
Přírodní vědy aktivně a interaktivně

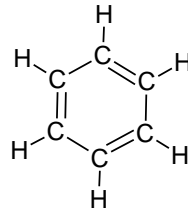
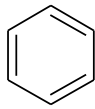
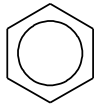
Elektronický materiál byl vytvořen v rámci projektu OP VK CZ.1.07/1.1.24/01.0040

Zvyšování kvality vzdělávání v Moravskoslezském kraji
Střední průmyslová škola stavební, Havířov, příspěvková organizace

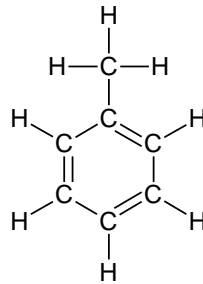
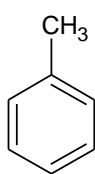
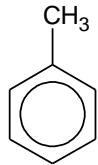
Název EM	Areny a jejich uhlovodíkové zbytky
Název sady EM	ŽUR_CHE_04
Vzdělávací obor	Chemie
Vzdělávací oblast	Člověk a příroda, Informační a komunikační technologie
Autor	Mgr. Jana Žůrková
Ročník	2. a 3. (technické lyceum)
Anotace	Organická chemie, klasifikace arenů, názvy a vzorce arenů, odvození názvů a vzorců uhlovodíkových zbytků arenů

ARENY = AROMATICKÉ UHLOVODÍKY

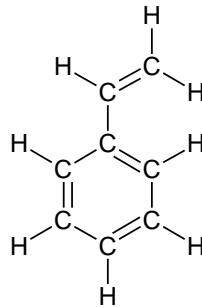
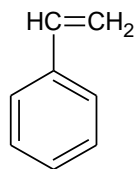
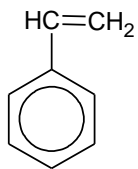
1) Areny monocyklické: Obsahují 1 benzenové jádro.



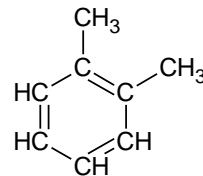
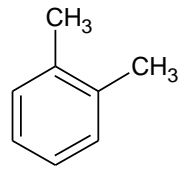
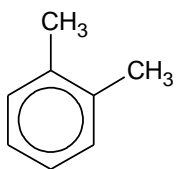
benzen
 C_6H_6



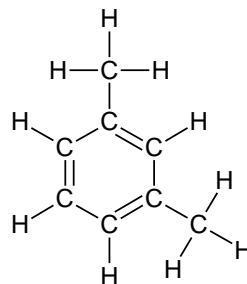
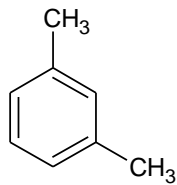
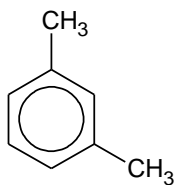
toluen = methylbenzen
 $C_6H_5CH_3$



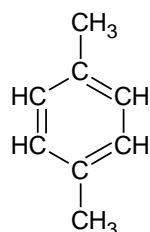
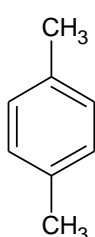
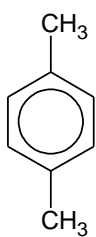
styren = vinylbenzen
 $C_6H_5CHCH_2$



o-xylen **o = ortho**
1,2-dimethylbenzen

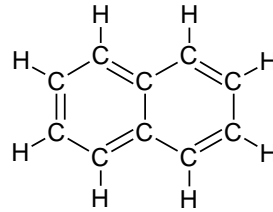
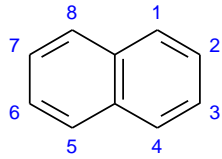
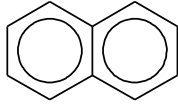


m-xylen **m = meta**
1,3-dimethylbenzen

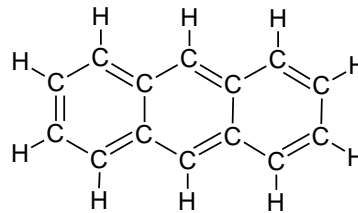
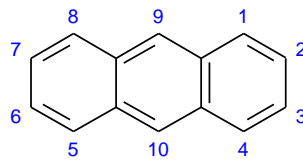
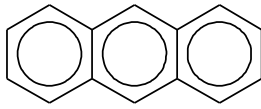


p-xylen **p = para**
1,4-dimethylbenzen

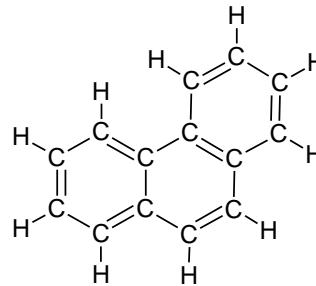
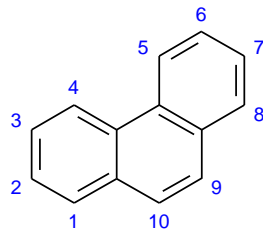
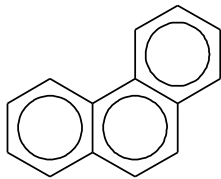
2) Areny polycyklické: Obsahují 2 nebo více benzenových jader.



