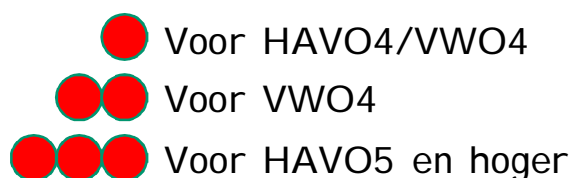


Oefeningen in naamgeving

Hierna volgen enkele molecuulmodellen, soms vergezeld van structuurformules. Probeer de juiste naam te vinden.

Koolstofatomen zijn zwart afgebeeld, zuurstofatomen rood, waterstofatomen wit en chlooratomen groen. In andere gevallen krijg je aanwijzingen.

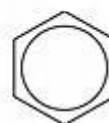




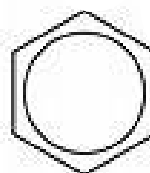
In structuren wordt de benzeenring vaak voorgesteld door:



Eigenlijk is dit de structuur van 1,3,5-cyclohexatrieën, een andere stof dan benzeen. De benzeen-ring moet eigenlijk voorgesteld worden met behulp van de Kékulé-structuur:

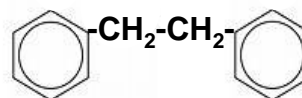








Is de benzeenring de hoofdgroep dan krijgt ze de naam benzeen. Als zijtak heet de benzeenring de fenyl-groep. bv:



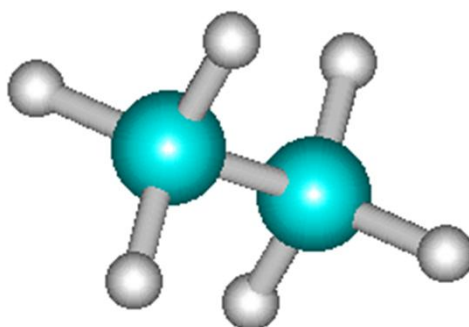
1,2-dibroombenzeen

1,2-difenylethaan



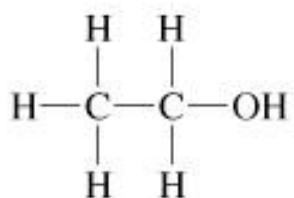
	als hoofdgroep	als nevengroep	in structuurformules geschreven als
$\begin{array}{c} \text{O} \\ \\ -\text{C}-\text{O}-\text{C}- \end{array}$	-oaat	-	-COO-C 
$\begin{array}{c} \text{O} \\ \\ -\text{C}-\text{O}-\text{H} \end{array}$	-zuur	-carboxy	-COOH 
$\begin{array}{c} \text{O} \\ \\ -\text{C}-\text{H} \end{array}$	-al	-oxo	-CHO 
$\begin{array}{c} \text{O} \\ \\ \text{C}-\text{C}-\text{C} \end{array}$	-on	-oxo	-C-CO-C 
-C-O-H	-ol	-hydroxy	-COH 
-C-NH ₂	-amine	-amino	-C-NH ₂ 

1 Enkelvoudige bindingen zijn draaibaar. Dubbele en driedubbele bindingen niet. 

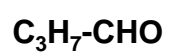
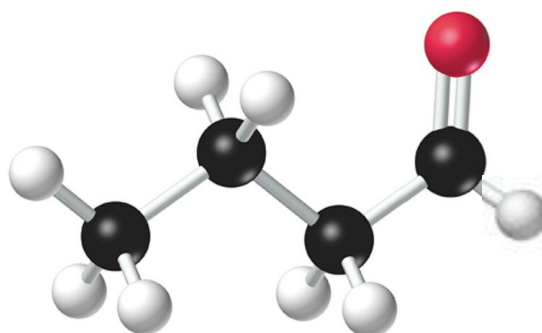


2

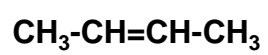
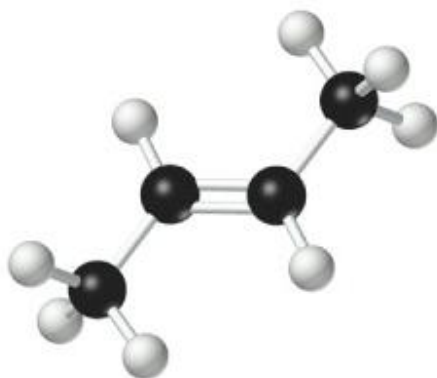
In de modellen zie je de hoeken die je in
structuurformules niet ziet.



