

01. 0620_s14_ms_62 Q: 3

(a) Bunsen/burner (1) [1]
ignore: heat/heater

(b) not pure/not just ethene (1)
not: a different alkane or alkene is formed first
 contains air (from the tube when heated) (1) [2]
ignore: oxygen

(c) catalyst/to provide a large surface area (1) [1]

(d) bromine (water) (1)
not: bromide
 colourless / decolourised in alkene **or** stays orange in alkane (1) [2]
allow: colour change ecf

02. 0620_s15_ms_63 Q: 1

(a)	(delivery) <u>tube</u> ;	1	
(b)	arrow under wool; arrow under tile;	2	
(c)(i)	to provide large surface area;	1	A catalyst/increase rates
(c)(ii)	to absorb/contain/hold the paraffin;	1	
(d)	cracking;	1	
(e)	bromine water would turn colourless/react with alkenes;	1	

03.0620_w12_ms_63 Q: 6

any 7 from:

[7]

known mass or volume of fats/oil (1)

add organic solvent (1)

shake/stir (1)

add drops of bromine water (1)

until orange colour seen (1)

read and record volume/number of drops (1)

compare oils (1)

conclusion (1)

[Total: 60]

04.0620_w13_ms_62 Q: 1

(a) trough/tub/beaker/bowl/waterbath/basin (1) [1]
not: tray/container/dish

(b) arrow to space in boiling tube above liquid in trough (1) [1]

(c) to absorb/contain/store/trap/hold the alkane/liquid (1) [1]

(d) idea of large surface area/catalyst/speeds up reaction (1) [1]

(e) test bromine(water) (1)
result colourless (1) [2]
not: clear

05.0620_w16_ms_63 Q: 1

(a)	(clamp/retort) stand trough	1 1
(b)	to absorb/hold/keep/soak up/contain the paraffin oil	1
(c)	M1 bromine (aqueous/in cyclohexane) M2 turns colourless/decolourised	1 1
(d)	to prevent suck back (of water)	1