



GET A CLUE 2025

A Series of Unfortunate Clues - The Manual

Dear Reader,

It is with utmost dread and horror that we, Game Control, must welcome you to Get A Clue 2025. Should you wish to continue, we ask that all participants arrive early to complete registration in order to be ready for a prompt start at 8AM on Saturday, April 5, 2025.

In order to aid you on this perilous adventure - a phrase which here means "day filled with solving puzzles among friends" - we have compiled the below reference materials that may contain useful information in your endeavors.

With all due respect,

Game Control

Vital Facts for Deciphering

Safety

Don't be stupid! GAC is meant to be a fun experience for all involved, and it's not fun if someone gets hurt. Be mindful of traffic when in and out of your car. Whoever is driving must be licensed and capable of driving. There must be one seatbelt per person on your team; use them. Obey all traffic laws. If you are borrowing or renting a vehicle, familiarize yourself with its controls. Disobeying these rules makes your team subject to penalties, and putting others in danger makes your team subject for disqualification.

Common Courtesy Pranking

Teams may prank other teams throughout the day. This can be in any creative form, including but not limited to, yelling, taunting, and leaving notes on windshields. Game Control urges that pranksters use common courtesy. If you are unacquainted with the team you intend to prank, do not attempt said prank. Pranks should be limited to friends whom you are certain will find said prank amusing. Do not prank clue packets in any way. This will result in punishment by Game Control based on the outlined rules regarding packets. Do not prank a team in regards to law enforcement. Any team found pranking another team with law enforcement will be summarily disqualified. There are no appeals. This includes, but is not limited to, calling the police on another team, leaving notes that resemble tickets, or yelling anything regarding terrorism. The exception to this rule would be calling the police in the event of an accident or emergency regardless of team involvement. If you are involved in or witness an accident or crime involving another team, please call the authorities first and notify Game Control immediately after.

Never Split The Party

In GAC and in any social event, it's always a poor idea to split the party. You can try to run around looking for clues in the same general area (remember, one car!), but you have no guarantee that it will be helpful or timely.

ClueKeeper

Get-A-Clue uses the ClueKeeper application to distribute clues, and all teams should have at least one smartphone with ClueKeeper installed on it.

[Download on the Apple Store](#)

[Download on the Google Play store](#)



You can learn more about the application at its website: <https://www.cluekeeper.com/>

Don't go into places of business without spending money there.

You'll be visiting several locations around Atlanta, which may or may not include places of business who have been graceful enough to let us use their stores as clue locations. We have instructed said places of business that you will not be entering their location without spending money there. So, if you get hungry, feel free to use a restaurant to sit down, solve a clue, and enjoy a meal. Otherwise, don't take up unnecessary space.

Don't come find us, you'll get there eventually

Speaking of messing with things, don't mess with us and don't try to find us. You'll get there eventually, trust us.

Contact Information

The website is www.getaclueatl.com. We hope to be able to pass this on to future hosts.

The phone number to contact Game Control is **770-765-6130**; call or text is acceptable.

Our Twitter account is **@getaclueatl** - follow us and check it often for the chance at getting bonus clues! Like the website, we hope to be able to pass this on to future hosts to avoid the problem of needing to sign up for a new account every year.

Terrible Tunes

To accompany your journey of misery and woe, we at Game Control have curated the below playlists as a score for your puzzle-solving experience.

Adverse Adjectives	Nasty Nouns	The Tragic Treasury
Spotify	Spotify	Spotify
https://bit.ly/AdverseAdjectives	https://bit.ly/NastyNouns	https://bit.ly/TheTragicTreasury



Common Puzzles

There are a number of puzzles that may be used in Get-A-Clue. Below is an overview of the ones that may be used in this year's hunt!

Nonograms

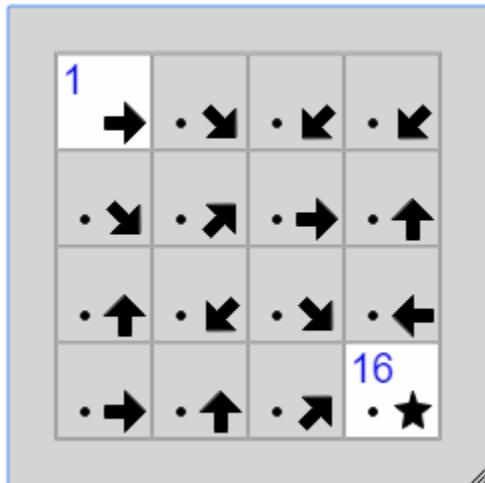
Nonograms, also known as Hanjie, Paint by Numbers, Picross, Griddlers, and Pic-a-Pix, are picture logic puzzles in which cells in a grid must be colored or left blank according to numbers at the edges of the grid to reveal a hidden picture. In this puzzle, the numbers measure how many unbroken lines of filled-in squares there are in any given row or column. For example, a clue of "4 8 3" would mean there are sets of four, eight, and three filled squares, in that order, with at least one blank square between successive sets.

To solve a puzzle, one needs to determine which cells will be boxes and which will be empty. Determining which cells are to be left empty (called spaces) is as important as determining which to fill (called boxes). Later in the solving process, the spaces help determine where a clue (continuing block of boxes and a number in the legend) may spread. Solvers usually use dots, crosses, or xs to mark cells they are certain are spaces.

Empty Nonogram

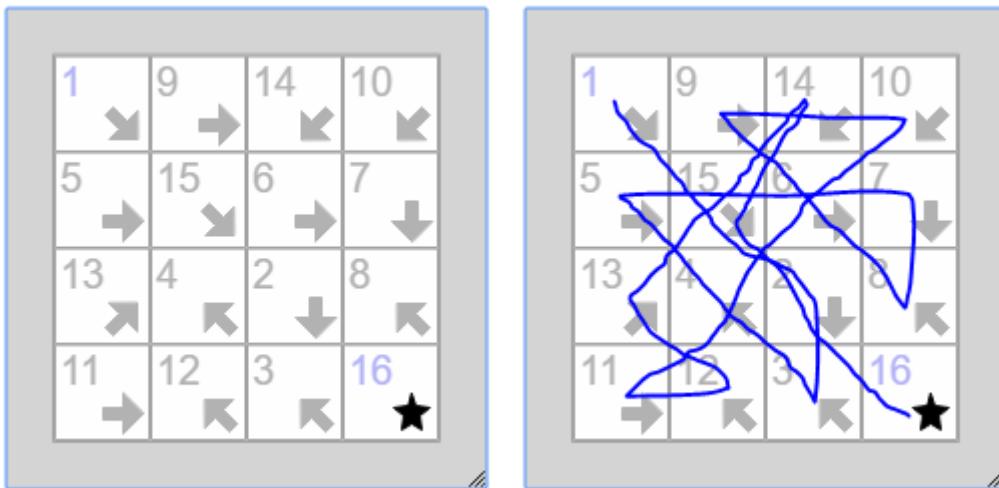
Solved Nonogram

Signpost Puzzle



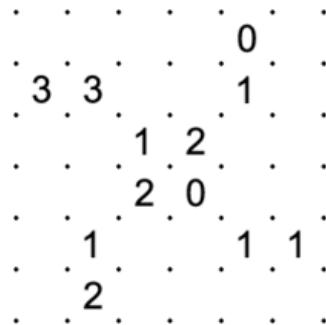
You have a grid of squares; each square (except the last one) contains an arrow, and some squares also contain numbers. Your job is to connect the squares to form a continuous list of numbers starting at 1 and linked in the direction of the arrows – so the arrow inside the square with the number 1 will point to the square containing the number 2, which will point to the square containing the number 3, etc. Each square can be any distance away from the previous one, as long as it is somewhere in the direction of the arrow.

By convention the first and last numbers are shown; one or more interim numbers may also appear at the beginning.



Slitherlink

Slitherlink is generally played on a rectangular lattice of dots. Some of the squares formed by the dots have numbers inside them. The objective is to connect horizontally and vertically adjacent dots so that the lines form a simple loop with no loose ends. In addition, the number inside a square represents how many of its four sides are segments in the loop.



Other types of planar graphs can be used in lieu of the standard grid, with varying numbers of edges per vertex or vertices per polygon. These patterns include snowflake, Penrose, Laves and Altair tilings. These add complexity by varying the number of possible paths from an intersection, and/or the number of sides to each polygon; but similar rules apply to their solution.

Sudoku

The classic Sudoku game involves a grid of 81 squares. The grid is divided into nine blocks, each containing nine squares.

The rules of the game are simple: each of the nine blocks has to contain all the numbers 1-9 within its squares. Each number can only appear once in a row, column or box.

The difficulty lies in that each vertical nine-square column, or horizontal nine-square line across, within the larger square, must also contain the numbers 1-9, without repetition or omission.