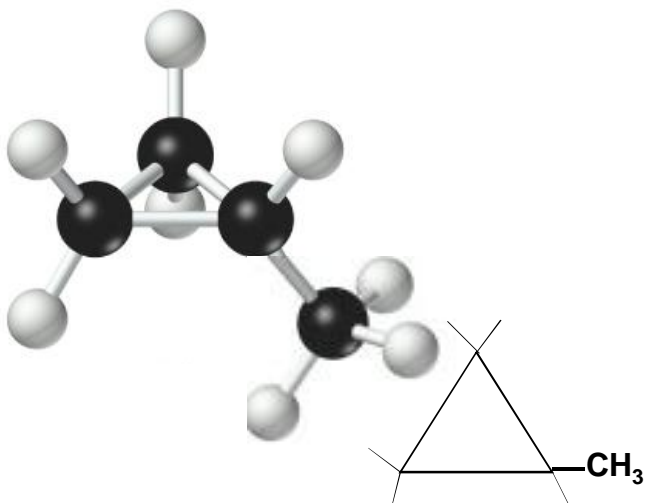
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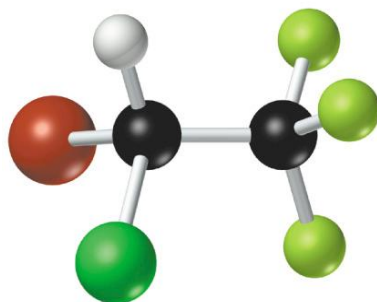
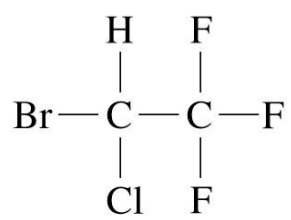
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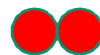
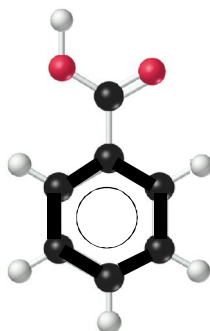
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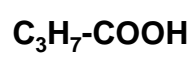
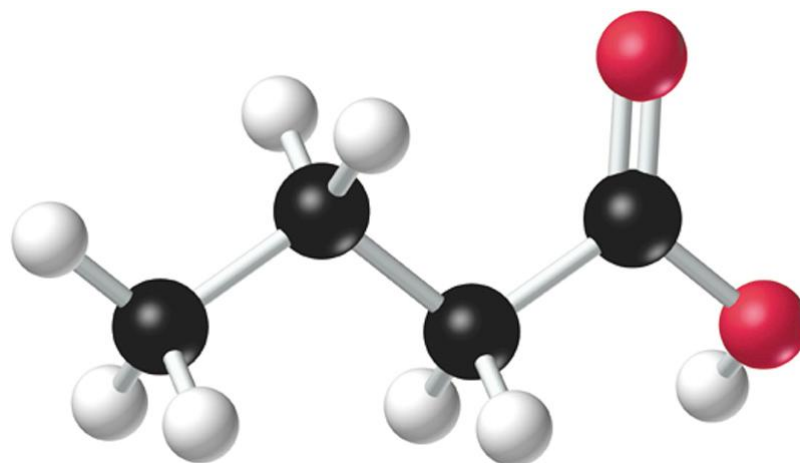
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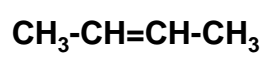
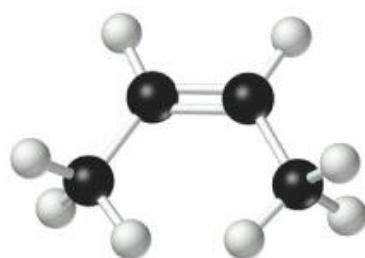
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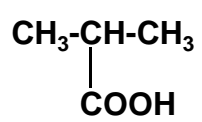
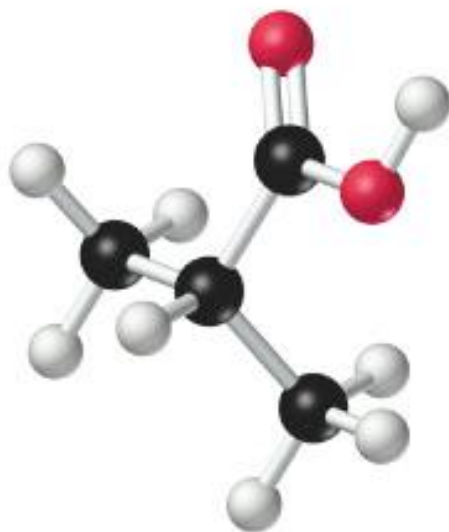
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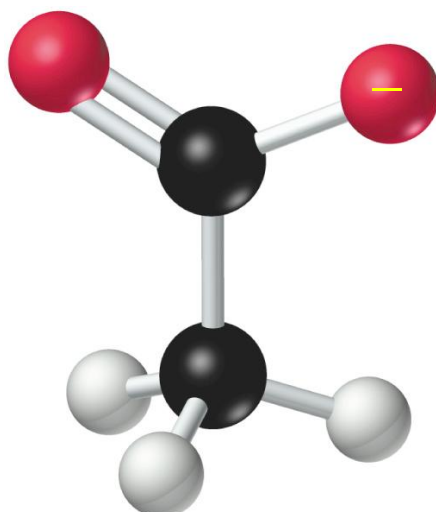
9



