*Ogljikovodiki, utrjevanje*

*1. Podanih je šest organskih spojin, označenih od A do F. Zapisane so s strukturno formulo ali predstavljene z modeli. Dobro si jih oglej in odgovori na vprašanja.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F |
|  | http://upload.wikimedia.org/wikipedia/commons/thumb/e/ee/Propyne-2D-flat.png/220px-Propyne-2D-flat.png |  |  | http://upload.wikimedia.org/wikipedia/commons/thumb/9/9a/Cyclopropane-3D-balls.png/100px-Cyclopropane-3D-balls.png |  |

1. V katero skupino ogljikovodikov uvrščamo spojini A, B in D?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. V katero skupino spojin uvrščamo spojino E?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Katera formula predstavlja spojino s splošno formulo CnH2n+2 ?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. V kateri spojini so med atomi ogljika enojne in trojne vezi?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Zapiši ime spojine C.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Zapiši molekulsko formulo spojine D.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Katera spojina vsebuje klor?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Produkt katere reakcije je spojina F?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Katera vrsta reakcije bo potekala na spojini D?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. Imenuj produkt, ki bo nastal, če na spojino A adiramo/vežemo molekulo klora.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. Spojino A zapiši s skeletno formulo.

*2. Obkroži pravilne odgovore. Izomere heksana so:*

|  |  |
| --- | --- |
| *Poimenuj izomere.*  a) H3C – CH2 – CH2 – CH2 – CH= CH2  ime: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | CH3 CH3  │ │  b) H3C – CH – CH – CH3  ime: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| c) H3C – CH2 – CH2 – CH2 – CH3 | d) H3C – CH2 – CH2 – CH2 – CH2 – CH3 |
| ime: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  e) H3C – CH – CH – CH2 – CH3  │ │  CH3 CH3  ime: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | ime: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  f) H3C – CH – CH2 – CH2  │ │  CH3 CH3  ime: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

*3. Pojmom na levi najdi ustrezno dopolnitev na desni strani. Na črte vpiši ustrezno črko.*

|  |  |  |  |
| --- | --- | --- | --- |
| Alkeni \_\_\_\_ |  | A | Atomi ogljika so vezani v obroče. |
| Benzen \_\_\_\_ |  | B | Nasičeni ogljikovodik. |
| Radikal \_\_\_\_ |  | C | Nenasičeni ogljikovodiki z enojnimi in dvojnimi vezmi. |
| Cikloalkani \_\_\_\_ |  | D | Nasičeni ogljikovodiki z enojnimi vezmi med atom ogljika. |
| Metan \_\_\_\_ |  | E | V molekuli ogljikovodika se izmenjujejo enojne in dvojne vezi. |
| Alkani \_\_\_\_ |  | F | Etil. |

*4. Oglej si imena in formule spojin. Vpiši ustrezno črko v prostor za odgovor.*

|  |  |  |  |
| --- | --- | --- | --- |
| \_\_\_\_ buten  \_\_\_\_ oktan  \_\_\_\_ propen | a) C2H2 | b)  H3C - CH2 - CH2 - CH2 – C ≡ C - H | c) H3C–CH2–CH3 |
| \_\_\_\_ etin  \_\_\_\_ 2-metilbutan  \_\_\_\_ pentan | d) | e) H3C–CH2– CH=CH2 | f) C5H12 |
| \_\_\_\_ heksin  \_\_\_\_ propan  \_\_\_\_ ciklobutan | g) C8H18 | h) | i) |

*5. Dobro si oglej spojini. V čem sta si podobni in v čem se razlikujeta. Zapiši ugotovitve. Spojinam pripiši imena in molekulsko formulo.*



a) b)

ime: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ime: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sorodnosti: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Razlike:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*6. Modelom spojin pripiši imena ter strukturno in racionalno formulo.*

|  |  |  |  |
| --- | --- | --- | --- |
| *Model spojine* | *Strukturna formula* | *Ime spojine* | *racionalna formula* |
|  |  |  |  |
|  |  |  |  |

*Kaj je značilno za spojini?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*