Every puzzle has just one correct solution.

2				3					
4	6		5	1	7	2			
				2			8		
		9	8	2	4			5	
		1		9			3		
6			1		7	2	8		
1			3						
	6	3	7	4		9		2	
			5				6		
2	7	5	6	8	3	4	9	1	
4	8	6	9	5	1	7	2	3	
9	3	1	4	7	2	5	6	8	
3	9	8	2	6	4	1	7	5	
7	1	2	8	9	5	6	3	4	
6	5	4	1	3	7	2	8	9	
1	4	9	3	2	6	8	5	7	
5	6	3	7	4	8	9	1	2	
8	2	7	5	1	9	3	4	6	

Codes

ASCII

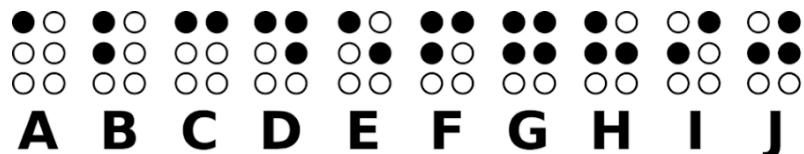
ASCII, abbreviated from **American Standard Code for Information Interchange**, is a character encoding standard for electronic communication.

ASCII TABLE

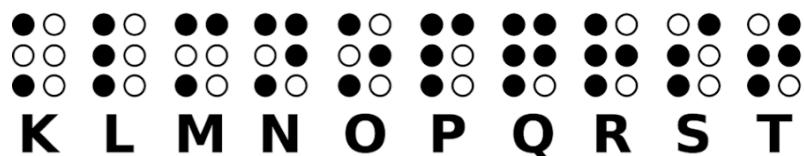
Decimal	Hex	Char	Decimal	Hex	Char	Decimal	Hex	Char	Decimal	Hex	Char
0	0	[NULL]	32	20	[SPACE]	64	40	@	96	60	'
1	1	[START OF HEADING]	33	21	!	65	41	A	97	61	a
2	2	[START OF TEXT]	34	22	*	66	42	B	98	62	b
3	3	[END OF TEXT]	35	23	#	67	43	C	99	63	c
4	4	[END OF TRANSMISSION]	36	24	\$	68	44	D	100	64	d
5	5	[ENQUIRY]	37	25	%	69	45	E	101	65	e
6	6	[ACKNOWLEDGE]	38	26	&	70	46	F	102	66	f
7	7	[BELL]	39	27	'	71	47	G	103	67	g
8	8	[BACKSPACE]	40	28	(72	48	H	104	68	h
9	9	[HORIZONTAL TAB]	41	29)	73	49	I	105	69	i
10	A	[LINE FEED]	42	2A	*	74	4A	J	106	6A	j
11	B	[VERTICAL TAB]	43	2B	+	75	4B	K	107	6B	k
12	C	[FORM FEED]	44	2C	,	76	4C	L	108	6C	l
13	D	[CARRIAGE RETURN]	45	2D	-	77	4D	M	109	6D	m
14	E	[SHIFT OUT]	46	2E	.	78	4E	N	110	6E	n
15	F	[SHIFT IN]	47	2F	/	79	4F	O	111	6F	o
16	10	[DATA LINK ESCAPE]	48	30	0	80	50	P	112	70	p
17	11	[DEVICE CONTROL 1]	49	31	1	81	51	Q	113	71	q
18	12	[DEVICE CONTROL 2]	50	32	2	82	52	R	114	72	r
19	13	[DEVICE CONTROL 3]	51	33	3	83	53	S	115	73	s
20	14	[DEVICE CONTROL 4]	52	34	4	84	54	T	116	74	t
21	15	[NEGATIVE ACKNOWLEDGE]	53	35	5	85	55	U	117	75	u
22	16	[SYNCHRONOUS IDLE]	54	36	6	86	56	V	118	76	v
23	17	[ENG OF TRANS. BLOCK]	55	37	7	87	57	W	119	77	w
24	18	[CANCEL]	56	38	8	88	58	X	120	78	x
25	19	[END OF MEDIUM]	57	39	9	89	59	Y	121	79	y
26	1A	[SUBSTITUTE]	58	3A	:	90	5A	Z	122	7A	z
27	1B	[ESCAPE]	59	3B	;	91	5B	[123	7B	{
28	1C	[FILE SEPARATOR]	60	3C	<	92	5C	\	124	7C	
29	1D	[GROUP SEPARATOR]	61	3D	=	93	5D]	125	7D	}
30	1E	[RECORD SEPARATOR]	62	3E	>	94	5E	^	126	7E	~
31	1F	[UNIT SEPARATOR]	63	3F	?	95	5F	-	127	7F	[DEL]

Braille

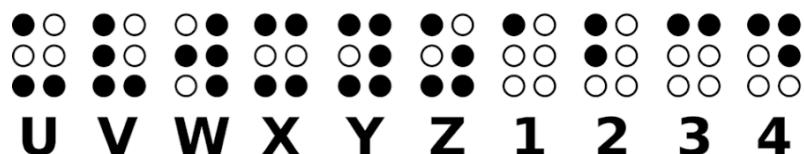
Braille is a tactile writing system used by people who are visually impaired. It can be read either on embossed paper or by using refreshable braille displays that connect to computers and smartphone devices. Braille can be written using a slate and stylus, a braille writer, an electronic braille notetaker or with the use of a computer connected to a braille embosser.



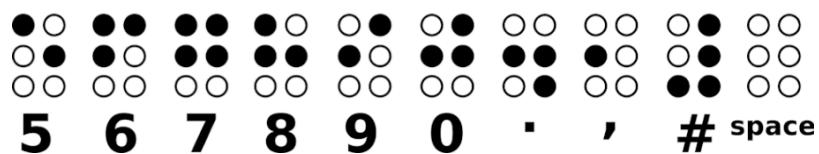
The first row of Braille patterns represents the letters A through J. Each letter is composed of two rows of six dots each. The patterns are as follows:
A: Top row has dots 1 and 4; Bottom row has dots 1, 2, 3, 4, 5
B: Top row has dots 1 and 2; Bottom row has dots 1, 2, 3, 4, 5
C: Top row has dots 1 and 3; Bottom row has dots 1, 2, 3, 4, 5
D: Top row has dots 1, 2, 4; Bottom row has dots 1, 2, 3, 4, 5
E: Top row has dots 1, 2, 5; Bottom row has dots 1, 2, 3, 4, 5
F: Top row has dots 1, 3, 4; Bottom row has dots 1, 2, 3, 4, 5
G: Top row has dots 1, 3, 5; Bottom row has dots 1, 2, 3, 4, 5
H: Top row has dots 1, 4, 5; Bottom row has dots 1, 2, 3, 4, 5
I: Top row has dots 1, 3, 4, 5; Bottom row has dots 1, 2, 3, 4, 5
J: Top row has dots 1, 2, 3, 4, 5; Bottom row has dots 1, 2, 3, 4, 5



The second row of Braille patterns represents the letters K through T. Each letter is composed of two rows of six dots each. The patterns are as follows:
K: Top row has dots 1 and 2; Bottom row has dots 1, 2, 3, 4, 5
L: Top row has dots 1 and 3; Bottom row has dots 1, 2, 3, 4, 5
M: Top row has dots 1 and 4; Bottom row has dots 1, 2, 3, 4, 5
N: Top row has dots 1, 2, 4; Bottom row has dots 1, 2, 3, 4, 5
O: Top row has dots 1, 2, 5; Bottom row has dots 1, 2, 3, 4, 5
P: Top row has dots 1, 3, 4; Bottom row has dots 1, 2, 3, 4, 5
Q: Top row has dots 1, 3, 5; Bottom row has dots 1, 2, 3, 4, 5
R: Top row has dots 1, 4, 5; Bottom row has dots 1, 2, 3, 4, 5
S: Top row has dots 1, 3, 4, 5; Bottom row has dots 1, 2, 3, 4, 5
T: Top row has dots 1, 2, 3, 4, 5; Bottom row has dots 1, 2, 3, 4, 5



The third row of Braille patterns represents the letters U through Z and the numbers 1 through 4. Each character is composed of two rows of six dots each. The patterns are as follows:
U: Top row has dots 1 and 2; Bottom row has dots 1, 2, 3, 4, 5
V: Top row has dots 1 and 3; Bottom row has dots 1, 2, 3, 4, 5
W: Top row has dots 1 and 4; Bottom row has dots 1, 2, 3, 4, 5
X: Top row has dots 1, 2, 4; Bottom row has dots 1, 2, 3, 4, 5
Y: Top row has dots 1, 2, 5; Bottom row has dots 1, 2, 3, 4, 5
Z: Top row has dots 1, 3, 4; Bottom row has dots 1, 2, 3, 4, 5
1: Top row has dots 1, 2, 3; Bottom row has dots 1, 2, 3, 4, 5
2: Top row has dots 1, 2, 4; Bottom row has dots 1, 2, 3, 4, 5
3: Top row has dots 1, 2, 5; Bottom row has dots 1, 2, 3, 4, 5
4: Top row has dots 1, 3, 4; Bottom row has dots 1, 2, 3, 4, 5