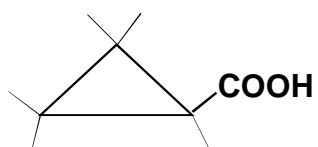
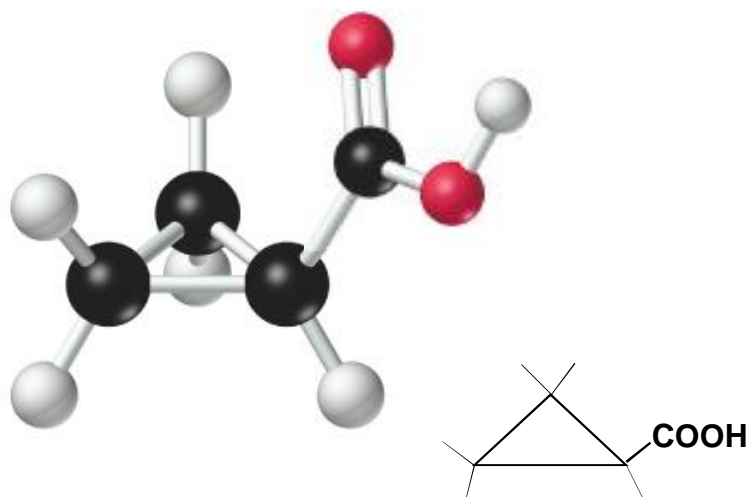
10



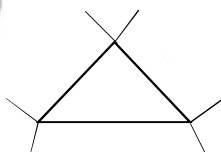
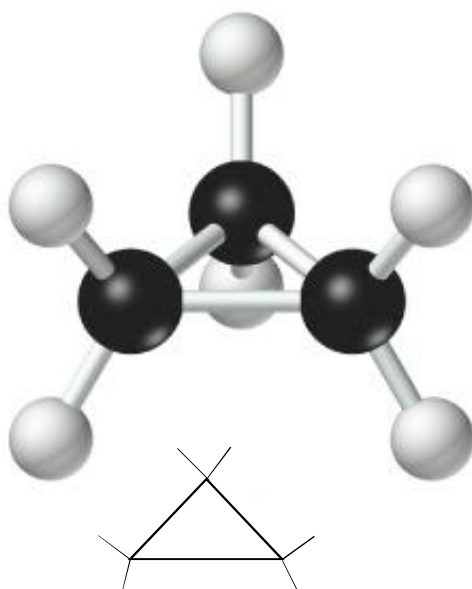
11



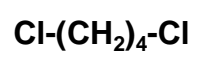
12



13



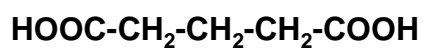
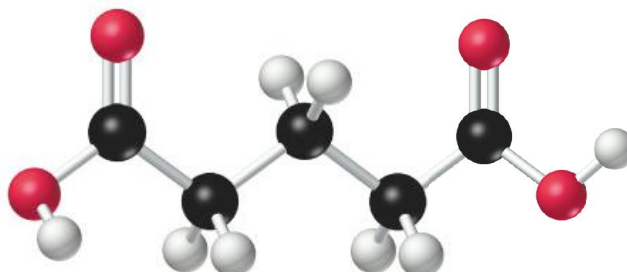
14



15



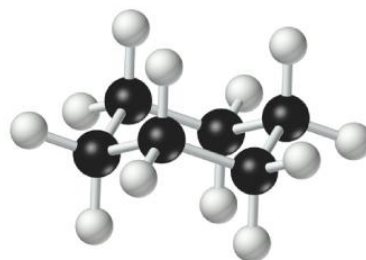
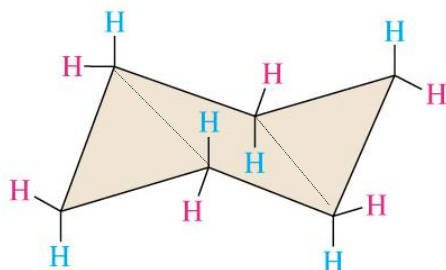
16



17

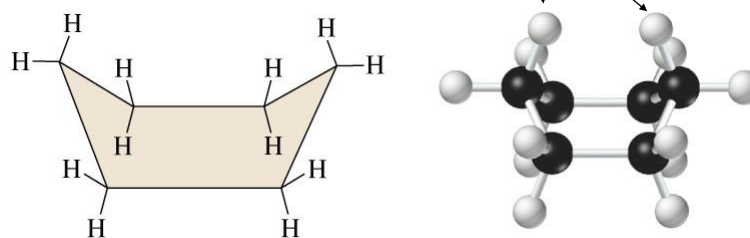


Dit is de gunstige "stoel"-conformatie van cyclohexaan.

