

LEMBAR KERJA PESERTA DIDIK

BILINGUAL

Materi: Hidrokarbon (Alkana, Alkena, Alkuna) • Kelas XI IPA / Fase F

Pasangan 1:

Kelas:

Pasangan 2:

Tanggal:

TASK 1: READ • Alokasi Waktu: 3 Menit

1. Bacalah teks di bawah ini secara saksama.
2. **Lingkari (Circle)** kata: **alkane**, **alkene**, dan **alkyne**.
3. **Garis bawah (Underline)** **SATU** kalimat yang menjelaskan jenis ikatan antar atom karbon.

Hydrocarbons are organic compounds composed of carbon and hydrogen atoms. They are classified based on the types of bonds between carbon atoms. An **alkane** is a saturated hydrocarbon because it contains only single C–C bonds. In contrast, an **alkene** is an unsaturated hydrocarbon that has at least one double C=C bond. Meanwhile, an **alkyne** is also an unsaturated hydrocarbon containing at least one triple C≡C bond.

TASK 2: CONNECT • Alokasi Waktu: 4 Menit

1. Amati kartu struktur molekul pada tabel di bawah ini.
2. Hubungkan struktur molekul dengan **Hydrocarbon Group** dan **Relationship Word** yang tepat dengan menarik garis lurus.

MOLECULAR STRUCTURE	HYDROCARBON GROUP	RELATIONSHIP WORD
Card A: $\text{H}_3\text{C}-\text{CH}_2-\text{CH}_3$	[ALKANE]	contains single bond(s)
Card B: $\text{H}_2\text{C}=\text{CH}-\text{CH}_3$	[ALKENE]	has double bond(s)
Card C: $\text{HC}\equiv\text{C}-\text{CH}_3$	[ALKYNE]	has triple bond(s)

Word Bank / Frasa Bantuan: • ...is classified as... • ...is an unsaturated hydrocarbon because... • ...contains only single bonds...

TASK 3: COMMUNICATE • Alokasi Waktu: 3 Menit

Part A: Pair Explanation (30–45 detik per siswa)

Jelaskan struktur pada **Card A, B, atau C** kepada pasanganmu menggunakan template berikut. Gunakan minimal **3 target terms** dan **2 relationship words**.

"Card (**A / B / C**) shows (**propane / propene / propyne**). It [**is classified as / contains**] _____. This molecule [**has double bond / contains single bond / has triple bond**] _____, so it is [**a saturated / an unsaturated**] hydrocarbon."

Part B: Peer Feedback & Evidence Checklist

Ketika pasanganmu menjelaskan, ajukan pertanyaan bukti: "**Which part of the structure supports your explanation?**"

☐ Pasangan menggunakan ≥ 3 target terms (*alkane, alkene, alkyne, single/double/triple bond, saturated/unsaturated*).

☐ Pasangan menunjuk langsung jenis ikatan pada struktur sebagai bukti penjelasan.