The fourth row of Braille patterns represents the numbers 5 through 9, a decimal point, a comma, a hash symbol, and a space. Each character is composed of two rows of six dots each. The patterns are as follows:
5: Top row has dots 1 and 2; Bottom row has dots 1, 2, 3, 4, 5
6: Top row has dots 1 and 3; Bottom row has dots 1, 2, 3, 4, 5
7: Top row has dots 1 and 4; Bottom row has dots 1, 2, 3, 4, 5
8: Top row has dots 1, 2, 4; Bottom row has dots 1, 2, 3, 4, 5
9: Top row has dots 1, 2, 5; Bottom row has dots 1, 2, 3, 4, 5
0: Top row has dots 1, 3, 4; Bottom row has dots 1, 2, 3, 4, 5
. (Decimal point): Top row has dots 1, 2, 3; Bottom row has dots 1, 2, 3, 4, 5
, (Comma): Top row has dots 1, 2, 4; Bottom row has dots 1, 2, 3, 4, 5
(Hash): Top row has dots 1, 2, 5; Bottom row has dots 1, 2, 3, 4, 5
space: Top row has dots 1, 3, 4, 5; Bottom row has dots 1, 2, 3, 4, 5

Barcodes

One-dimensional (or 1D) barcodes systematically represent data by varying the widths and spacings of parallel lines. These include some of the most traditional and well-recognized barcode types, such as the UPC and EAN codes used to identify products. 1D barcodes are also commonly referred to as linear barcodes.

Two-dimensional, (or 2D) barcodes encode data on both the horizontal and vertical axes. They are similar to a linear 1D barcode, but can represent more data per unit area. 2D barcodes include some newer barcode types, such as QR codes and PDF417.

1D Barcodes



UPC



EAN



CODE 39



CODE 128



ITF



CODE 93

2D Barcodes



Codabar



Databar



MS1 Plessey



QR code



Data Matrix



PDF417

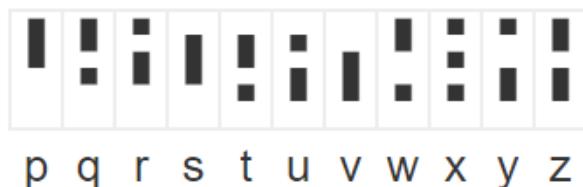


Aztec

Today, 1D (or linear) barcodes are still the most common barcode types, typically used on retail items and product packaging. Some examples of popular 1D barcodes include UPC, extensively utilized in North America, and EAN, which are more commonly found in Europe and other parts of the world. However, the increasing demand for enhanced data storage, versatility, and improved scanning capabilities is driving a noticeable shift from 1D barcodes to 2D barcodes.

Barcode readers are widely available and have become extremely common thanks to the proliferation of smartphone technology over the last decade. Many barcode reader apps exist for common platforms including iOS and Android. As a result barcodes can be employed in non-traditional settings.

Dotsies



Dotsies is a new way of writing Latin letters (a, b, c, etc) in an attempt to be read faster and more efficiently. With the Dotsies font, each letter has 5 dots that are on or off (Black or White) arranged in a vertical format, with no space between letters. Below is the alphabet transposed to Dotsies.

It is significantly more horizontally condensed than normal fonts, allowing about twice as much fall within the area of your field of vision that perceives fine detail. As to overall space efficiency in practice, the jury is still out. That won't be apparent until many people have spent time acclimating to it. (Think how you began with large letters when you learned to read, but then preferred smaller typefaces after some time.) It is hoped it will eventually be legible by people when taking up half as much space. Imagine your phone having twice the screen space! Here's this paragraph repeated in dotsies for comparison:

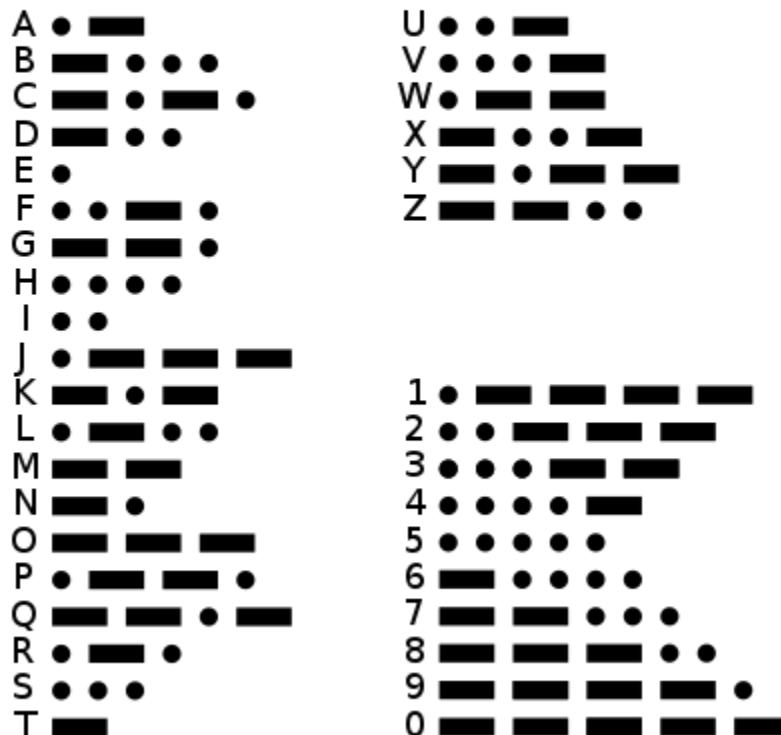
It is significantly more horizontally condensed than normal fonts, allowing about twice as much fall within the area of your field of vision that perceives fine detail. As to overall space efficiency in practice, the jury is still out. That won't be apparent until many people have spent time acclimating to it. (Think how you began with large letters when you learned to read, but then preferred smaller typefaces after some time.) It is hoped it will eventually be legible by people when taking up half as much space. Imagine your phone having twice the screen space!

Morse Code

Morse code is a method used in telecommunication to encode text characters as standardized sequences of two different signal durations, called dots and dashes, or dits and dahs. Morse code is named after Samuel Morse, one of the early developers of the system adopted for electrical telegraphy.

International Morse Code

1. The length of a dot is one unit.
2. A dash is three units.
3. The space between parts of the same letter is one unit.
4. The space between letters is three units.
5. The space between words is seven units.



Phone

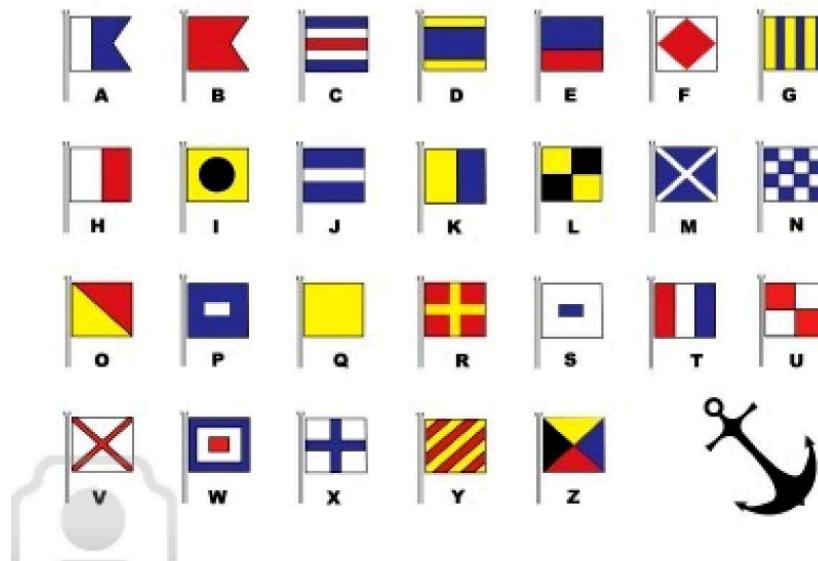
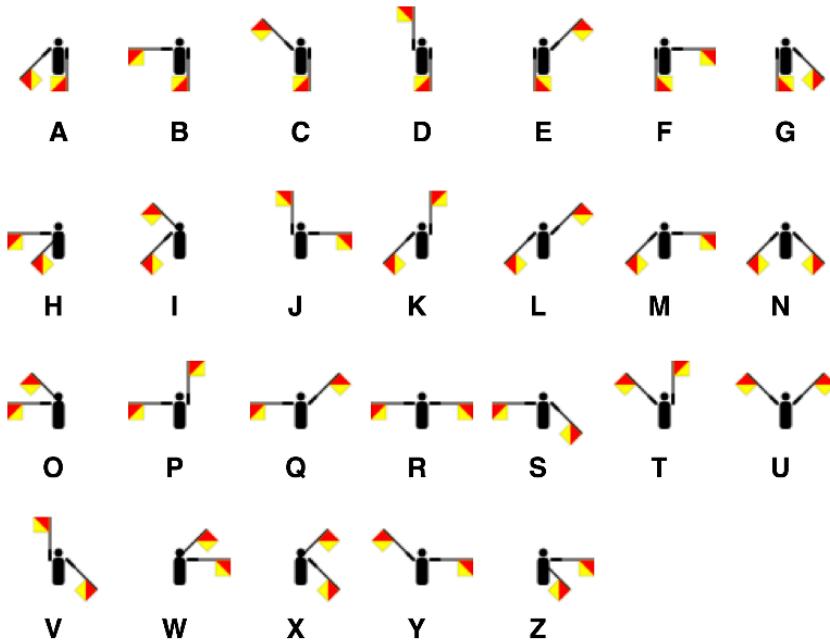
Back in my day, my old rotary phone had letters on the keys! Back when we used to actually call people and what-have-you. Phones today still have them, too, but that's besides the point. The numbers zero and one typically were reserved for other symbols while every other digit has three or letters on it.