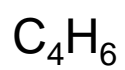
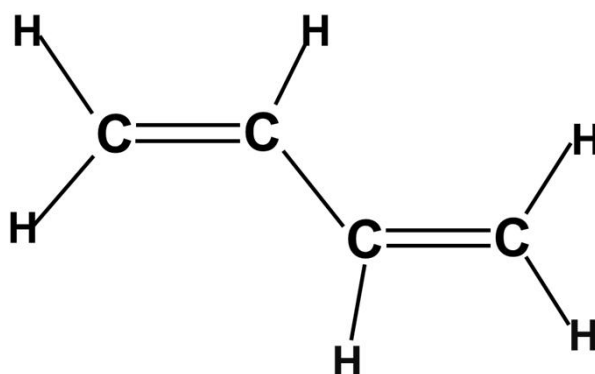


18

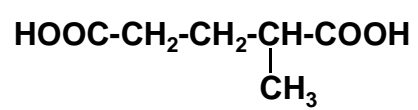
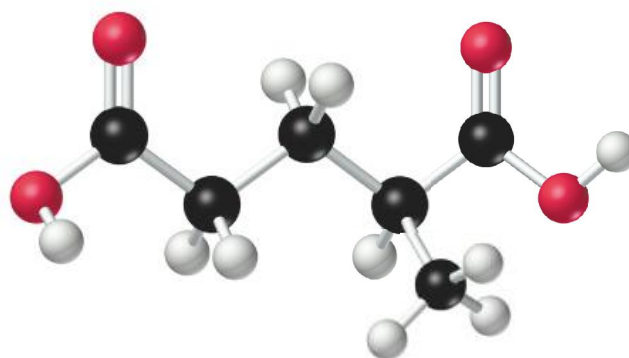
Dit is de ongunstige "boot"-conformatie van cyclohexaan. Energetisch ongunstig vanwege de onderlinge afstoting van de bovenste 2 H-atomen



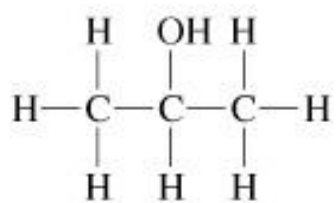
19



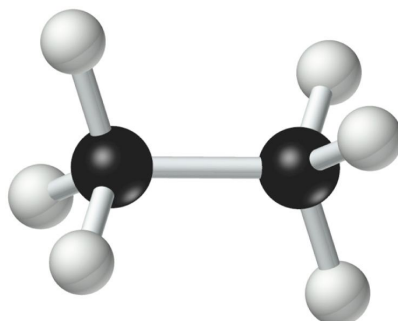
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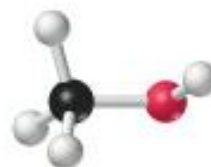
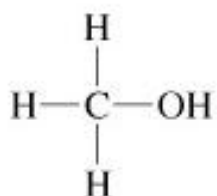
21



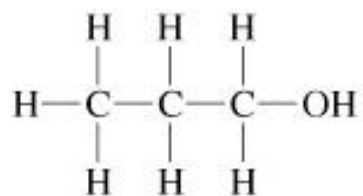
22



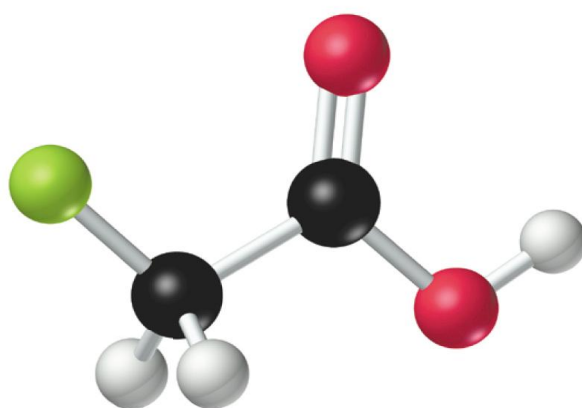
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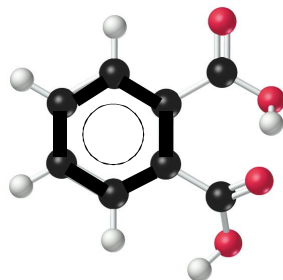
24