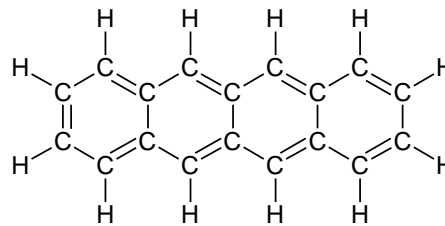
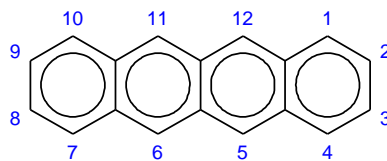
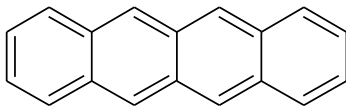
naftalen
 $C_{10}H_8$



anthracen
 $C_{14}H_{10}$

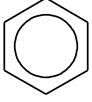
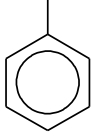
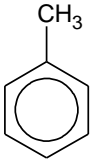
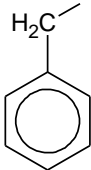
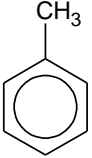
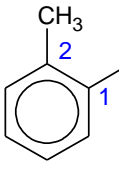
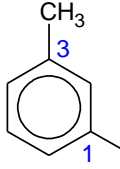
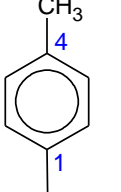
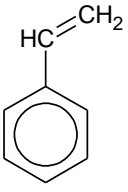
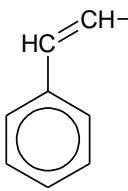
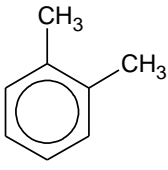
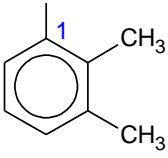
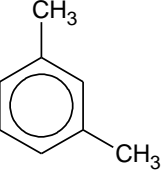
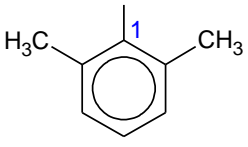
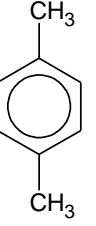
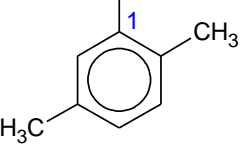


fenanthren
 $C_{14}H_{10}$



naftacen
 $C_{18}H_{12}$

ARENY A JEJICH UHLOVODÍKOVÉ ZBYTKY (ARYLY)

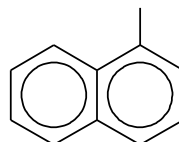
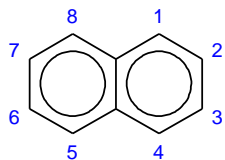
	AREN		ARYL	
benzen			 fenyl	
toluen			 benzyl	
toluen		 o-tolyl 2-methylbenzen-1-yl	 3-methylbenzen-1-yl m-tolyl	 p-tolyl 4-methylbenzen-1-yl
styren			 styryl	
o-xylen			 2,3-xylyl 2,3-dimethylbenzen-1-yl	
m-xylen			 2,6-xylyl 2,6-dimethylbenzen-1-yl	
p-xylen			 2,5-xylyl 2,5-dimethylbenzen-1-yl	

ARENY A JEJICH UHLOVODÍKOVÉ ZBYTKY (ARYLY)

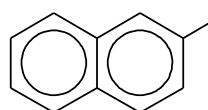
AREN

ARYL

naftalen

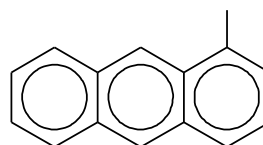
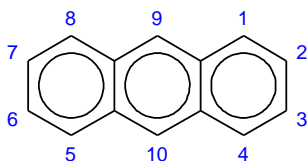


naftalen-1-yl
1-naftyl

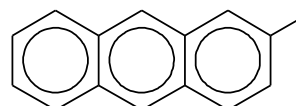


naftalen-2-yl
2-naftyl

anthracen



anthracen-1-yl
1-anthryl



anthracen-2-yl
2-anthryl