2	3	4	5	6	7	8	9
ABC	DEF	GHI	JKL	MNO	PQRS	TUV	WXYZ



Semaphores

You may be asked to identify and use NATO's semaphores.



Ciphers

Caesar Cipher

Also known as a shift cipher or ROT-N cipher, the Caesar cipher is one of the simplest and most widely known encryption techniques. It is a type of substitution cipher in which each letter in the plaintext is replaced by a letter some fixed number of positions down the alphabet. For example, with a shift of 3, A would be replaced by D, B would become E, and so on. The method is named after Julius Caesar, who used it to communicate with his generals.

Example

Plaintext alphabet:

ABCDEFGHIJKLMNOPQRSTUVWXYZ

Plaintext message:

the quick brown fox jumps over the lazy dog

Cipher-text alphabet:

DEFGHIJKLMNOPQRSTUVWXYZABC

Encoded message:

WKH TXLFN EURZQ IRA MXPSV RYHU WKH ODCB GRJ

Bacon's Cipher

Bacon's cipher is a method of steganography (a method of hiding a secret message as opposed to a true cipher) devised by Francis Bacon. A message is concealed in the presentation of text, rather than its content.

To encode a message, each letter of the plain text is replaced by a group of five of the letters 'A' or 'B'. This replacement is done according to the alphabet of the Bacon cipher, shown below.

Letter(s)	Code	Binary		Letter(s)	Code	Binary
A	AAAAA	00000		N	ABBA	01100
B	AAAAB	00001		O	ABBAB	01101
C	AAABA	00010		P	ABBBA	01110
D	AAABB	00011		Q	BBBBB	01111
E	AABAA	00100		R	BAAAA	10000
F	AABAB	00101		S	BAAAB	10001
G	AABBA	00110		T	BAABA	10010
H	AABBB	00111		U, V	BAABB	10011
I, J	ABAAA	01000		W	BABAA	10100
K	ABAAB	01001		X	BABAB	10101
L	ABABA	01010		Y	BABBA	10110
M	ABABB	01011		Z	BABBB	10111

The writer must make use of two different typefaces for this cipher. After preparing a false message with the same number of letters as all of the As and Bs in the real, secret message, two typefaces are chosen, one to represent As and the other Bs. Then each letter of the false message must be presented in the appropriate typeface, according to whether it stands for an A or a B.

To decode the message, the reverse method is applied. Each "typeface 1" letter in the false message is replaced with an A and each "typeface 2" letter is replaced with a B. The Baconian alphabet is then used to recover the original message.

Example

For this example, lowercase letters replace A, while uppercase letters replace B. For the word "HELLO":

HELLO -> ABBBB / AABAA / ABABA / ABABA / ABBAB / __

-> ieXTE / ndMyh / aNdIn / wElCo / mEToY / ou

Cipher-text: i eXTEnD My haNd In wElComE To You

Columnar Transposition Cipher

In a columnar transposition, the message is written out in rows of a fixed length, and then read out again column by column, and the columns are chosen in some scrambled order. Both the length of the rows and the permutation of the columns are usually defined by a keyword. For example, the word ZEBRAS is of length 6 (so the rows are of length 6), and the permutation is defined by the alphabetical order of the letters in the keyword. In this case, the order would be "6 3 2 4 1 5".

In a regular columnar transposition cipher, any spare spaces are filled with nulls, or random letters; in an irregular columnar transposition cipher, the spaces are left blank. Finally, the message is read off in columns, in the order specified by the keyword. For example, suppose we use the keyword **ZEBRAS** and the message **WE ARE DISCOVERED. FLEE AT ONCE**. In a regular columnar transposition, we write this into the grid as:

6	3	2	4	1	5
W	E	A	R	E	D
I	S	C	O	V	E
R	E	D	F	L	E
E	A	T	O	N	C
E	Q	K	J	E	U

Five nulls (QKJEU) are added at the end. The cipher-text is then read off vertically as: **EVLNE ACDTK ESEAQ ROFOJ DEECU WIREE**

In the irregular case, the columns are not completed by nulls:

6	3	2	4	1	5
W	E	A	R	E	D
I	S	C	O	V	E
R	E	D	F	L	E
E	A	T	O	N	C
E

This results in the following cipher-text: **EVLNA CDTES EAROF ODEEC WIREE**

To decipher it, the recipient has to work out the column lengths by dividing the message length by the key length. Then he can write the message out in columns again, then re-order the columns by re-forming the key word.

Playfair Cipher

The Playfair cipher or Playfair square is a manual symmetric encryption technique and was the first literal digraph substitution cipher. The scheme was invented in 1854 by Charles Wheatstone, but bears the name of Lord Playfair who promoted the use of the cipher. The technique encrypts pairs of letters (digraphs), instead of single letters as in the simple substitution cipher. The Playfair is thus significantly harder to break since the frequency analysis used for simple substitution ciphers does not work with it.

The Playfair cipher uses a 5 by 5 table containing a keyword or phrase. Use of this table and 4 simple rules is all that is required to use the cipher.

To encrypt a message, one breaks the message into digraphs (groups of 2 letters) such that, for example, "HelloWorld" becomes "HE LL OW OR LD", and maps them out on the key table. The two letters of the digraph look like the corners of a rectangle in the key table. Note the relative position of the corners of this rectangle. Then apply the following four rules, in order, to each pair of letters:

- If both letters are the same (or only one letter is left), add an "X" after the first letter. Encrypt the new pair and continue. Some variants of Playfair use "Q" instead of "X", but any uncommon monograph will do.
- If the letters appear on the same row of your table, replace them with the letters to their immediate right respectively (wrapping around to the left side of the row if a letter in the original pair was on the right side of the row).
- If the letters appear on the same column of your table, replace them with the letters immediately below respectively (wrapping around to the top side of the column if a letter in the original pair was on the bottom side of the column).
- If the letters are not on the same row or column, replace them with the letters on the same row respectively but at the other pair of corners of the rectangle defined by the original pair. The order is important – the first encrypted letter of the pair is the one that lies on the same row as the first plaintext letter.

To decrypt, use the inverse of these 4 rules (dropping any extra "X"s (or "Q"s) that don't make sense in the final message when you finish).

Example: Using "**playfair example**" as the key where I and J are combined, the table becomes:

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

Encrypting the message "**Hello World**":

Split the message into letter pairs: HE LL OW OR LD

Add X's where appropriate: HE LX LO WO RL DX

The pair HE forms a rectangle, replace with DM

The pair LX forms a rectangle, replace with YR

The pair LO forms a rectangle, replace with AN

The pair WO forms a rectangle, replace with VQ

The pair RL is in a column, replace with CR

The pair DX forms a rectangle, replace with GE

Cipher-text: **DMYRANVQCRGE**

Railfence Cipher

The Railfence Cipher is a form of transposition cipher that gets its name from the way in which it is encoded. In the rail fence cipher, the plaintext is written downwards on successive "rails" of an imaginary fence, then moving up when we get to the bottom. The message is then read off in rows. For example, if we have 3 "rails" and a message of 'WE ARE DISCOVERED. FLEE AT ONCE', the cipherer writes out:

```
W . . . E . . . C . . . R . . . L . . . T . . . E  
. E . R . D . S . O . E . E . F . E . A . O . C .  
. . A . . . I . . . V . . . D . . . E . . . N . .
```

Then reads off: **WECRLTEERDSOEEFEAOCAIVDEN**

To decrypt, the number of rails needs to be known. Then, the cipher-text can be mapped onto the rail pattern that fits the length of the message.