25



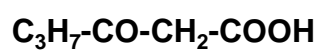
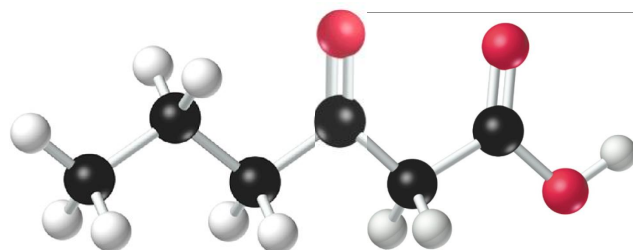
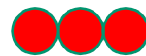
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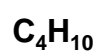
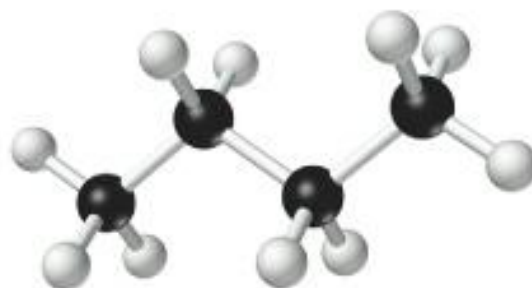
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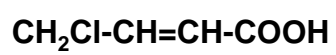
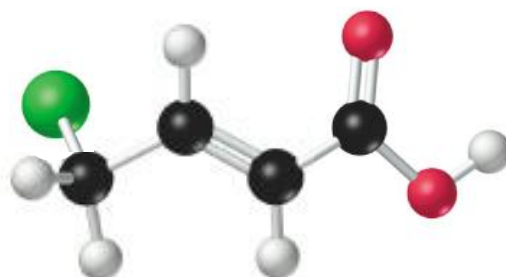
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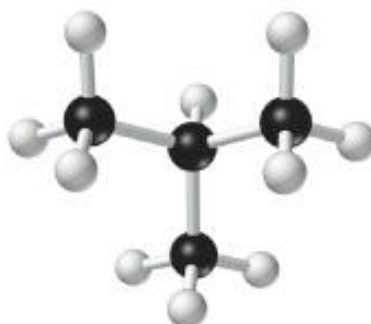
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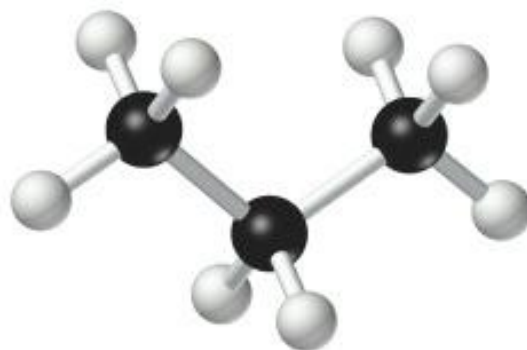
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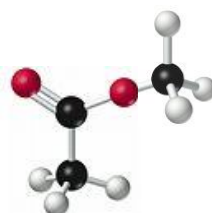
31



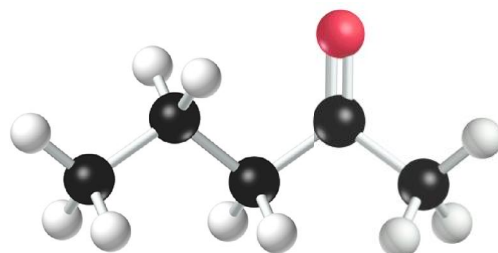
32



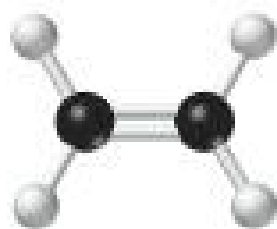
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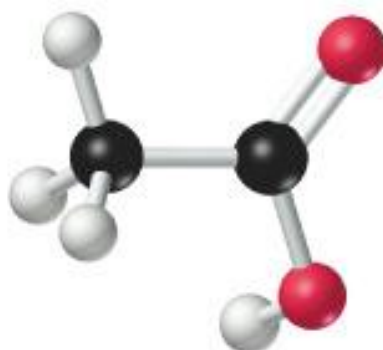
34



35



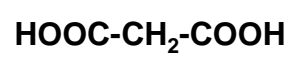
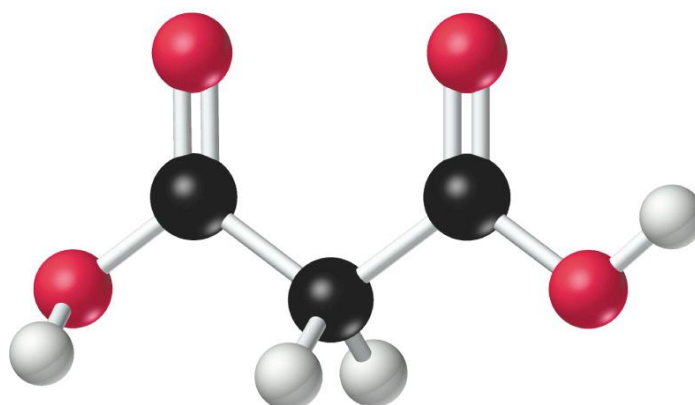
36

 CH_3COOH

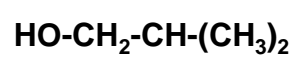
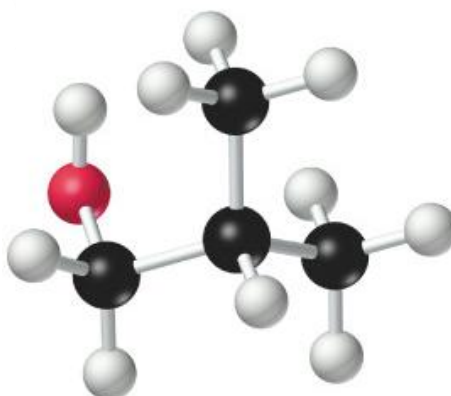
37



