

Event #6: Cryptography in World War II Scoring Guidelines

Material to be provided by Station Master:

Clipboard
Pencil
Key words
Messages
Stopwatch
Cones
Event score sheet

The Scout patrol will be taught how to use a columnar transposition cipher. They will then be split into two groups, and placed 50 yards apart. The first group will be given a message to encrypt using the columnar transposition cipher. One member of the first group will then be designated as a runner to meet with the other group's runner halfway in-between the two groups to deliver the encrypted message. The other group's runner will bring the encrypted message to the second group to begin decrypting the message. Once they decrypt the message, they will encrypt their response. The runners will meet again, half way, to exchange the message. The first group's runner will rush the encrypted message to the station master to be given a score based on time and accuracy. The clock start when the first group is given the message and stops when the encrypted reply is delivered to the station master.

20 points will be awarded for participation.

20 points will be awarded for correct translation of reply. (Subtract 2 points for each wrong letter in the encrypted message.)

Additional points are awarded at the end of the day for speed of encryption, decryption, and encryption:

Fastest time	20 pts
2 nd place	15 pts
3 rd place	10 pts
4 th place	5 pts
5 th place and lower	0 pts

Total points possible: 60 points

KEY WORDS	MESSAGES TO BE ENCRYPTED
TWELVE	SEND THE FIRST FOUR PARTS TO THE SCOUT LAWS
ORANGE	SEND THE TWO THROUGH FIVE PARTS OF THE SCOUT LAWS
THIRTY	SEND THREE THROUGH SIX PARTS OF THE SCOUT LAWS
PURPLE	SEND FOUR THROUGH SEVEN PARTS OF THE SCOUT LAWS
BANANA	SEND FIVE THROUGH EIGHT PARTS OF THE SCOUT LAWS
SPRING	SEND SIX THROUGH NINE PARTS OF THE SCOUT LAWS
MONDAY	SEND SEVEN THROUGH TEN PARTS OF THE SCOUT LAWS
MONKEY	SEND EIGHT THROUGH ELEVEN PARTS OF THE SCOUT LAWS
TURTLE	SEND NINE THROUGH TWELVE PARTS OF THE SCOUT LAWS
SCHOOL	SEND FIRST TWO AND LAST TWO PARTS OF THE SCOUT LAWS
AUTUMN	SEND THE FIRST EIGHT WORDS OF THE SCOUT OATH
CIRCUS	SEND THE WORDS TO THE SCOUT SLOGAN AND MOTTO

Message Encryption #1

T	W	E	L	V	E	SEND THE FIRST FOUR PARTS TO THE SCOUT LAWS
4	6	1	3	5	2	
S	E	N	D	O	N	NHFRH TXNUR OCWXD ROTEL XSEGP FOSOO USSAX ETHAT UX
E	T	H	R	O	U	
G	H	F	O	U	R	
P	A	R	T	S	O	
F	T	H	E	S	C	
O	U	T	L	A	W	
S	X	X	X	X	X	

Reply Encryption #1

T	W	E	L	V	E	TRUSTWORTHY LOYAL HELPFUL FRIENDLY
4	6	1	3	5	2	
T	R	U	S	T	W	UTAFE XWLEF LXSHL UNXTO OLRYT YHLDX RRYPI X
O	R	T	H	Y	L	
O	Y	A	L	H	E	
L	P	F	U	L	F	
R	I	E	N	D	L	
Y	X	X	X	X	X	

Message Encryption #2

O	R	A	N	G	E	SEND THE TWO THROUGH FIVE PARTS OF THE SCOUT LAWS
5	6	1	4	3	2	
S	E	N	D	T	W	NHFRH TXWUE OCWXT OVSSA XDRIT ELXSO GPFOS ETHAT UX
O	T	H	R	O	U	
G	H	F	I	V	E	
P	A	R	T	S	O	
F	T	H	E	S	C	
O	U	T	L	A	W	
S	X	X	X	X	X	

Reply Encryption #2

O	R	A	N	G	E	LOYAL HELPFUL FRIENDLY COURTEOUS
5	6	1	4	3	2	
L	O	Y	A	L	H	YPICO DHLDR KXLUN USXAF EOUXL EFLTI OLRYE N
E	L	P	F	U	L	
F	R	I	E	N	D	
L	Y	C	O	U	R	
T	E	O	U	S	K	
I	N	D	X	X	X	

