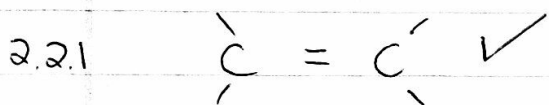


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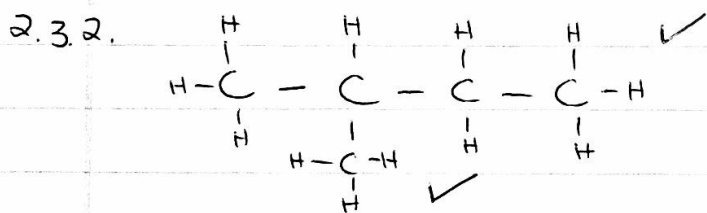
- 1.1 A ✓✓
- 1.2 B ✓✓
- 1.3 C ✓✓
- 1.4 A ✓✓
- 1.5 B. ✓✓

- 2.1.1 E ✓
- 2.1.2 C ✓
- 2.1.3 A ✓
- 2.1.4 B or F ✓



2.2.2 polythene ✓

2.3.1 Butan-2-one or Butanone ✓



3.1 A series of organic compounds that can be described by the same general formula OR in which one member differs from the next with a CH_2 group. ✓✓

3.2 As molecular mass or size increases, the BP increases ✓✓

3.3 Higher than ✓

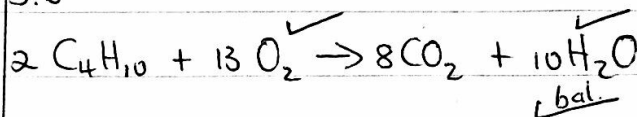
3.4 Structure: Pentane less branched, or less spherical or has larger surface area. ✓

IM forces: Stronger London- forces in pentane ✓

Energy: need more energy to break IM forces. ✓

3.5 Thinner dissolves fat ✓ and oil, skin dries out

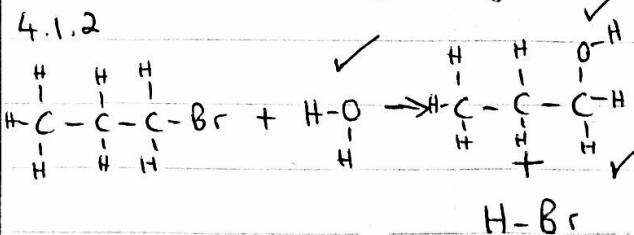
3.6



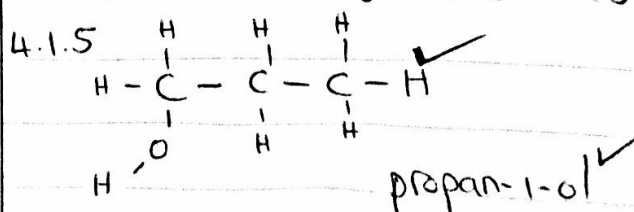
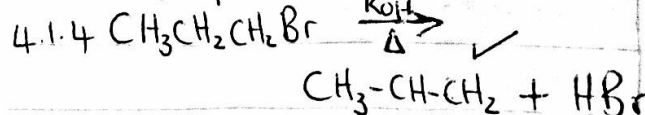
3.7.1 Functional group (Type of) homologous series. ✓

- 3.7.2. • Butanal has dipole-dipole ✓
- Butan-1-ol has H-bonding ✓
- H-bonding stronger than dipole-dipole. ✓
- More energy needed to break forces in butan-1-ol. ✓

4.1.1 A: substitution. } bromination
 } halogenation

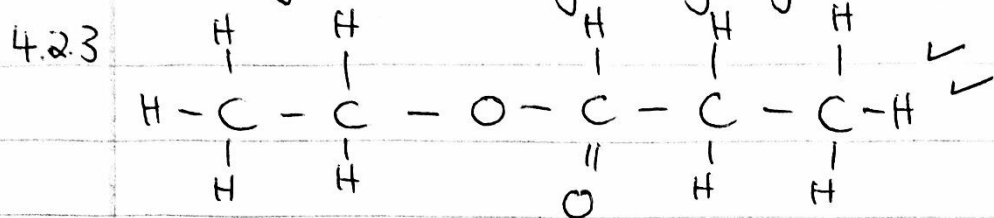


4.1.3 propane ✓



4.2.1 Ethanol ✓

4.2.2 Catalyst or dehydrating agent. ✓



4.2.4 Alcohols flammable (volatile) (gradual heating) ✓

4.2.5 (Food) flavouring ✓

5.1 - Food demand (growing population). ✓ only one.
- Crops needs to grow faster.

5.2 ammonium nitrate OR ammonium sulfate ✓ (no formula) ^x

5.3 $\frac{2}{14} \times 35\% \times 20 = 1 \text{ kg.}$ ✓

5.4.1 Moderate ✓

5.4.2 Moderate ✓