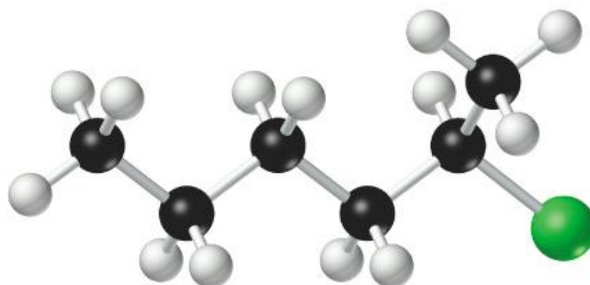
38



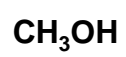
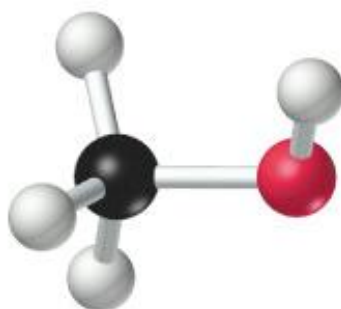
39



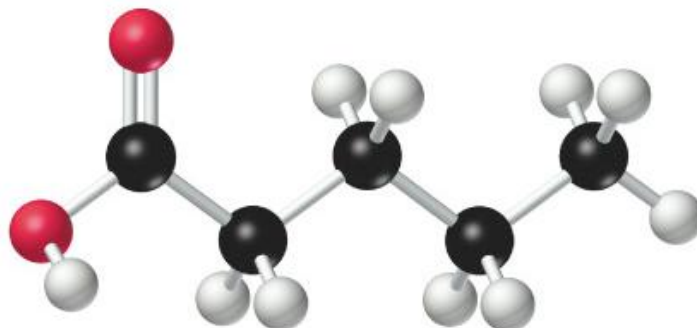
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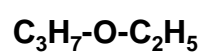
41



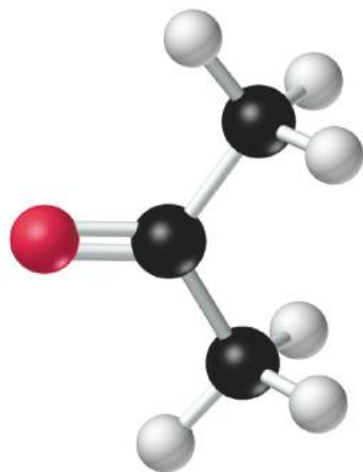
42



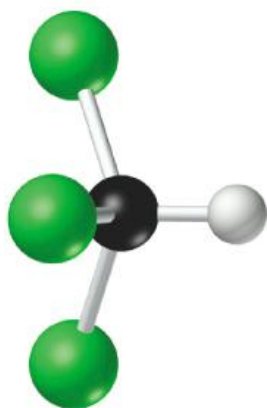
43



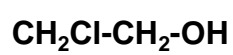
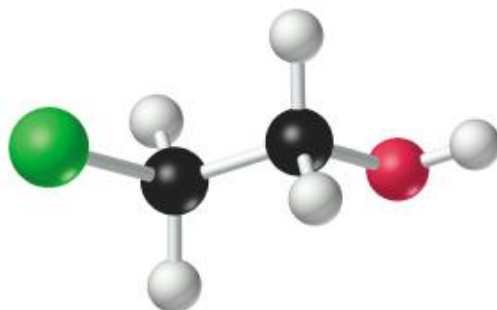
44



45

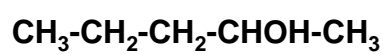
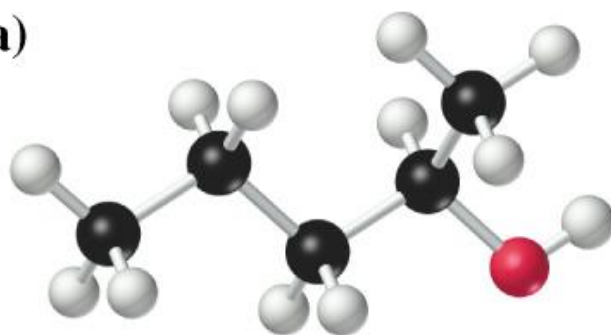


