

Index number: _____

Year: _____

JASPER WILLIAMS HIGH SCHOOL

ANNUAL EXAMINATION 2020

YEAR 12 CHEMISTRY

ANSWER BOOKLET

**HAND IN THIS ANSWER BOOKLET TO THE SUPERVISOR
BEFORE YOU LEAVE THE EXAMINATION ROOM.**

**Mark
Gained:**

STRAND 1

GENERAL CHEMISTRY

(10 marks)

1.	A	B	C	D
2.	A	B	C	D

(2 marks)

3. (i) I. _____ (1 mark)

II. _____ (1 mark)

(ii) _____ (1 mark)

(iii) _____

(1 mark)

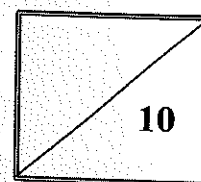
4. Complete the following Table

Prefix	Symbol	Exponential base	Base units
Mega	(ii) _____	(iii) _____	1,000,000
(i) _____	k	10^3	(iv) _____

(2 marks)

5. A. - _____ (1 mark)

B. - _____ (1 mark)



STRAND 2

INVESTIGATING MATTER

(20 marks)

1.	A	B	C	D
2.	A	B	C	D
3.	A	B	C	D
4.	A	B	C	D

(4 marks)

5. (i)

(1 mark)

(ii)

(1 mark)

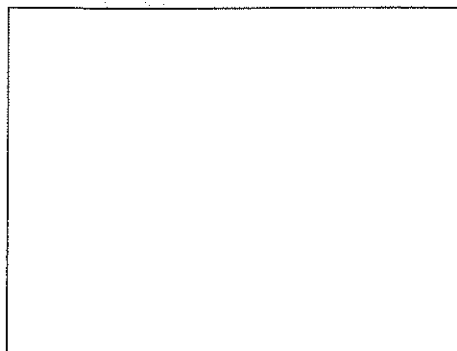
(iii)

(1 mark)

(iv)

(1 mark)

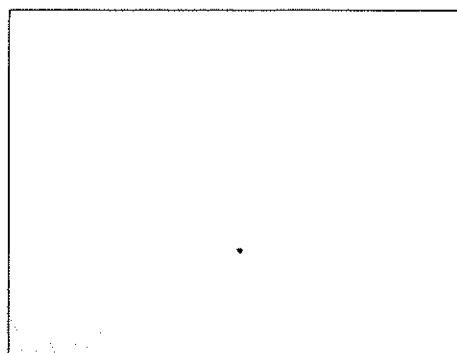
6. (i) H_2S



Shape: _____

(1 mark)

(ii) PCl_3



Shape: _____

(1 mark)

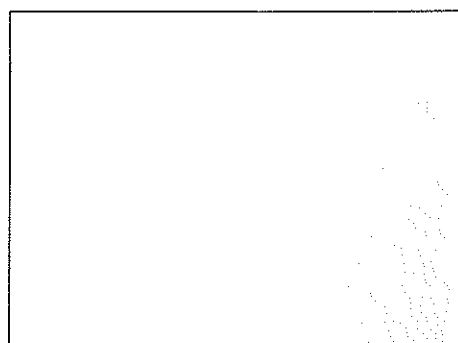
7.

(1 mark)

8. (i)

(1 mark)

(ii) Lewis structure of NCl_3



(1 mark)

9. Complete the table below

Molecule	Formula	Shape	Reason for Shape
Boron trichloride	(i)	Trigonal planar	Maximum repulsion from three bond pairs of electrons.
Tetrachloromethane	CCl ₄	(ii)	The four bonded pairs having maximum repulsion
Nitrogen trichloride	NCl ₃	Trigonal pyramid	(iii)

(2 marks)

10.

(2 marks)

11. (i) X-

Y-

(1 mark)

(ii) I-

II-

III-

(2 marks)

STRAND 3

REACTIONS

(30 Marks)

1.	A	B	C	D
2.	A	B	C	D
3.	A	B	C	D
4.	A	B	C	D
5.	A	B	C	D
6.	A	B	C	D

(6 marks)

7. _____

(1 mark)

8. (i) _____

(1 mark)

(ii) _____

(1 mark)

9. (i) _____

(1 mark)

(ii) _____

(1 mark)

(iii) _____

(1 mark)

10. (i) _____

(1 mark)

(ii) _____
(1 mark)

(iii) _____

(1 mark)

(iv) _____

(1 mark)