Skip Cipher

The skip cipher is a simple cipher that shuffles the message in a fixed pattern. The cipherer breaks the message up into a fixed number of equal rows and read vertically. Extra "null" characters, such as "X" can be placed to adjust the last row to match the others in length. To decipher the text, simply start at the initial letter and skip the appropriate number of letters to obtain the next character in the encoded message.

Example

Using the message, "**This message is encoded with the skip cipher**" and a skip number of 3:

Plaintext: **THISMESSAGEISENCODEDWITHTHESKIPCIPHER**

```
THISMESSAGEIS  
ENCODEDWITHTH  
ESKIPCIPHERXX
```

Cipher-text: **TEEHNSICKSOIMDPEECSDISWPALHGTEEHRITXSHX**

Substitution Cipher

A substitution cipher is a method of encryption by which units of plaintext are substituted with cipher-text according to a regular system; the "units" may be single letters (simple substitution), pairs of letters, triplets of letters, mixtures of the above, and so forth (polygraphic). The receiver deciphers the text by performing an inverse substitution.

Substitution over a single letter (simple substitution) can be demonstrated by writing out the alphabet in some order to represent the substitution. This is termed a substitution alphabet. The cipher alphabet is traditionally mixed by first writing out a keyword, removing repeated letters in it, then writing all the remaining letters in the alphabet. Sometimes, the replacement alphabet consists not of letters, but of symbols and/or pictograms.

Example

Using the keyword of "ZEBRAS":

- Plaintext alphabet: abcdefghijklmnopqrstuvwxyz
- Cipher-text alphabet: **ZEBRASCDFGHJKLMNPQTUVWXYZ**

With that, you can

- Plaintext: **flee at once. we are discovered!**
- Cipher-text: SIAA ZQ LKBA. VA ZOA RFPBLUAOAR!

Vigenère Cipher

In a Caesar cipher, each letter of the alphabet is shifted along some number of places; for example, in a Caesar cipher of shift 3, A would become D, B would become E and so on. The Vigenère cipher consists of several Caesar ciphers in sequence with different shift values.

To encipher, the Caesar shift value to use for any given character depends on a repeating keyword.

The distance of the shift for each character is equal to the place in the alphabet for its corresponding character in the repeating keyword, zero-indexed. A would be a shift of 0, B would be a shift of 1, C would be a shift of 2, etc.

For example, suppose that the plaintext to be encrypted is **ATTACKATDAWN**. The person sending the message chooses a keyword and repeats it until it matches the length of the plaintext, for example, the keyword "**LEMON**", the cipher to use would be **LEMONLEMONLE**.

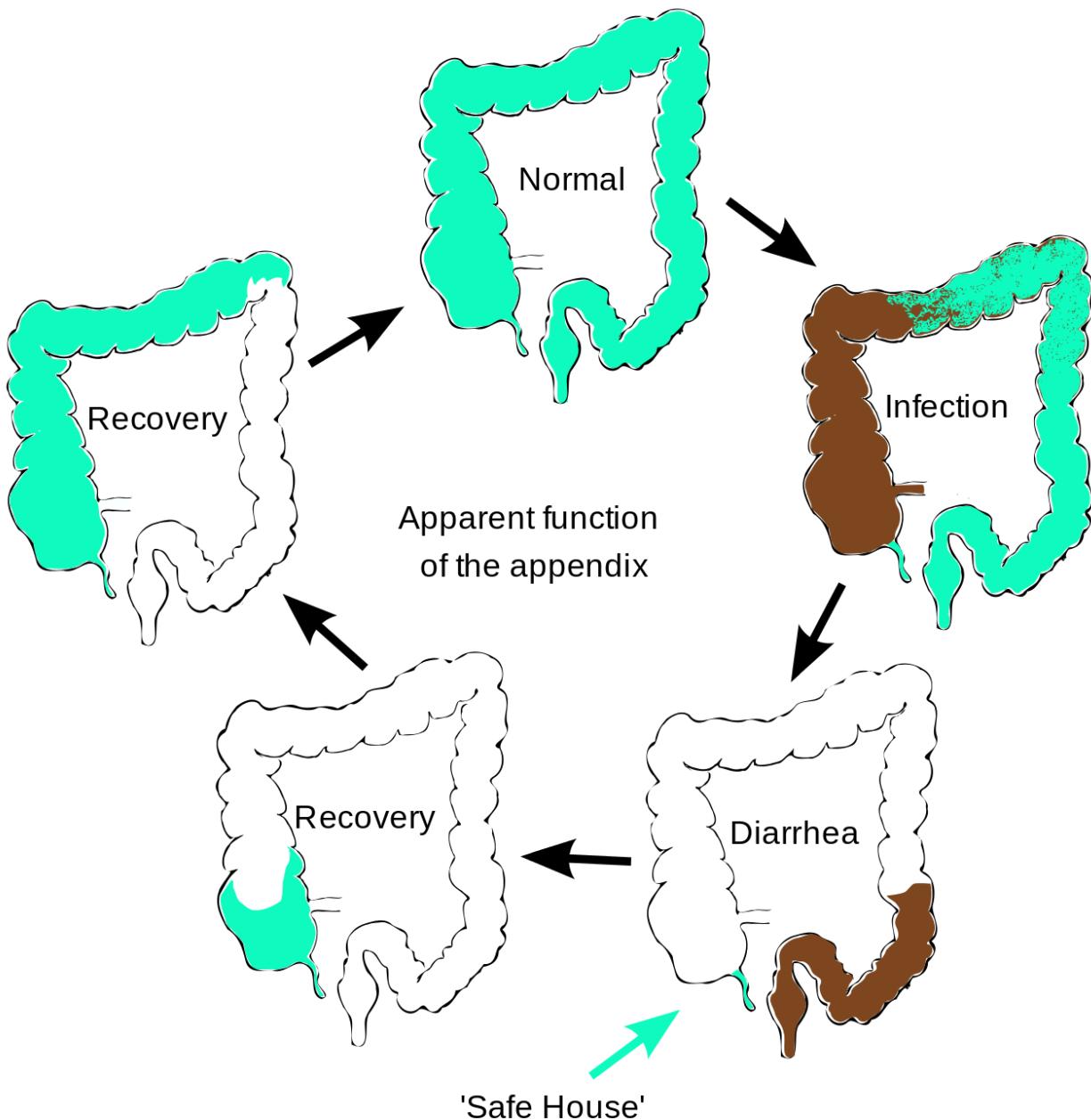
The first letter of the plaintext, A, is enciphered using the character L, which gives a shift of 12, or L. Similarly, for the second letter of the plaintext, the second letter of the key is used; the letter T is shifted by E, or 4 spaces resulting in X. The rest of the plaintext is enciphered in a similar fashion:

- Plaintext: ATTACKATDAWN
- Key: LEMONLEMONLE
- Cipher-text: LXFOPVEFRNHR

Decryption is performed by shifting the cipher-text characters back the value of the place of the repeated keyword. If this keyword is unknown, then the only way to solve this is via brute force.

Appendix

The appendix (pl.: appendices or appendixes; also vermiform appendix; cecal (or caecal, cæcal) appendix; vermix; or vermiform process) is a finger-like, blind-ended tube connected to the cecum, from which it develops in the embryo. The cecum is a pouch-like structure of the large intestine, located at the junction of the small and the large intestines. The term "vermiform" comes from Latin and means "worm-shaped". The appendix was once considered a vestigial organ, but this view has changed since the early 2000s.^{[1][2]} Research suggests that the appendix may serve an important purpose as a reservoir for beneficial gut bacteria.



Common Chess Openings

The Vienna Game

The Vienna Game is a 1.e4 opening for White. Compared to other 1.e4 openings, the Vienna is much less common but theoretically sound. Because of this, it can be an excellent weapon for beginners to catch their opponents by surprise.



The Scotch Game

The Scotch Game is a centuries-old 1.e4 opening for White and one of the best alternatives to the Ruy Lopez. A good opening for beginners, the Scotch is also an excellent weapon for players of every strength level





The Italian Game

The Italian Game is one of the oldest openings in chess and has been around for centuries. This classical 1.e4 opening can lead to slower and positional games as well as open, tactical battles. Although very common among beginners, the Italian Game is a part of the repertoire of players of every level.





The Sicilian Defense

The Sicilian Defense is the most popular response to White's 1.e4. Employed by masters and beginners alike, the Sicilian Defense is a reputable and positionally sound opening. Still, the Sicilian is a combative opening that tends to lead to dynamic and sharp positions.



The French Defense

The French Defense is one of the most popular Black responses to 1.e4. It has consistently been a part of masters' repertoire since the 1800s and one of the favorites of positional players. Usually leading to slower games, this opening is a good choice for players of all levels.



