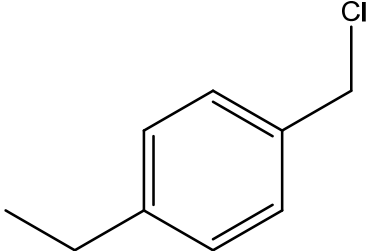
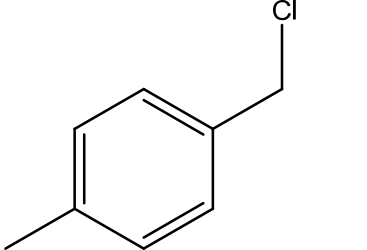
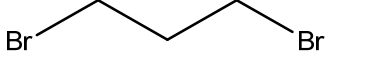
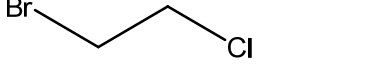
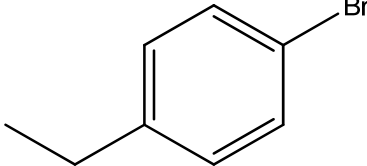
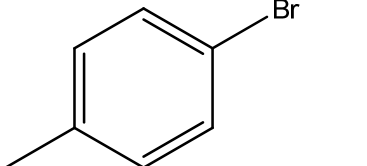
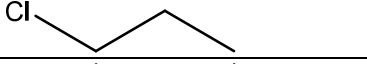

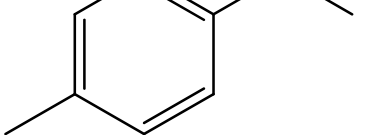
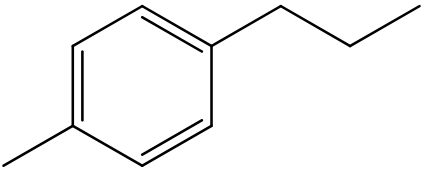
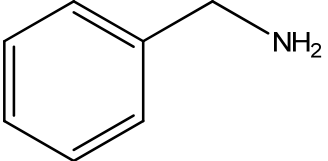
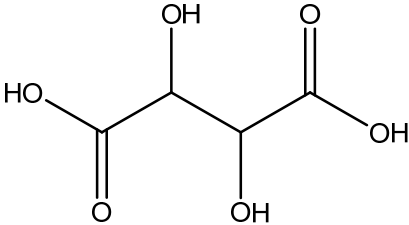
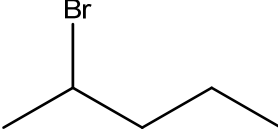
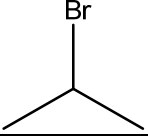
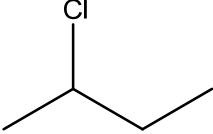
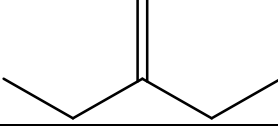
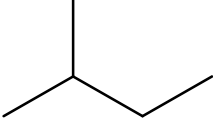
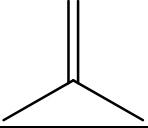
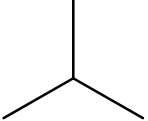
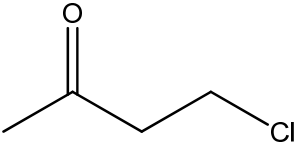


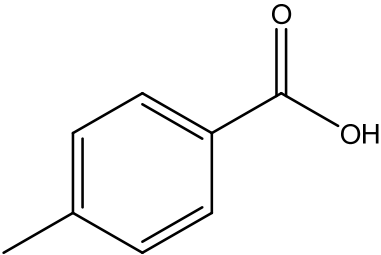
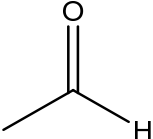
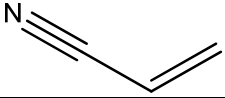
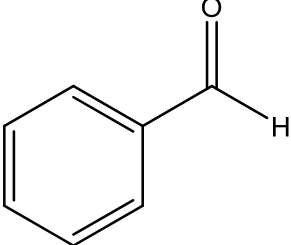
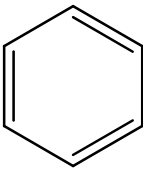
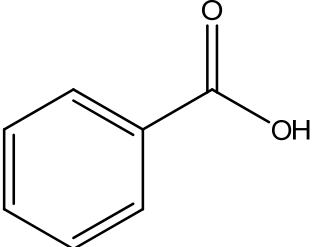
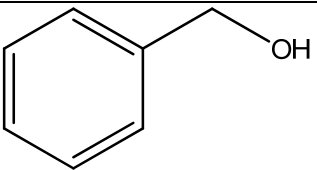
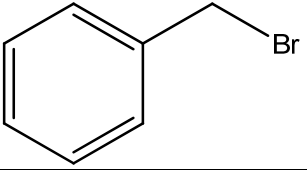
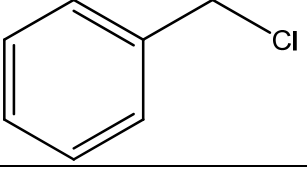

