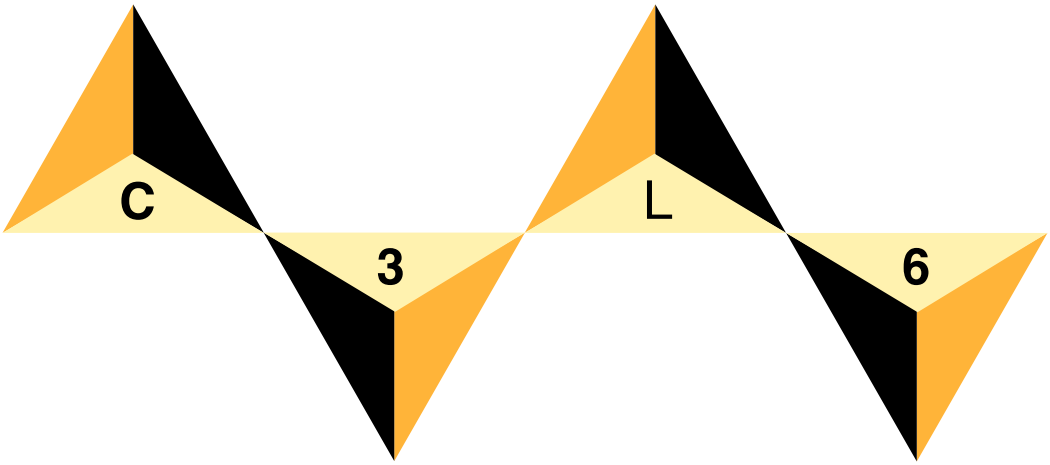


Cambridge Chemistry Challenge Lower 6th

June 2023

Student Answer Booklet

In order to print your certificate, we need to store your name, school, and mark in a database until the end of the year: these details are only viewable by your school and our committee. Your participation in the competition indicates that you are happy for us to do this. If you wish to withdraw your consent, please contact your teacher who will be able to delete your data from our database.

Student name _____

School _____

Date of exam _____

School year (eg year 12) _____

Signature _____

	p2	p3	p4	p5	p6	p7	Total
mark							

Marks available

1(a) (i)

Cl	Sr	Nb	Xe

2

(ii)

S^{2-}	O^{+}	N^{+}	Tl^{+}	B^{3+}	Na^{-}

3

1(b) Circle the correct answer:

i) just less than +1 ii) +1 exactly

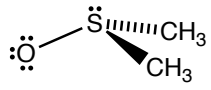
iii) at least +1 iv) just less than +1/3

v) +1/3 exactly vi) at least +1/3

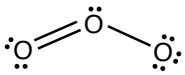
1

1(c)

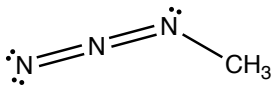
(i)



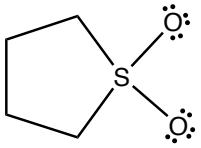
(ii)



(iii)



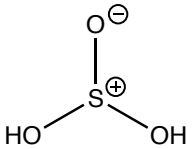
(iv)



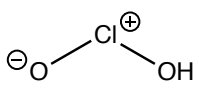
4

1(d)

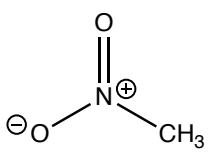
(i)



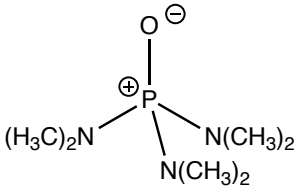
(ii)



(iii)



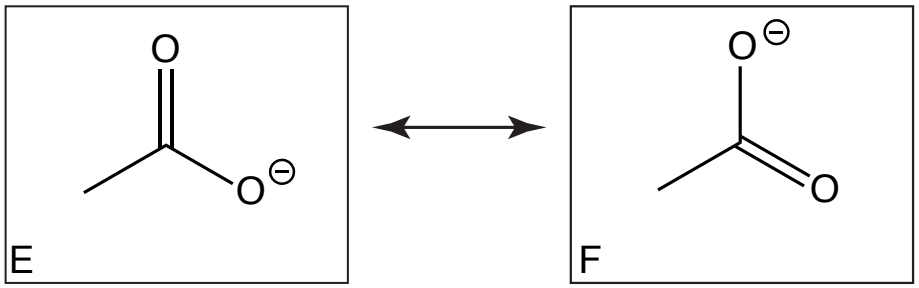
(iv)



4

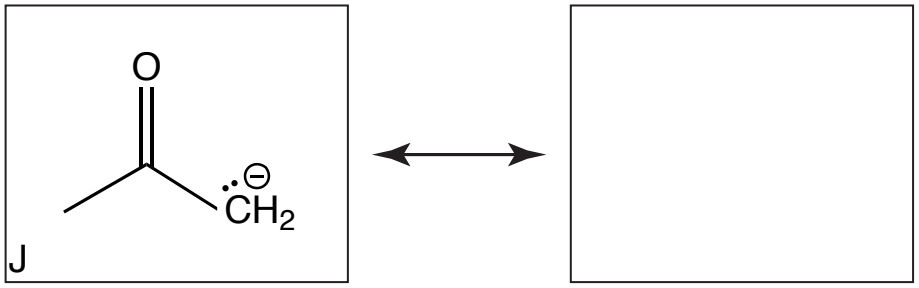
Marks available

1(e)



2

1(f) (i)



2

1(f) (ii) Circle one:

Same Stronger Weaker

1

1(f) (iii) Circle one:

Same Stronger Weaker

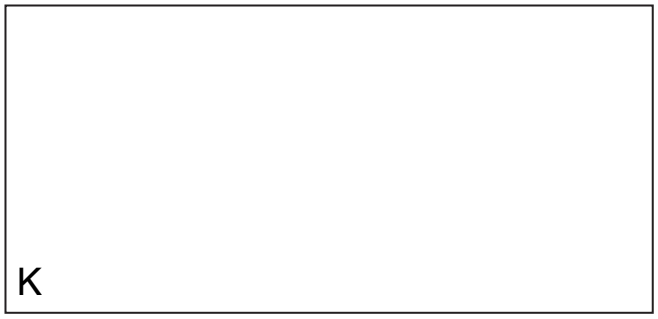
1

1(f) (iv) Circle one:

A B C

1

1(f) (v)



2

Marks available

1(g) (i)

L–H

2

1(g) (ii)

3

1(g) (iii)

Q

1

1(g) (iv)

3

Marks available

2(a) (i)

1

2(a) (ii) Circle one:

95º–108º 108º–110º 110º–119º 119º–121º >121º

1

2(a) (iii)

Formula: Oxidation state:

2

2(a) (iv) Maximum oxidation state

(v) Formula

2

2(b) isotope

2

2(c) (i) equation

2

2(c) (ii)

answer:

2

Marks available

2(d) (i)

$x =$ ☐ a ☐ b ☐ c ☐ d ☐ e ☐ f

6

2(d) (ii)

1

2(e) (i)

2

2(e) (ii)

1

2(e) (iii)

3

2(e) (iv)

1

		Marks available
2(f)	(i)	1
2(f)	(ii)	2
2(g)	(i) Answer:	2
2(g)	(ii)	1
2(g)	(iii)	1
2(g)	(iv)	2
2(g)	(v)	1
2(g)	(vi)	2