The Scandinavian Defense

The Scandinavian Defense, formerly better known in English language texts as the Center-Counter, is Black's seventh most popular response to 1.e4.



Algebraic Chess Notation

Algebraic notation is the standard method for recording and describing the moves in a game of [chess](#). It is based on a system of [coordinates](#) to uniquely identify each square on the board.^[1] It is now almost universally used by books, magazines, newspapers and software, and is the only form of notation recognized by [FIDE](#),^[2] the international chess governing body.

Each square of the board is identified by a unique coordinate pair—a letter and a number—from White's point of view. The vertical columns of squares, called [files](#), are labeled *a* through *h* from White's left (the [queenside](#)) to right (the [kingside](#)). The horizontal rows of squares, called [ranks](#), are numbered 1 to 8 starting from White's side of the board. Thus each square has a unique identification of file letter followed by rank number. For example, the initial square of White's king is designated as "e1".

Each [piece type](#) (other than pawns) is identified by an uppercase letter. English-speaking players use the letters *K* for [king](#), *Q* for [queen](#), *R* for [rook](#), *B* for [bishop](#), and *N* for [knight](#). Different initial letters are used by other languages.

Dewey Decimal System

000 – Computer Science, Info, and Works

- 000 – Computer Science, Knowledge, and Systems
- 010 – Bibliographies
- 020 – Library and Information Systems
- 030 – Encyclopedias and Books of Facts
- 040 – Unassigned
- 050 – Magazines, Journals, and Serials
- 060 – Associations, Organizations, and Museums
- 070 – News Media, Journalism, and Publishing
- 080 – Quotations
- 090 – Manuscripts and Rare Books

100 – Philosophy and Psychology

- 100 – Philosophy
- 110 – Metaphysics
- 120 – Epistemology
- 130 – Parapsychology and Occultism
- 140 – Philosophical Schools of Thought
- 150 – Psychology
- 160 – Philosophical Logic
- 170 – Ethics
- 180 – Ancient, Medieval, and Eastern Philosophy
- 190 – Modern Western Philosophy

200 – Religion

- 200 – Religion
- 210 – Philosophy and Theory of Religion
- 220 – The Bible
- 230 – Christianity
- 240 – Christian Practice and Observance
- 250 – Christian Orders and Local Church
- 260 – Social and Ecclesiastical Theology
- 270 – History of Christianity
- 280 – Christian Denominations
- 290 – Other Religions

300 – Social Sciences

- 300 – Social Sciences, Sociology, and Anthropology
- 310 – Statistics
- 320 – Political Science
- 330 – Economics
- 340 – Law
- 350 – Public Administration/Military Science
- 360 – Social Problems/Services
- 370 – Education
- 380 – Commerce, Communications, Transportation
- 390 – Customs, Etiquette, and Folklore

400 – Language

- 400 – Language
- 410 – Linguistics
- 420 – English Languages
- 430 – German Languages
- 440 – French Languages
- 450 – Italian and Romanian Languages
- 460 – Spanish, Portuguese, and Galician Languages
- 470 – Latin and Italic Languages
- 480 – Greek Languages
- 490 – Other Languages

500 – Science

- 500 – Science
- 510 – Mathematics
- 520 – Astronomy
- 530 – Physics
- 540 – Chemistry
- 550 – Earth Sciences and Geology
- 560 – Fossils and Prehistoric Life
- 570 – Biology
- 580 – Plants
- 590 – Animals

600 – Technology

- 600 – Technology
- 610 – Medicine and Health
- 620 – Engineering
- 630 – Agriculture
- 640 – Home and Family Management
- 650 – Management and Public Relations
- 660 – Chemical Engineering
- 670 – Manufacturing
- 680 – Manufacture for Specific Uses
- 690 – Construction of Buildings

700 – Arts And Recreation

- 700 – Arts
- 710 – Area Planning and Landscape Architecture
- 720 – Architecture
- 730 – Sculpture, Ceramics, Metalwork
- 740 – Graphic Arts, Decorative Arts
- 750 – Painting
- 760 – Printmaking and Prints
- 770 – Photography, Computer Art, Film, Video
- 780 – Music
- 790 – Sports, Games, and Entertainment

Texas hold 'em

Texas hold 'em (also known as **Texas holdem**, **hold 'em**, and **holdem**) is the most popular variant of the card game of [poker](#).^[1] Two cards, known as hole cards, are dealt face down to each player, and then five [community cards](#) are dealt face up in three stages. The stages consist of a series of three cards ("the flop"), later an additional single card ("the turn" or "fourth street"), and a final card ("the river" or "fifth street"). Each player seeks the best [five-card poker hand](#) from any combination of the seven cards: the five community cards and their two hole cards. Players have [betting](#) options to check, call, raise, or fold. Rounds of betting take place before the flop is dealt and after each subsequent deal. The player who has the best hand and has not folded by the end of all betting rounds wins all of the money bet for the hand, known as the pot. If more than one player still remains after betting has concluded on the fifth street, all players reveal their cards, an act known as the "showdown". In certain situations, a "split pot" or "tie" can occur when two players have hands of equivalent value. This is also called "chop the pot". Hands are read beginning with the card of higher rank (number, 2 → A). If the two hole cards have the same rank, the general suit order is Spades → Hearts → Diamonds → Clubs.

POKER HAND RANKING

1. Royal Flush



The best hand possible, a royal flush consists of A, K, Q, J and 10, all of the same suit.

2. Straight Flush



Also very rare, a straight flush consists of any straight that is all the same suit.

3. Four Of a Kind



Four of a kind, or 'quads' consists of four cards of equal value along with another card known as a side card.

4. Full House



A full house consists of three cards of one value and two cards of another.



A flush is a hand which has all cards of the same suit.

6. Straight



A straight has 5 cards of consecutive value that are not all the same suit.

7. Three of a Kind



Also known as 'trips'; three of a kind is 3 cards of the same value and 2 side cards of different values.

8. Two Pair



Two pair consists of two cards of equal value, another two cards of equal value, and one extra card.

9. Pair



One pair consists of two cards of the same value, and three extra cards.

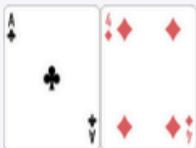
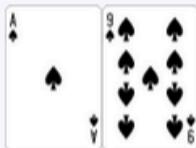
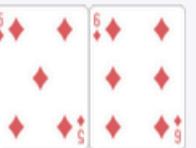
10. High Card



Five cards that do not interact with each other to make any of the above hands.

Sample showdown [\[edit \]](#)

Here is a sample showdown:

Board				
Bob	Carol	Ted	Alice	
				

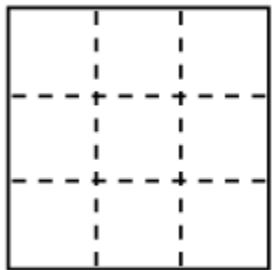
Each player plays the best five-card hand they can make with the seven cards available. Below is the list of best hands each player has.

Bob		Three of a kind: fours
Carol		Flush: Ace high
Ted		Full house: Kings full of fours
Alice		Straight: Four to eight

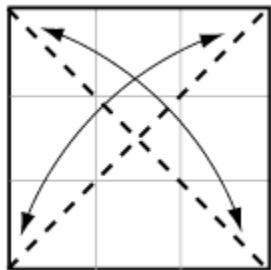
In this case, Ted wins as he has the best hand (full house). If arranged in order of hand strength from the strongest, it would be Ted's full house, Carol's flush, Alice's straight, and Bob's three of a kind.

Common Origami Shapes

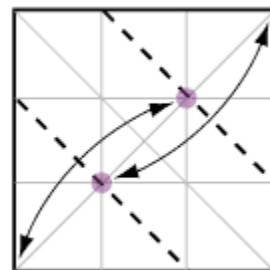
Origami Star Instructions



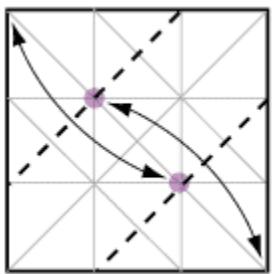
1. Make these creases, exactly in thirds. You may have to measure.



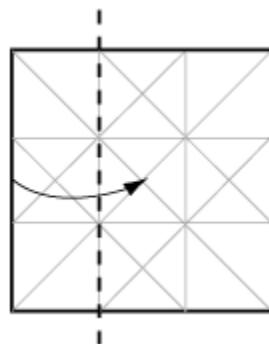
2. Now fold in half diagonally both ways, and open.