Compound list for Chemical Detectives 2009

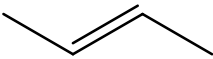
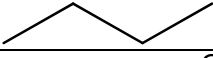
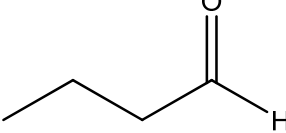

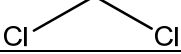
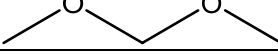
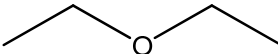
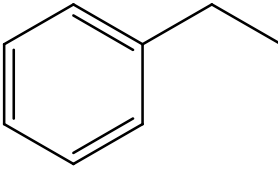
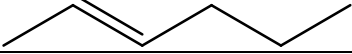
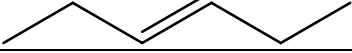
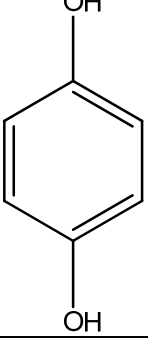
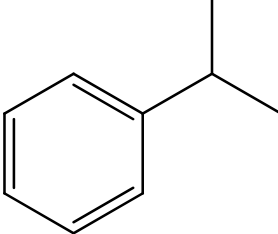
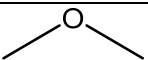
This is the current compound list for ChemicalDetectives2009. The compounds are now classified by functional group and also graded easy/medium/hard.

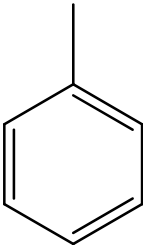
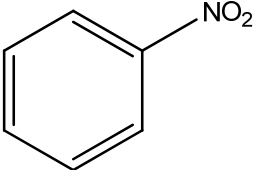
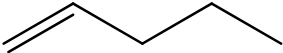
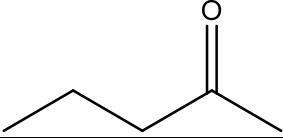
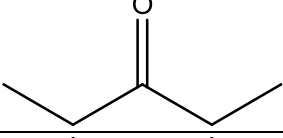

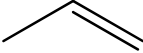
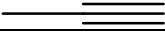
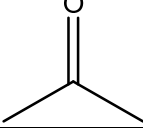
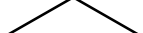
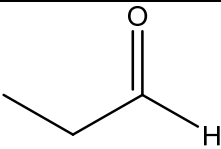
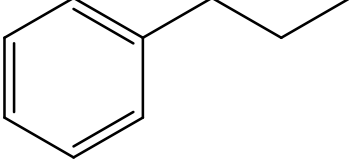

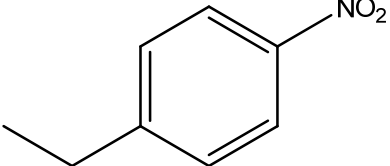
A numbered compound can be selected from the list, or a random selection performed according to grading/functional group that is chosen by the user.