Message Encryption #3

T	H	I	R	T	Y	SEND THREE THROUGH SIX PARTS OF THE SCOUT LAWS
4	1	2	3	5	6	
S	E	N	D	T	H	EEUPF OSNEG ATUXD THRHT XSROX OCWTH STELX HRISS AX
R	E	E	T	H	R	
O	U	G	H	S	I	
X	P	A	R	T	S	
O	F	T	H	E	S	
C	O	U	T	L	A	
W	S	X	X	X	X	

Reply Encryption #3

T	H	I	R	T	Y	HELPFUL FRIENDLY COURTEOUS KIND
4	1	2	3	5	6	
H	E	L	P	F	U	EFLTILRYENPICODHLDRKFEUOXUNUSX
L	F	R	I	E	N	
D	L	Y	C	O	U	
R	T	E	O	U	S	
K	I	N	D	X	X	

Message Encryption #4

P	U	R	P	L	E	SEND FOUR THROUGH SEVEN PARTS OF THE SCOUT LAWS
3	6	5	4	2	1	
S	E	N	D	F	O	OOVTE LXFRE RHTXS UUESS ADHSA TUXNT HPFOS ERGNO CW
U	R	T	H	R	O	
U	G	H	S	E	V	
E	N	P	A	R	T	
S	O	F	T	H	E	
S	C	O	U	T	L	
A	W	S	X	X	X	

Reply Encryption #4

P	U	R	P	L	E	FRIENDLY COURTEOUS KIND OBEDIENT
3	6	5	4	2	1	
F	R	I	E	N	D	DRKEX NUSBT FLTID EOUON ICODE RYENI
L	Y	C	O	U	R	
T	E	O	U	S	K	
I	N	D	O	B	E	
D	I	E	N	T	X	

Message Encryption #5

B	A	N	A	N	A	SEND FIVE THROUGH EIGHT PARTS OF THE SCOUT LAWS
4	1	5	2	6	3	
S	E	N	D	F	I	EEGTO CWDHE ATUXI OGTEL XSVUH SSANT HPFOS FRIRH TX
V	E	T	H	R	O	
U	G	H	E	I	G	
H	T	P	A	R	T	
S	O	F	T	H	E	
S	C	O	U	T	L	
A	W	S	X	X	X	

Reply Encryption #5

B	A	N	A	N	A	COURTEOUS KIND OBEDIENT CHEERFUL
4	1	5	2	6	3	
C	O	U	R	T	E	OUOTF RKDHL ENEEX CODNR USBCU
O	U	S	K	I	N	
D	O	B	D	I	E	
N	T	C	H	E	E	
R	F	U	L	X	X	

Message Encryption #6

S	P	R	I	N	G	SEND SIX THROUGH NINE PARTS OF THE SCOUT LAWS
6	4	5	2	3	1	
S	E	N	D	S	I	IUEOC WXDRI TELXS ONSSA XETHA TUXNH NRHTX SXGPF OS
X	T	H	R	O	U	
G	H	N	I	N	E	
P	A	R	T	S	O	
F	T	H	E	S	C	
O	U	T	L	A	W	
S	X	X	X	X	X	

Reply Encryption #6

S	P	R	I	N	G	KIND OBEDIENT CHEERFUL THRIFTY
6	4	5	2	3	1	
K	I	N	D	O	B	BTFIX DEEHX IDHLT NIETY KECUF
E	D	I	E	N	T	
C	H	E	E	R	F	
U	L	T	H	R	I	
F	T	Y	X	X	X	

Message Encryption #7

M	O	N	D	A	Y	SEND SEVEN THROUGH TEN PARTS OF THE SCOUT LAWS
3	5	4	2	1	6	
S	E	N	D	S	E	SHTTE LXDTH RHTXS VONOC WNNGA TUXEE UPFOS ERESS AX
V	E	N	T	H	R	
O	U	G	H	T	E	
N	P	A	R	T	S	
O	F	T	H	E	S	
C	O	U	T	L	A	
W	S	X	X	X	X	

Reply Encryption #7

M	O	N	D	A	Y	OBEDIENT CHEERFUL THRIFTY BRAVE
3	5	4	2	1	6	
O	B	E	D	I	E	IETYX DHLTE ONRRR ECUFV BTFIA EEHBX
N	T	C	H	E	E	
R	F	U	L	T	H	
R	I	F	T	Y	B	
R	A	V	E	X	X	