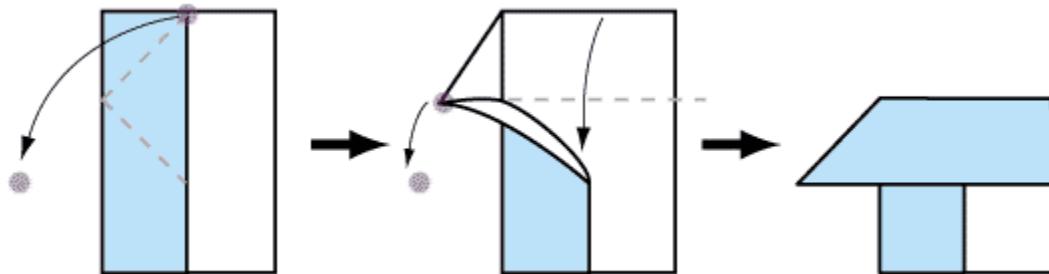
3. Fold along creases shown to points shown, and open.



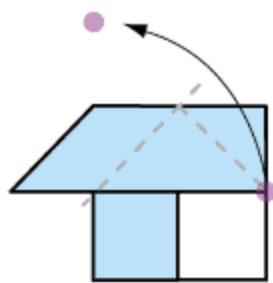
4. Do the same creases but in the other direction.



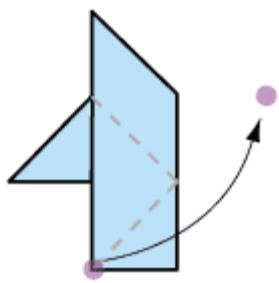
5. Fold the left third inward.



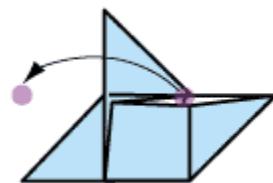
6. Using the creases shown, pull the corner from the point shown down to the other point shown, and flatten.



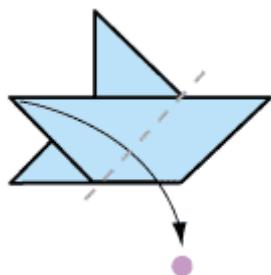
7. Again using the creases as shown, move this point to the other point, and flatten.



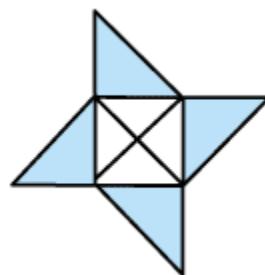
8. Again, using the creases shown, move this point to the other point and flatten.



9. Move only the inside flap outside to the point shown.

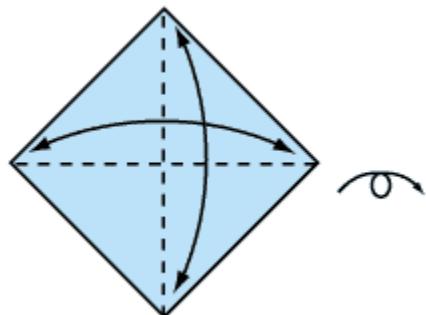


10. Fold this corner down along crease shown.



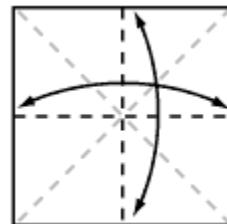
Finished 4 Pointed Star.

Origami Crane Instructions



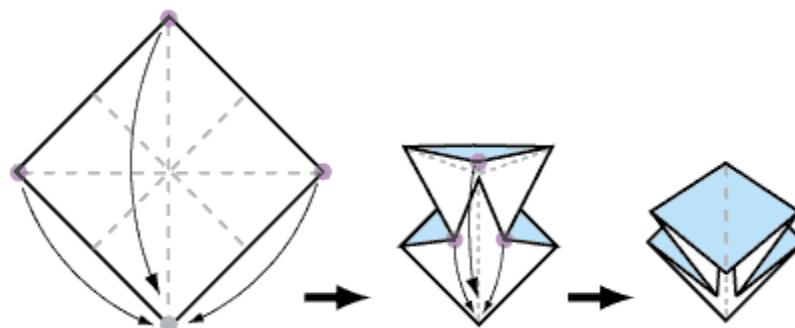
1. Start with a square piece of paper, coloured side up.

Fold the top corner of the paper down to the bottom corner. Crease and open again. Then fold the paper in half sideways.



2. Turn the paper over to the white side.

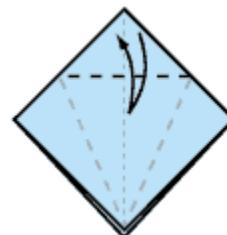
Fold the paper in half, crease well and open, and then fold again in the other direction.



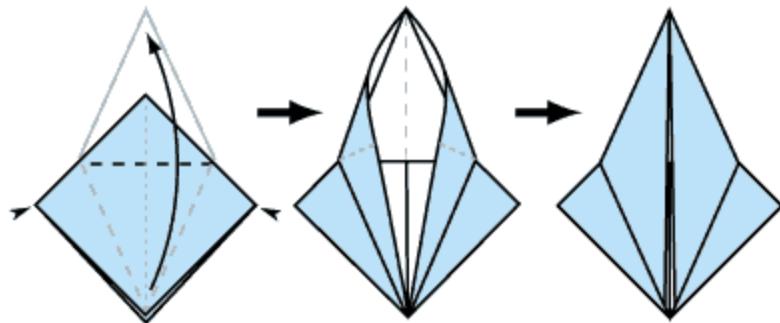
3. Using the creases you have made, Bring the top 3 corners of the model down to the bottom corner. Flatten model.



4. Fold top triangular flaps into the centre and unfold

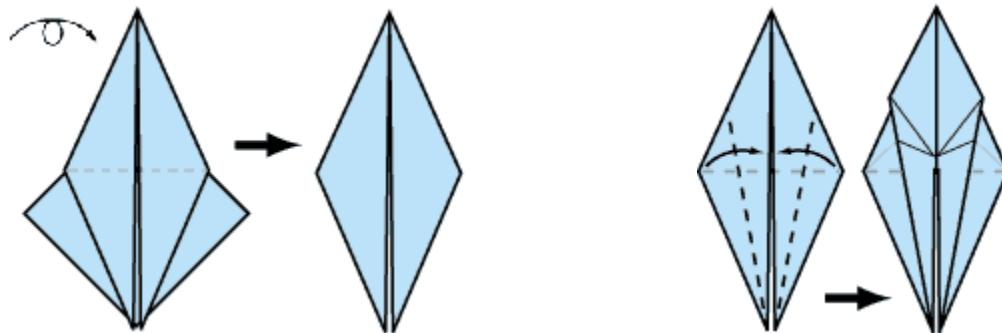


5. Fold top of model downwards, crease well and unfold



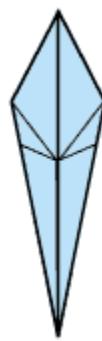
6. Open the uppermost flap of the model, bringing it upwards and pressing the sides of the model inwards at the same time.

Flatten down, creasing well.



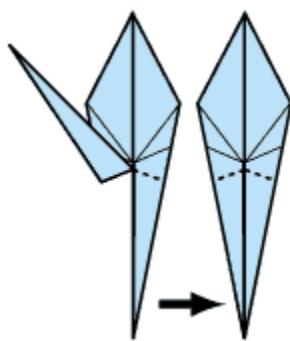
7. Turn model over and repeat Steps 4-6 on the other side.

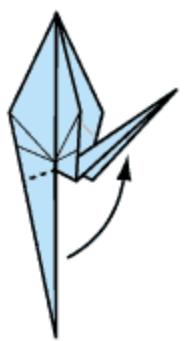
8. Fold top flaps into the centre.



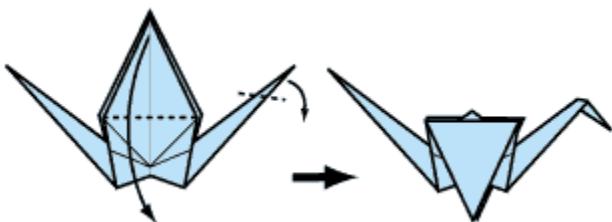
9. Repeat on other side, so your model looks like this.

10. Fold both 'legs' of model up, crease very well, then unfold.

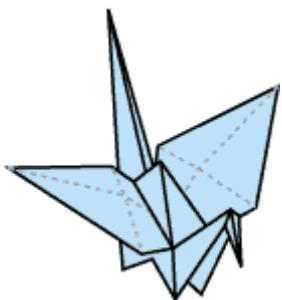




11. Inside Reverse Fold the "legs" along the creases you just made.

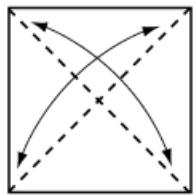


12. Inside Reverse Fold one side to make a head, then fold down the wings.

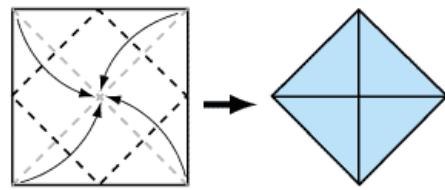


Finished Crane!