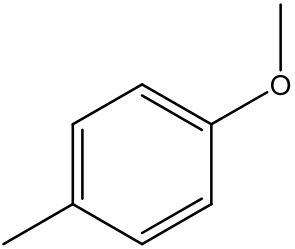
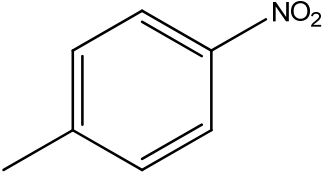
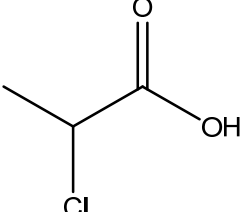
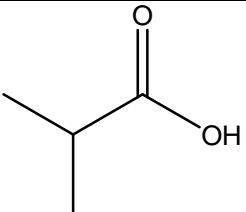
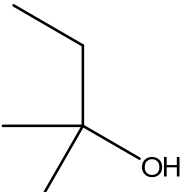
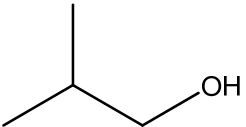
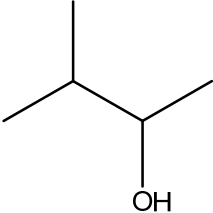
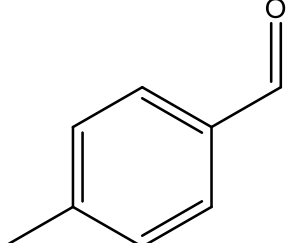
Compound Name	#	Classification		Structure	Known Problems
		E/ M/ H	Functional Group		
1-(chloromethyl)-4-ethylbenzene	0	H	Halogen 09		
1-(chloromethyl)-4-methylbenzene	1	H	Halogen 09		
1,3-dibromopropane	2	M	Halogen 09		
1-bromo-2-chloroethane	3	M	Halogen 09		
1-bromo-4-ethylbenzene	4	H	Halogen 09		
1-bromo-4-methylbenzene	5	H	Halogen 09		
1-chloropropane	6	E	Halogen 09		
1-chlorobutane	7	E	Halogen 09		
1-ethyl-4-methylbenzene	8	H	Hydrocarbon 01		

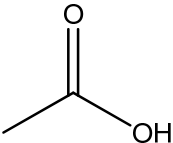
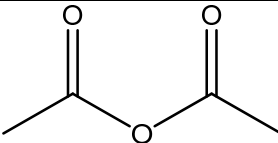
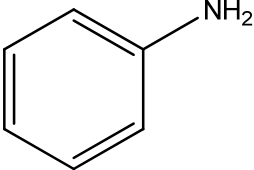
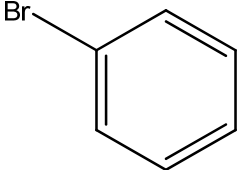
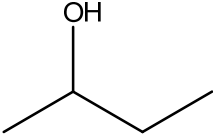
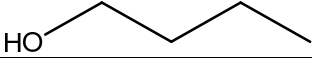
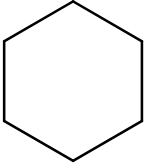
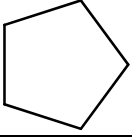
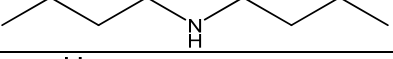
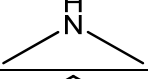
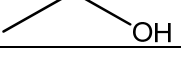
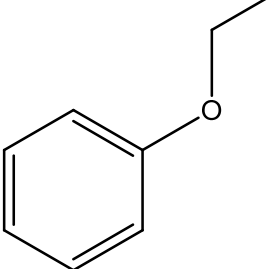
1-methyl-4-propylbenzene	9	H	Hydrocarbon 01		
1-phenylmethanamine	10	H	Amine 03		
2,3-dihydroxybutanedioic acid	11	H	Carboxylic acid 05		
2-bromopentane	12	H	Halogen 09		
2-bromopropane	13	E	Halogen 09		
2-chlorobutane	14	M	Halogen 09		
2-ethylbut-1-ene	15	H	Hydrocarbon 01		
2-methylbutane	16	M	Hydrocarbon 01		
2-methylprop-1-ene	17	M	Hydrocarbon 01		
2-methylpropane	18	E	Hydrocarbon 01		
4-chlorobutan-2-one	19	M	Ketone 10		ERROR – No IR