46

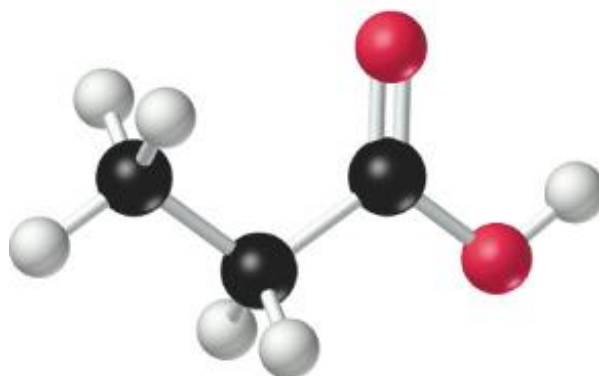


47

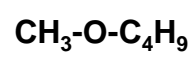
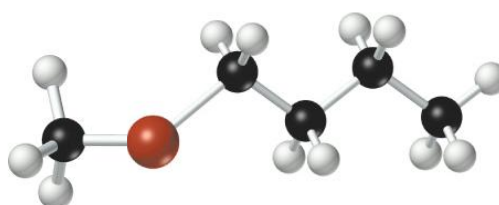
(a)



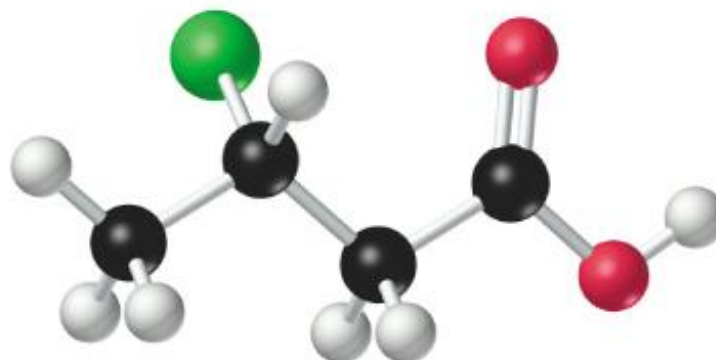
48



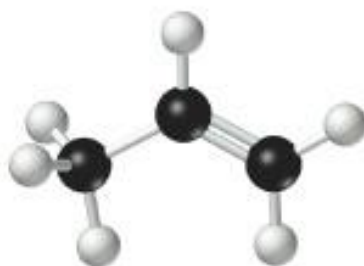
49



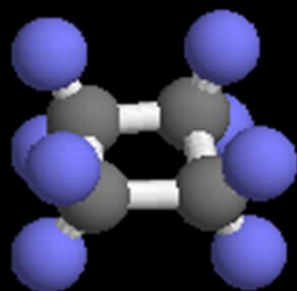
50



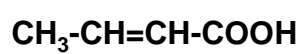
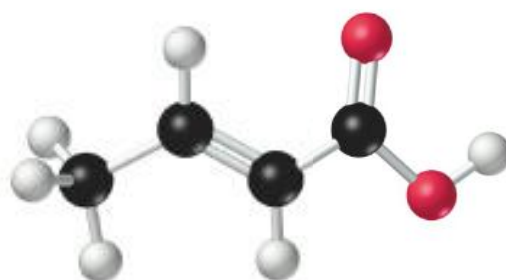
51



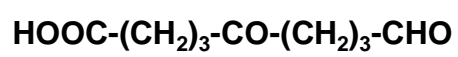
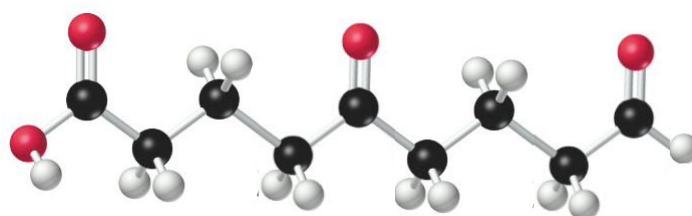
52



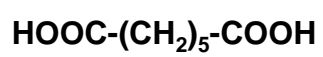
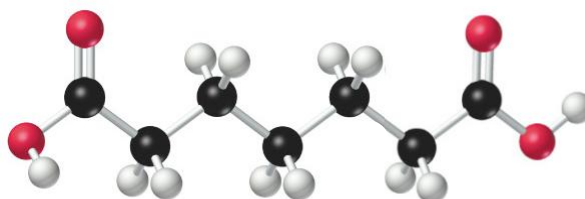
53



54



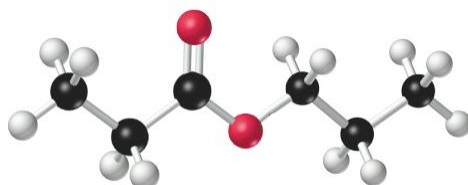
55



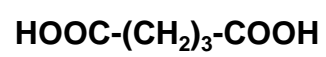
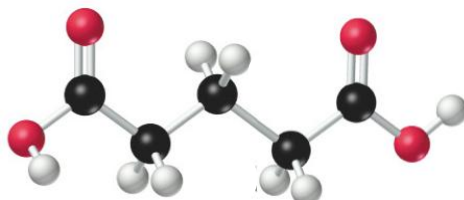
56