11. (i) _____

(1 mark)

(ii) _____

(1 mark)

(iii) _____

(1 mark)

(iv) _____

(1 mark)

12. (i) _____

(2 marks)

(ii) _____

(1 mark)

13. _____

(2 marks)

14. Complete the equation



(1 mark)

15. (i) _____

(1 mark)

(ii) _____

(1 mark)

(iii) _____

(1 mark)

16. _____

(1 mark)

STRAND 4**MATERIALS****(25 Marks)**

1.	A	B	C	D
2.	A	B	C	D
3.	A	B	C	D
4.	A	B	C	D
5.	A	B	C	D

(5 marks)

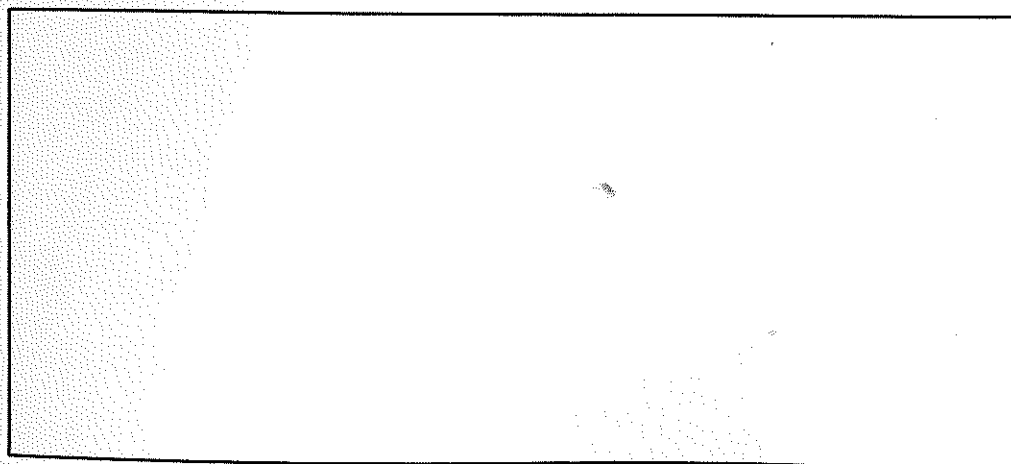
6. (i)

(1 mark)

(ii)

(1 mark)

(iii)

(1 mark)7. Geometrical isomers of **Butene****(2 marks)**

8. (i) B- _____
C- _____ (1 mark)

(ii) I. _____ (1 mark)

II- _____ (1 mark)

(iii) Formula and Name

(2 marks)

9. (i) _____
_____ (1 mark)

(ii) _____

_____ (1 mark)

(iii) _____

_____ (1 mark)

(iv) _____
_____ (1 mark)

(v) _____
_____ (1 mark)

10. (i)

(2 marks)

(ii)

(1 mark)

(iii)

(2 marks)

25

STRAND 5

CONSUMER CHEMISTRY

(15 Marks)

1.	A	B	C	D
2.	A	B	C	D
3.	A	B	C	D

(3 marks)

4. (i)

(1 mark)

(ii)

(1 mark)

(iii)

(1 mark)

(iv) _____

(1 mark)

(v) _____

(1 mark)

5. _____

(1 mark)

6. (i) Heroin- _____

(ii) Marijuana - _____

(2 marks)

7. (i) _____

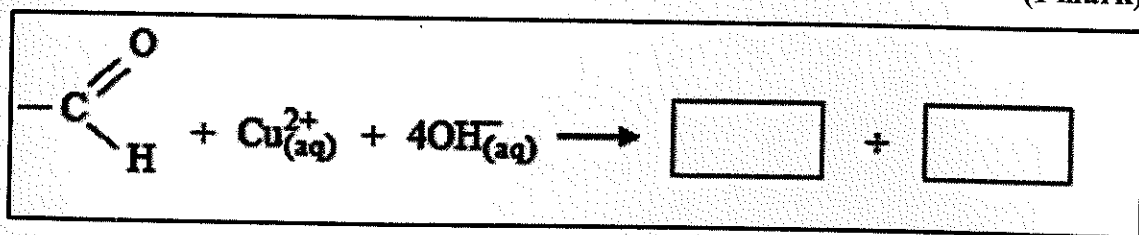
(ii) _____

(iii) _____

(iv) _____

(2 marks)

8. Complete the equation (1 mark)



9. _____

(1 mark)

THE END

15