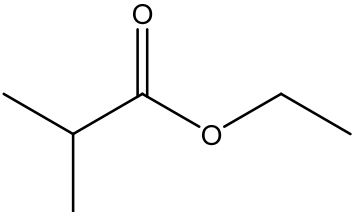
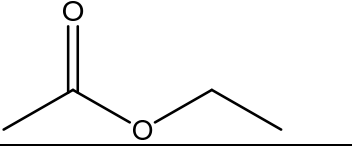
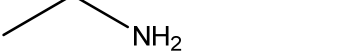
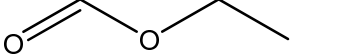
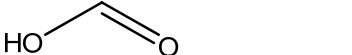
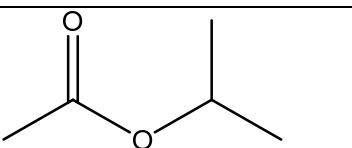

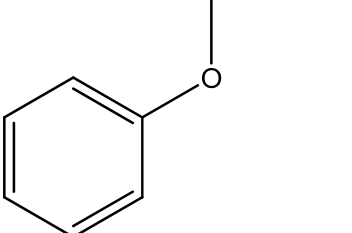
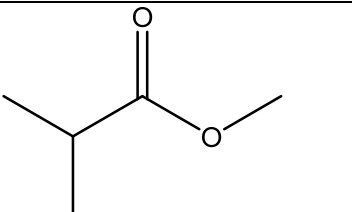
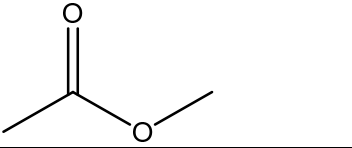
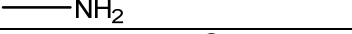
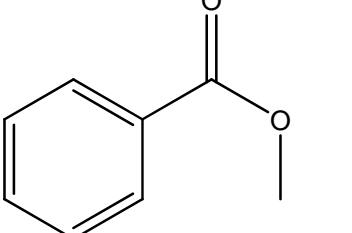
4-methylbenzoic acid	20	H	Carboxylic acid 05		
acetaldehyde	21	E	Aldehyde 07		
acrylonitrile	22	H	Amine 03		
benzaldehyde	23	H	Aldehyde 07		
benzene	24	E	Hydrocarbon 01		
benzoic acid	25	H	Carboxylic acid 05		
benzyl alcohol	26	H	Alcohol 02		
benzyl bromide	27	H	Halogen 09		
benzyl chloride	28	H	Halogen 09		
but-1-ene	29	H	Hydrocarbon 01		

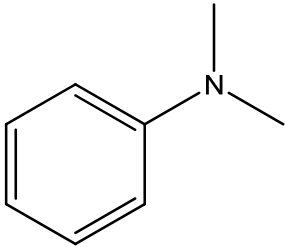
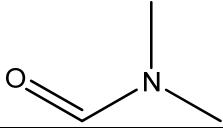
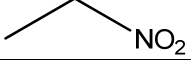
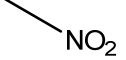
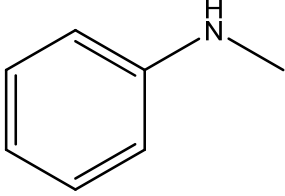
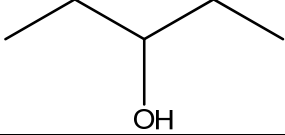
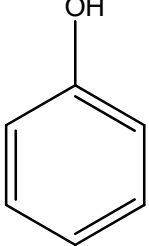
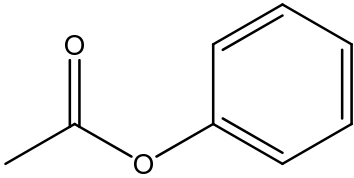
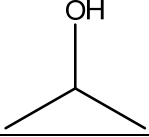
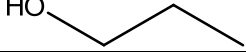
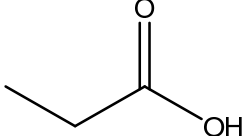
but-2-ene	30	H	Hydrocarbon 01		
butane	31	E	Hydrocarbon 01		
butyraldehyde	32	M	Aldehyde 07		
chloromethane	33	E	Halogen 09		
dichloromethane	34	E	Halogen 09		
dimethoxymethane	35	H	Ether 08		
ethane	36	E	Hydrocarbon 01	$\text{H}_3\text{C}-\text{CH}_3$	
ethene	37	E	Hydrocarbon 01	$\text{H}_2\text{C}=\text{CH}_2$	
ethoxyethane	38	E	Ether 08		
ethylbenzene	39	H	Hydrocarbon 01		
hex-2-ene	40	H	Hydrocarbon 01		
hex-3-ene	41	H	Hydrocarbon 01		
hydroquinone	42	H	Alcohol 02		
isopropylbenzene	43	H	Hydrocarbon 01		
methane	44	E	Hydrocarbon 01	CH_4	
methoxymethane	45	E	Ether 08		

