

America's
CryptoKidsTM
Future Codemakers & Codebreakers



FUN BOOK

Welcome to Cryptokids' Fun Book!

Hey Kids,

Are you ready for some CryptoKid fun?

Help me and my friends solve some really cool
games and puzzles.

For more fun
games and puzzles,
visit our website at
nsa.gov/kids and learn more
about NSA/CSS and
the Cryptokids.



America's
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www.nsa.gov/kids



SERGEANT SAM

CSS REPRESENTATIVE

A NATURAL BORN LEADER WITH AN EYE FOR EXCELLENCE, HE GUIDES THE KIDS THROUGH CRYPTOLOGIC FUN.



NUMBERGRAM

Solve each problem. Find the letter that matches the answer from the key and put it in the box to help Slate read the message!

1=A	2=B	3=C	4=D	5=E	6=F	7=G	8=H	9=I	10=J	11=K	12=L	13=M
14=N	15=O	16=P	17=Q	18=R	19=S	20=T	21=U	22=V	23=W	24=X	25=Y	26=Z

6+7	10-9	4x5	2+6	8-3	9+4	1x1	10x2	18-9	2+1	7+12	5+4	6x4-5	
<input type="text"/>													
5x2+10	12-4	2+3		24-7	18+3	11-6	4+1	2x7	9+6	3x2	28-8	5+3	9-4
<input type="text"/>													
2x8+3	14-11	8+1	10-5	18-4	4x3-9	2x2+1	6+8+5	~					
<input type="text"/>													
12-9	26-25	9x2	3x4		20-14	3x6	3x3	15-10	2+2	10+8	7+7-5	60-57	4x2
<input type="text"/>													
5+2	30-29	3x7	9+10	17+2									
<input type="text"/>													

Solution on answer page

Crypto Cat

Information Assurance Analyst

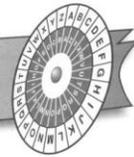
The purrr-fect little feline, she loves to create secret messages to purrr-plex her friends.





Decipher Dog's

CRYPTOGRAM CHALLENGE!



If you don't have a Cipher Disk, see the back inside cover of this book to make one!

Set your wheel according to the hint then solve to see some of the CryptoKids' favorite sayings! The hint changes with each puzzle.

1. Hint Z=f A j a n g b e i y x e m x w m b e g .

2. Hint Z=g M y b o b f o b m y o b b v x s c n r a t f m y b t f m x d x f s n :

M y r n b j y r d f s d r l s m f s c m y r n b j y r d f s ' m .

3. Hint Z=w Z o r i v d r t e r c i r r s d c h u r l r g c , x h b o v a r c h q n i s v z v x c h g e h c r t c n c .

4. Hint Z=a X z i k v W r v n .

5. Hint Z=k q c f i f r q q c b w d j i v p q h v x u p q f s r b r q c j a q c f l g v

f j h q y l n c j a l v p a f y y q c f x q v g v . Q c f n v s r q q c b w d j i v p q

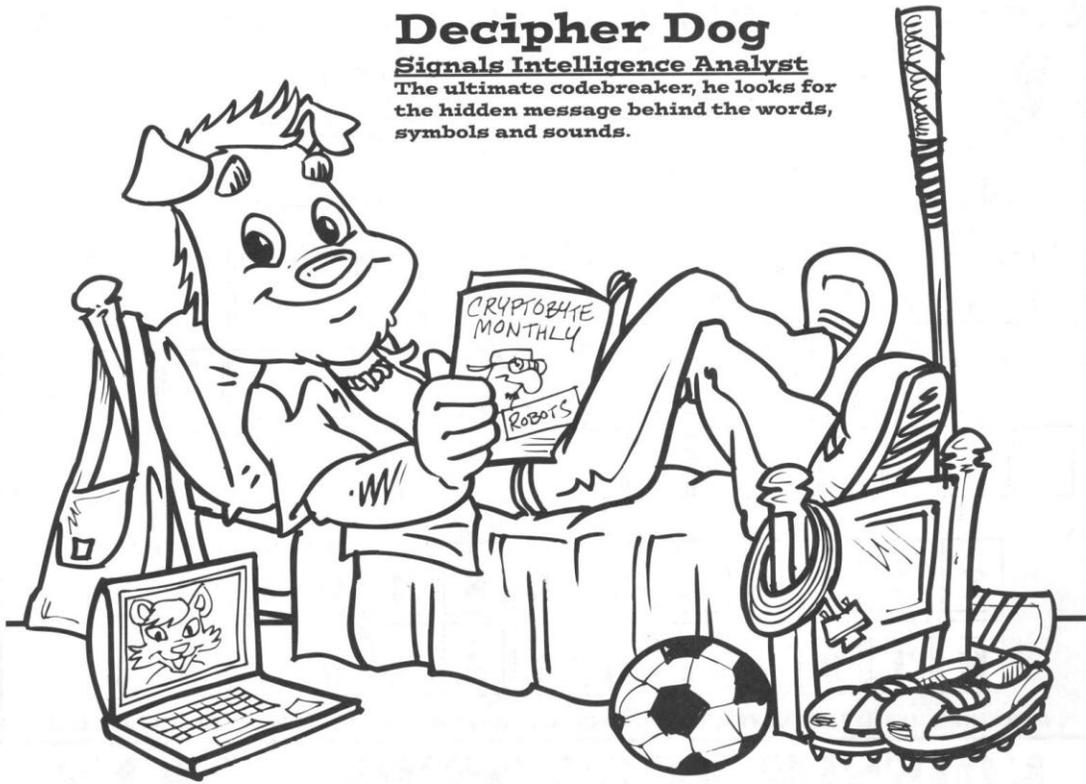
h v u p q f s r b r q c j a q c f l g v f m j h q y l n c j a l v p a f y y q c f x q v g v .

