

Science Olympiad — 2024 Workshop Test - Div A

Names of participants: (Please print neatly)

School Name: _____

Team Number: **A** _____

Check your team: Varsity JV1 JV2 JV3

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

Note: There are useful notes after this page.

Question	Value	Incorrect letters	Deduction	Score
1	65			
2	80			
3	106			
4	110			
5	58			
6	65			
7	80			
8	55			
9	81			
10	129			
11	64			
12	188			
13	270			
14	322			
Final Score				

1) **[65 points]** Decode this quote which has been encoded using the Atbash Cipher.

O	R	U	V	R	H	Z	Y	Z	O	Z	M	X	V	L	U	S	L	O	W	R	M	T

L	M	Z	M	W	O	V	G	G	R	M	T	T	L	.
														.

2) **[80 points]** Decode this quote which has been encoded using the Caesar Cipher. with a shift of 3

Q	E	B	Y	B	D	F	K	K	F	K	D	F	P	Q	E	B	J	L	P	Q

F	J	M	L	O	Q	X	K	Q	M	X	O	Q	L	C	Q	E	B	T	L	O	H

3) [106 points] Solve this Caesar with a shift between -5 and 5.

F	Q	P	'	V

F	G	E	K	F	G

V	J	C	V

A	Q	W

E	C	P	'	V

D	G	H	Q	T	G

A	Q	W

F	K	U	E	Q	X	G	T

V	J	C	V

A	Q	W

E	C	P	.

			.

4) [110 points] The following quote needs to be decoded with the Vigenère Cipher with a keyword of **LOVE**

C	S	H	I

X	P	Z	V

H	V	V	X

T	G	B	M

G	S	I	J

C	C	H	X

S	S	C	I

L	F	O	V

P	O	X	L

P	G	O	L

P	V	Z	E

C	H

5) [58 points] The following quote needs to be decoded with the Vigenère Cipher with a keyword of **DREAM**

L	D	E	G	U	Q	V	A	H	M	W	P	S	U	O	R	L	P	D	P	R

6) [65 points] A quote has been encoded using the Pig Pen Cipher for you to decode.

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7) [80 points] A quote has been encoded using the Pig Pen Cipher for you to decode.

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8) [55 points] The following symbols represent a quote which has been encoded using the Tap Code Cipher for you to decode.

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9) [81 points] The following symbols represent a quote which has been encoded using the Tap Code Cipher for you to decode.

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10) [129 points] A quote has been encoded using the Dancing Men Cipher for you to decode.



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11) [64 points] A quote by Walt Disney has been encoded using the Dancing Men Cipher for you to decode.

Stick figure cipher symbols: 

Empty boxes for decoding:

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Stick figure cipher symbols: 

Empty boxes for decoding:

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12) [188 points] A quote has been encoded using the Aristocrat Cipher for you to decode.

IWOM AWO UBND A GXGV QXTFWOY UHN

AWO UBND A ABCO, BA'D QXTFW GNHRO

BMAH X AWHTDXMY JBOSOD, XMY AWOV

XQQ IOMA DRBJJBMF XGHTA, XMY

AWXA IXD AWO GOFBMMBMF HU AWO

UXBNBOD.

	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
Frequency	15	12	1	8		5	5	6	3	3			10	5	14		4	2	1	4	5	2	10	12	4	
Replacement																										

13) [270 points] A quote has been encoded using the Aristocrat Cipher for you to decode. You are told the word IS shows up twice.

KHBWKLBFKQL KC HQSP KHYQSFBLE

FDBL MLQZGPXWP. MLQZGPXWP KC

GKHKFPX. KHBWKLBFKQL PLEKSEGPC

FDP ZQSGX.

	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
Frequency		6	3	2	2	7	5	5			12	9	2			9	7		4				4	4	1	3
Replacement																										

14) [322 points] A quote has been encoded using the Aristocrat Cipher for you to decode.

QVF KOMFGQMKQ MK GZQ R SFIKZG

EVZ AMHFK QVF IMAVQ RGKEFIK,

VF'K ZGF EVZ RKYK QVF IMAVQ

TLFKQMZGK.

	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
Frequency	3				3	10	6	1	4		12	1	7		1		9	3	1	1		8			1	6
Replacement																										