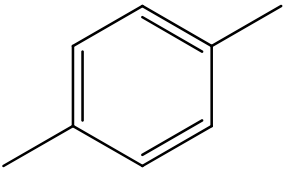
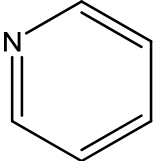
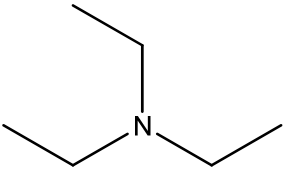
methyl benzene	46	H	Hydrocarbon 01		
nitrobenzene	47	H	Nitro 04		
pent-1-ene	48	H	Hydrocarbon 01		
pentan-2-one	49	M	Ketone 10		
pentan-3-one	50	E	Ketone 10		
pentane	51	E	Hydrocarbon 01		
prop-1-ene	52	M	Hydrocarbon 01		
prop-1-yne	53	M	Hydrocarbon 01		
propan-2-one	54	E	Ketone 10		
propane	55	E	Hydrocarbon 01		
propionaldehyde	56	M	Aldehyde 07		
propylbenzene	57	H	Hydrocarbon 01		
1,2-ethandiol	58	H	Alcohol 02		
1-ethyl-4-nitrobenzene	59	H	Nitro 04		

1-methoxy-4-methylbenzene	60	H	Ether 08		
1-methyl-4-nitrobenzene	61	H	Nitro 04		
2-chloropropanoic acid	62	H	Carboxylic acid 05		
2-methylpropionic acid	63	M	Carboxylic acid 05		
2-methylbutan-2-ol	64	H	Alcohol 02		
2-methylpropan-1-ol	65	M	Alcohol 02		
3-methylbutan-2-ol	66	H	Alcohol 02		
4-methylbenzaldehyde	67	H	Aldehyde 07		

Acetic acid	68	E	Carboxylic acid 05		
Acetic Anhydride	69	M	Esters 06		
Aniline	70	H	Amine 03		
Bromobenzene	71	H	Halogen containing 09		
Butan-2-ol	72	H	Alcohol 02		
Butanol	73	M	Alcohol 02		
Cyclohexane	74	E	Hydrocarbon 01		
Cyclopentane	75	E	Hydrocarbon 01		
Dibutylamine	76	H	Amine 03		
Dimethylamine	77	E	Amine 03		
Ethanol	78	E	Alcohol 02		
Ethoxybenzene	79	H	Ether 08		

Ethyl 2-methylpropanoate	80	H	Ester 06		
Ethyl acetate	81	M	Ester 06		
Ethylamine	82	E	Amine 03		
Ethyl formate	83	H	Aldehyde 07		
Formic acid	84	E	Carboxylic acid 05		
Isopropyl ethanoate	85	H	Ester 06		
Methanol	86	E	Alcohol 02		
Methoxybenzene	87	H	Ether 08		
Methyl 2-methylpropanoate	88	H	Ester 06		
Methyl acetate	89	E	Ester 06		
Methyl amine	90	E	Amine 03		
Methyl benzoate	91	H	Ester 06		

N,N-dimethyl aniline	92	H	Amine 03		
N,N-dimethylformamide	93	H	Aldehyde 07		
Nitroethane	94	E	Nitro 04		
Nitromethane	95	E	Nitro 04		
N-methyl aniline	96	H	Amine 03		
Pentan-3-ol	97	H	Alcohol 02		
Phenol	98	H	Alcohol 02		
Phenyl acetate	99	H	Ester 06		
Propan-2-ol	100	M	Alcohol 02		
Propanol	101	E	Alcohol 02		
Propanoic acid	102	E	Carboxylic acid 05		

p-xylene	103	H	Hydrocarbon 01		
Pyridine	104	H	Amine 03		
Triethylamine	105	M	Amine 03		
Trimethylamine	106	E	Amine 03	