Solutions on answer page

Decipher Dog

Signals Intelligence Analyst

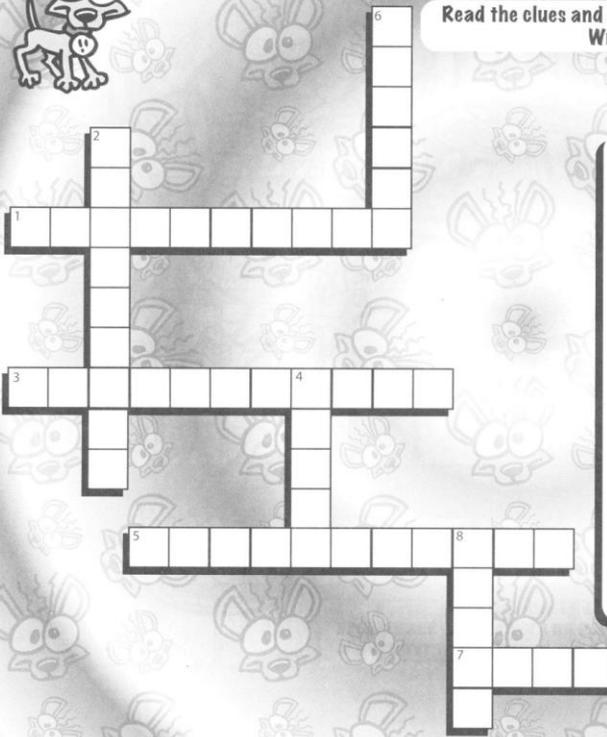
The ultimate codebreaker, he looks for the hidden message behind the words, symbols and sounds.





Socket's Crazy Crossword

Read the clues and help Socket figure out what character they describe.
Write the character's name in the box.



Across

1. America's Future Codemakers and Codebreakers.
3. The ultimate codebreaker, he looks for the hidden message behind the words, symbols and sounds.
5. A natural born leader with an eye for excellence, he guides the kids through cryptologic fun.
7. He won't challenge you to a foot race, but he's lightning fast in the science of computers.

Down

2. The purrr-fect little feline, she loves to create secret messages to purrr-plex her friends.
4. A free spirit with a fox-cination with language and culture, she learns something new every day.
6. A burst of energy, she's quite the innovator and loves to shock her friends with new ideas.
8. This MC (Math Caper) is no square, juggling numbers in the air; no doubt he's one cool hare.

Solutions on answer page



Rosie

Language Analyst - A free spirit with a fox-cination with language and culture, she learns something new every day.



T.Top's Crypto Word Hunt



Help T.Top find the 36 words related to cryptology

The words read in any direction including forwards, backwards, up, and down, diagonal and reverse. Letters may be used more than once.

Q W E R G U N I P A W C N D D J C V E I B A R K U F E L
 C O D E S S Z A C Y G O L O T P Y R C E L M K E I J H S
 S I E N J C C O M P R O M I S E D A S P L B Y Y I D E C
 V E C I T P U R R G P P E I S H U L E E H W E T A W S O
 N U I G S U K A A A G C R Y P T O G R A M A M A L T S D
 G H P M X Z A S M M M R E L L E T Q U B U S B B T N W E
 A R H A A Z B I Y B B L T P E C R E T N I P L L O E V M
 S L E A A L P L D L C L Q U O P P V A T A E Y E B M Y A
 F O R L L E A L P R O S E T T A S T O N E T R T U R N K
 M E R M A S K E D C O M M U N I C A T I O N S N L E D E
 C O D E B R E A K E R S D I G R A P H I C J X E J H I R
 U T E C H N O L O G Y R E B M A H C K C A L B M P P A S
 E T S E C R E T N G S H J O A W T S S T L L E R T I U A
 L V E S O P P M M H T E B A H P L A O D O O C R E C A B
 P A R R U E D P S S E U E W E E S O G G E T V H U N M P
 R C W E R W I G W A G R A E L A N G I S A R H J M E P K
 U N B T I R S Y J M A E S S T X A C C Y E B O M B E C A
 P U T T E S P E T T A W C V E R A M R E R N T P O W E S
 T C E H R I A K K E L L A S S R D H A Y B I E T S O B S
 J A P C S E T C O D E T A L K E R S D S P C E E M A R T
 A I X X F S C W A A C I O P E D I I I E T T A B A G I S
 C L U S E H H E J J I R S C R Y P T O G R A P H Y S A M

