

# Science Olympiad — 2024 Science Olympiad National Codebusters Division B

Names of participants: (Please print neatly)

School Name: _____ Team Number: <b>B</b>

**Warning:** Do not open this packet until given permission to do so.

**Note:** There are useful notes after this page.

**Scoring:** Time to solve first problem: \_\_\_\_\_ (use to calculate Bonus below)

Question	Value	Incorrect letters	Deduction	Score
Timed	200			
1	184			
<b>Timed Bonus</b>	<b>Timed:</b>			
<b>Final Score</b>				

Timed Question **[200 points]** A quote by Marcel Pagnol has been encoded using the Aristocrat Cipher for you to decode. When you have solved it, raise your hand so that the time can be recorded and the solution checked.

**XXX XXX XX XXXX XXX XXX XXXXXXXXXXXX - XXXX XXXXX XXXX**

**XXXXXXXX XXXXXXXXXXX XXX XXX XX XXXX XXX XXXXXXX XXXX.**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
<b>Frequency</b>	2	2	7	3	4		3		2	1	6	4	1	8		7	3	1		1	2	3	8	1		10
<b>Replacement</b>																										

1) **[184 points]** The following quote by Jane Smiley has been encoded with the Porta Cipher using a very common word for the key. The 27th through 31st cipher characters (**VACTF**) decode to be **ANNAT**

X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X