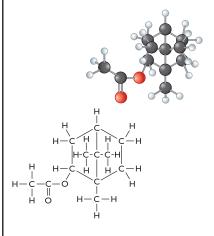
Living By Chemistry © 2010 Key Curriculum Press

Molecule U



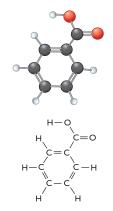
citral,  $C_{10}H_{16}O$ 

Molecule V



bornyl acetate,  $C_{12}H_{20}O_2$ 

Molecule W



benzoic acid,  $C_7H_6O_2$ 

Molecule X



trimethylamine,  $C_3H_9N$