- ALPHABET
- BLACK CHAMBER
- BOMBE
- CIPHER
- CODE
- CODEBREAKERS
- CODEMAKERS
- CODETALKERS
- COMMUNICATIONS
- COMPROMISED
- COURIER
- CRYPTOGRAM
- CRYPTOGRAPHY
- CRYPTOLOGY
- DECIPHER
- DIGRAPHIC
- DISPATCH
- ENCIPHERMENT
- ENCRYPT
- ENIGMA
- INTERCEPT
- JADE
- KEY TABLE
- LOGIC
- MASK
- PURPLE
- PUZZLE
- RADIO
- ROSETTA STONE
- SCRAMBLE
- SECRET
- SIGABA
- SIGNAL
- TECHNOLOGY
- WHEEL
- WIGWAG

Solution on answer page

T.TOP

Computer Scientist

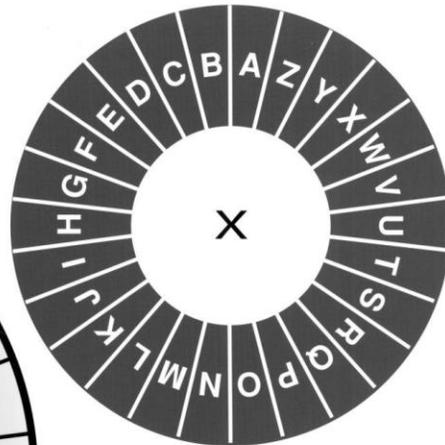
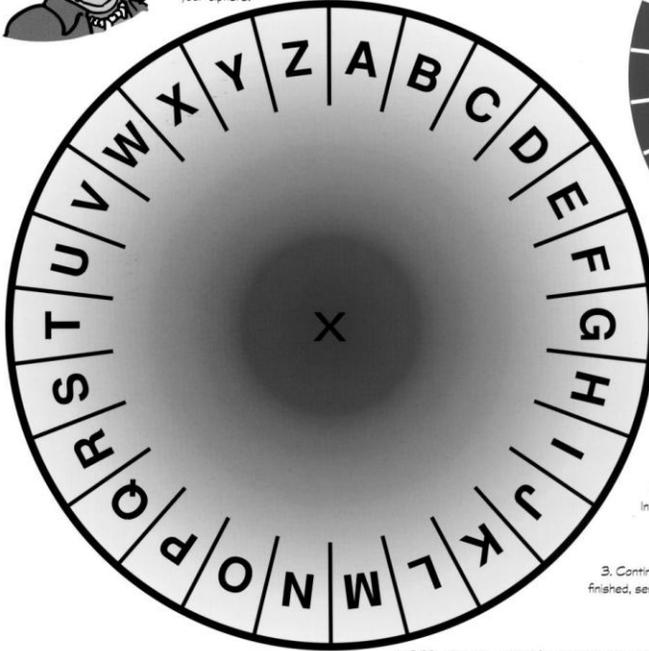
He won't challenge you to a foot race, but he's lightning fast in the science of computers.





Make a Cipher Disk!

1. Cut out the two cipher disks.
2. Put the smaller disk on top of the larger disk and stick the tack through the center of both disks.
3. Stick the sharp end of the tack into the eraser. This will prevent you from sticking yourself while turning the disks to make your ciphers.



Encrypting A Message

1. Pick a letter from the smaller disk on top - this will be used as the KEY that will be shared between you and your friends to encrypt and decrypt the message. Once you have picked a letter from the smaller disk, line it up with the "A" from the larger disk.

Example Key:

LARGE DISK: A SMALL DISK: M KEY = A:M

2. Begin encrypting each letter of your secret message. Find the first letter of your message on the larger disk and write down the cipher letter which appears underneath it on the smaller disk.
In the example below, A:M, B:L, C:K, etc.

LARGE DISK: ABCDEFGHUKLMNOPQRSTUWXYZ
SMALL DISK: MLKJHGFEDCBAZYXWVUTSRQPON

3. Continue finding each letter until your message has been encrypted. Once you are finished, send your friend the encrypted message and KEY separately.

PLAINTEXT: MAKING CODES IS FUN
CIPHERTEXT: AMCEZG KYJ I U EU H SZ

NOTE: Make sure your friend knows the KEY so they can use their Cipher Disk to break the cipher. For a super secure cipher, create a new KEY every time you send a message OR change the KEY every time you send a letter.



America's
CryptoKids™ FUN BOOK
Future Codemakers & Codebreakers

Coloring Pages • Brain Teasers • Make Your Own Code • Mazes • Math Puzzles • Make a Cipher Wheel
and lots more!

For more fun, visit the CryptoKids
on the web @ www.nsa.gov/kids