Message Encryption #8

M	O	N	K	E	Y	SEND EIGHT THROUGH ELEVEN PARTS OF THE SCOUT LAWS
3	5	4	2	1	6	
S	E	N	D	E	I	EHEPF OSDTH NOCWS GOERH TNTGE SSAEH UVTEL IRLAT UX
G	H	T	T	H	R	
O	U	G	H	E	L	
E	V	E	N	P	A	
R	T	S	O	F	T	
H	E	S	C	O	U	
T	L	A	W	S	X	

Reply Encryption #8

M	O	N	K	E	Y	CHEERFUL THRIFTY BRAVE CLEAN
3	5	4	2	1	6	
C	H	E	E	R	F	RRREX EHLX CUFVN ETYCX HLTEX FIAAX
U	L	T	H	R	I	
F	T	Y	B	R	A	
V	E	C	L	E	A	
N	X	X	X	X	X	

Message Encryption #9

T	U	R	T	L	E	SEND NINE THROUGH TWELVE PARTS OF THE SCOUT LAWS
4	6	3	5	2	1	
S	E	N	D	N	I	IOERH TXNRW ATUXN THEOC WSNUL TELDH TPFOS EEGVS SA
N	E	T	H	R	O	
U	G	H	T	W	E	
L	V	E	P	A	R	
T	S	O	F	T	H	
E	S	C	O	U	T	
L	A	W	S	X	X	

Reply Encryption #9

T	U	R	T	L	E	THRIFTY BRAVE CLEAN REVERANT
4	6	3	5	2	1	
T	H	R	I	F	T	TERNX FVNAX RREEX TYCET IAARX HBLVX
Y	B	R	A	V	E	
C	L	E	A	N	R	
E	V	E	R	A	N	
T	X	X	X	X	X	

Message Encryption #10

S	C	H	O	O	L	SEND FIRST TWO AND LAST TWO PARTS OF THE SCOUT LAWS
6	1	2	4	5	3	
S	E	N	D	F	I	ESNTT ELNTD WSSAI OSATU XDTLO OCWFW APFOS SRATR HT
R	S	T	T	W	O	
A	N	D	L	A	S	
T	T	W	O	P	A	
R	T	S	O	F	T	
H	E	S	C	O	U	
T	L	A	W	S	X	

Reply Encryption #10

S	C	H	O	O	L	TRUSTWORTHY LOYAL CLEAN REVERANT
6	1	2	4	5	3	
T	R	U	S	T	W	RRANA UTLRN WLEEX SHCET TYLVX TOYAR
O	R	T	H	Y	L	
Y	A	L	C	L	E	
A	N	R	E	V	E	
R	A	N	T	X	X	

Message Encryption #11

A	U	T	U	M	N	SEND THE FIRST TWELVE WORDS OF THE SCOUT OATH
1	5	4	6	2	3	
S	E	N	D	T	H	SETWF OHTSV SSAXH TEOCT XNIER HTXEF WOTUX DRSLE OX
E	F	I	R	S	T	
T	W	E	L	V	E	
W	O	R	D	S	O	
F	T	H	E	S	C	
O	U	T	O	A	T	
H	X	X	X	X	X	

Reply Encryption #11

A	U	T	U	M	N	ON MY HONOR I WILL DO MY BEST TO DO MY DUTY
1	5	4	6	2	3	
O	N	M	Y	H	O	ONLBD THWMT DXOIY OUXMR DSMXN OLEOY YIOTY X
N	O	R	I	W	I	
L	L	D	O	M	Y	
B	E	S	T	T	O	
D	O	M	Y	D	U	
T	Y	X	X	X	X	

Message Encryption #12

C	I	R	C	U	S	SEND THE WORDS TO THE SCOUT SLOGAN AND SCOUT MOTTO
1	3	4	2	6	5	
S	E	N	D	T	H	SETCO DMDRH TNOTE WOOGS ONOTU ACTHS SLNTX TDESA UO
E	W	O	R	D	S	
T	O	T	H	E	S	
C	O	U	T	S	L	
O	G	A	N	A	N	
D	S	C	O	U	T	
M	O	T	T	O	X	

Reply Encryption #12

C	I	R	C	U	S	DO A GOOD TURN DAILY BE PREPARED
1	3	4	2	6	5	
D	O	A	G	O	O	DDAPE GRYPX OTIRD AULEX ODERX ONBAX
D	T	U	R	N	D	
A	I	L	Y	B	E	
P	R	E	P	A	R	
E	D	X	X	X	X	