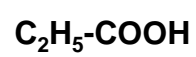
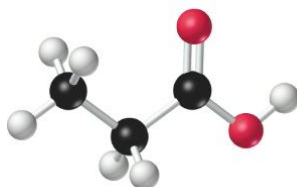
57



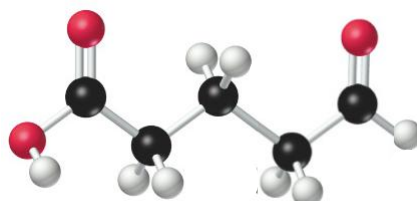
58



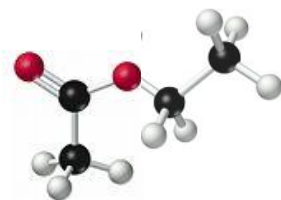
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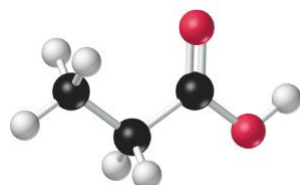
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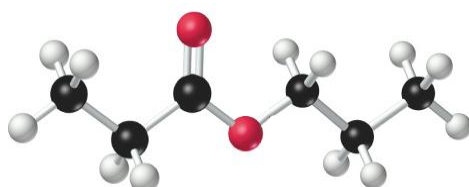
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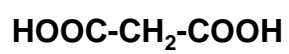
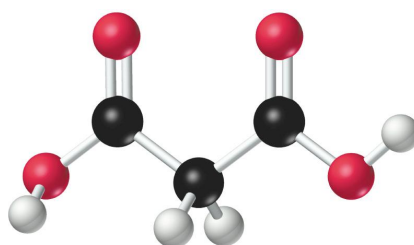
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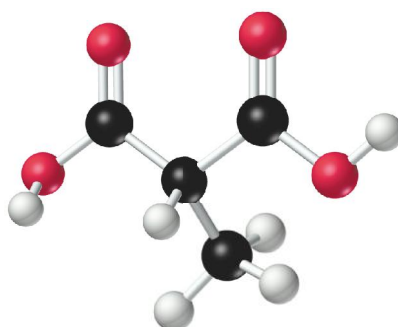
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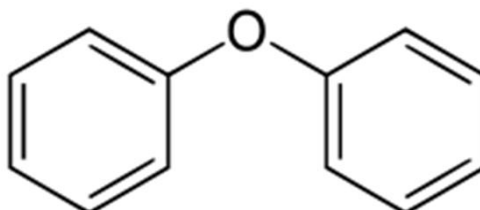
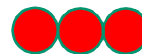
64



65



66

**ANTWOORDEN**

- | | |
|----|---------------------------------------|
| 1 | ethaan |
| 2 | ethanol |
| 3 | butanal |
| 4 | trans-2-buteen |
| 5 | methyl-cyclopropan |
| 6 | 2-broom-2-chloor-1,1,1-trifluorethaan |
| 7 | benzeencarbonzuur (benzoëzuur) |
| 8 | butaanzuur |
| 9 | cis-2-buteen |
| 10 | methylpropaanzuur |
| 11 | ethanoaat-ion (acetaation) |
| 12 | cyclopropaanarbonzuur |
| 13 | cyclopropaan |

ANTWOORDEN

14	1,4-dichloorbutaan
15	2-chloorpropaan
16	pentaandizuur
17	cyclohexaan
18	cyclohexaan
19	cis-1,3-butadiëen
20	2-methylpentaandizuur
21	2-propanol
22	ethaan
23	methanol
24	1-propanol
25	chloorethaanzuur
26	1,2-benzeendicarbonzuur

ANTWOORDEN

27	ethyl-acetaat (ethyl-ethanoaat)
28	3-oxohexaanzuur
29	butaan
30	4-chloor-trans-2-buteenzuur
31	methylpropaan
32	propaan
33	methyl-acetaat (methyl-ethanoaat)
34	2-pentanon
35	etheen
36	ethaanzuur (azijnzuur)
37	methaanzuur (mierenzuur)
38	propaandizuur
39	methyl-1-propanol

ANTWOORDEN

40	2-chloorhexaan
41	methanol
42	pentaanzuur
43	ethoxypropaan (ethyl-propylether)
44	aceton (propanon)
45	trichloormethaan (chloroform)
46	2-chloorethanol
47	2-pentanol
48	propaanzuur
49	methoxy-butaan
50	3-chloorbutaanzuur
51	propeen
52	cyclobutaan

ANTWOORDEN

53	trans-2-buteenzuur
54	5,9-dioxononaanzuur
55	heptaandizuur
56	methyl-ethanoaat (methylacetaat)
57	propylpropanoaat
58	pentaandizuur
59	propaanzuur
60	5-oxopentaanzuur
61	ethylethanoaat (ethylacetaat)
62	propaanzuur
63	propylpropanoaat
64	propaandizuur
65	methyl-propaandizuur
66	difenylether