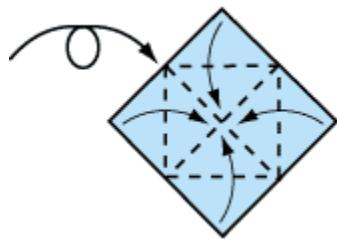
Origami Fortune Teller Instructions



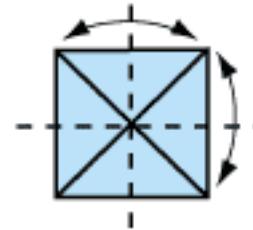
1. Start with white side up. Fold diagonally in both directions.



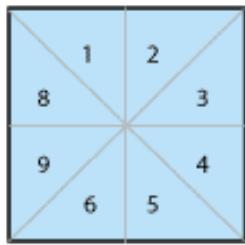
2. Fold each corner into the centre point.



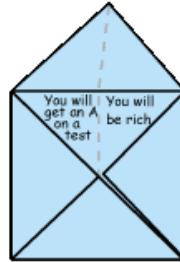
3. Turn over and again fold each corner into the centre point.



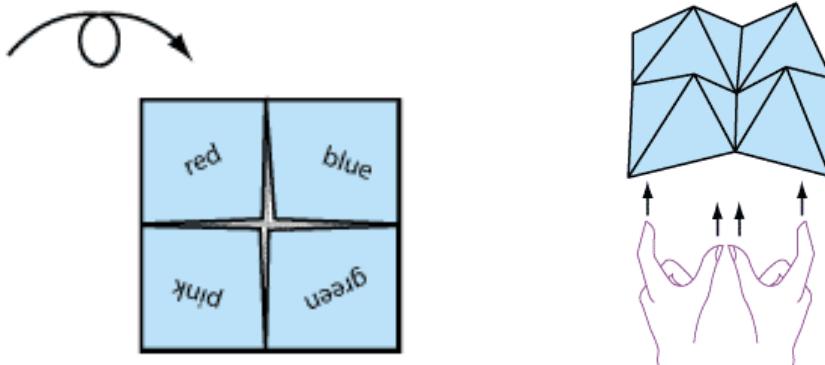
4. Fold in half along creases shown, both ways, and open.



5. Number each segment from 1-8.

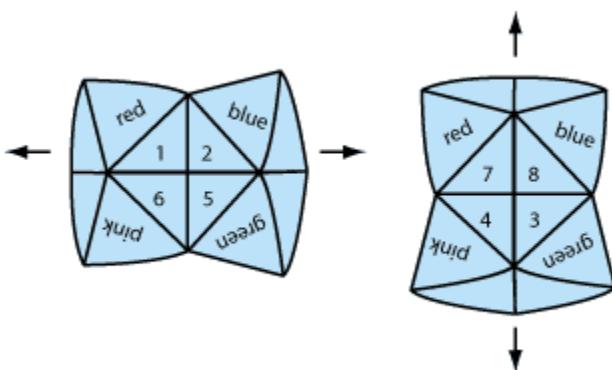


6. Open up each flap and write a fortune in each segment. Below are some examples of fortunes you can write, but you can also make up your own.



7. Turn the model over and write a colour on each flap as shown.

Finished Fortune Teller. Use your fingers to open it up.



The fortune teller in action. Move your fingers together to pull the fortune teller left-right (*shown left*) or top-bottom (*shown right*). Traditionally, fortune telling begins with a top-bottom move.

To tell someone's fortune:

Get them to pick an option from the options written on the front flap fortune teller. If it is blue, spell out B L U E, while moving the fortune teller 4 times (the number of letters in Blue). For luck, always move the fortune teller top-bottom before moving left-right.

Now get the person to choose one of the numbers that are shown in the centre of the fortune teller when you finish spelling out the colour. Let's say it is 3. You would move the fortune teller 3 times.

Then the person should choose a number from the ones showing this time. Whichever number they choose, lift up the flap and that is their fortune.

Tarot Cards

Major Arcana

The Fool: A symbol of starting fresh, trusting in what lies ahead, a lack of experience, facing the unknown, beginner's luck, going with the flow, and having faith in the greater universe.

The Magician: A symbol of a powerful connection between the everyday world and the mystical realm.

The High Priestess: A symbol of mystery, calmness, and paying attention to your inner self. It's a sign that now is a good time to step back, take a breather, and think about what's going on. Trust your inner feelings to help you understand things better, especially when everything around is different from what it appears to be.

The Empress: A symbol of the nurturing aspects of life. She signifies the desire to start a family and the beginnings of a new life. Other common meanings include romantic relationships, artistic endeavors, or even starting a new business.

The Emperor: The Emperor represents a person in a position of control, someone who has things well-managed. He is a symbol of steadiness and safety in life.

The Hierophant: A symbol of traditions and values. It may suggest the presence of a wise teacher or mentor who will guide you in your quest for knowledge and learning. It can also signify an arranged marriage.

The Lovers: The Lovers are a symbol of relationships and decisions. When it appears in a reading, it means a person is facing choices regarding a current relationship, feeling a strong attraction to someone, or considering multiple potential partners.

The Chariot: A symbol of conquering challenges and moving ahead with a positive outlook. It's a reminder that you should persist and stay determined. With your hard work and dedication, you will ultimately be able to succeed and reach your desired goals.

Strength: A symbol of the successful resolution of a significant life challenge, or the ability to resist and overcome temptations through your inner power and determination.

The Hermit: The Hermit is a symbol of introspection and turning your focus inward. The card symbolizes the act of seeking answers within yourself, analyzing what is happening in the mind.

Wheel of Fortune: A symbol of change in your life. This can involve shifts in your status, position, or luck. But be aware, depending on how you draw, it can be both a good and bad change.

Justice: A symbol of fair choices. The Justice tarot card trusts that given all facts, balance is the outcome of all things. It gets rid of the confusion and doesn't let appearances or outer charm influence what's truly fair and right.

The Hanged Man: The Hanged Man is a symbol of letting go, seeing things from a different angle, and surrendering to the flow of life. It embodies the concepts of transformation, introspection, and patience.

Death: A symbol of change and transformation in your life journey. The tarot card Death signifies the end of one chapter, making way for a fresh start.

Temperance: A symbol of balance and patience in life. Instead of going to extremes, the Temperance tarot card suggests a person should try to follow a middle path and stay calm. It's all about finding a harmonious and moderate approach to things.

The Devil: A symbol of seduction by the material world and physical pleasures. The Devil represents a feeling of being trapped or controlled by fear, excess, or materialism.

The Tower: A symbol of sudden, unforeseen change. The Tower can have a different meaning depending on the personal circumstances. This tarot card refers to danger, crisis, destruction, and liberation.

The Star: A symbol of hope, inspiration, and spiritual connection. The Star encourages a person to maintain optimism, follow their dreams, trust their intuition, and embrace healing and balance in their lives.

The Moon: A symbol of mystery and trickery. The card suggests things may not always be as straightforward as they appear.

The Sun: A symbol of good fortune, happiness, joy, and harmony. The Sun represents the universe coming together.

Judgment: A symbol of a profound moment of rebirth and awakening in a person's life. The Judgement tarot card signifies the conclusion of a significant life chapter, paving the way for exciting new beginnings.

The World: The World is a symbol of the conclusion of a life phase, before the start of a new chapter. This tarot card represents a moment of reflection before embarking on a new journey, which starts with the Fool card.

Wands

The **Suit of Wands** in Tarot represents fire: they embody the inner creative potential. They stand for inspiration, action, and ambition. The cards urge individuals to pursue their goals with enthusiasm, despite possible challenges.

The **Ace of Wands** is a symbol of new beginnings and positive news. Action is being taken and new passions are found. This tarot card indicates a creative spark, and a feeling of boldness and excitement.

The **Two of Wands** stands for a period of decision-making and future planning, where options are considered, and initial steps are taken towards goals or aspirations.

The **Three of Wands** stands for looking ahead with optimism and planning for the future. It usually represents a time of anticipation, steps are being taken toward long-term goals and dreams.

The **Four of Wands** stands for a time of celebration, harmony, and accomplishment, often marking a joyful and harmonious event or achievement.

The **Five of Wands** represents a situation where there is competition, conflicts, or disagreements among people, requiring navigation and resolution of differing interests and opinions.

The **Six of Wands** stands for a period of success and recognition, where achievements are celebrated and acknowledged. It brings a sense of victory and accomplishment to the larger endeavors of life.

The **Seven of Wands** represents the need to stand up for yourself or your beliefs. Protecting what's important to you when facing challenges or opposition.

The **Eight of Wands** explains that things are moving fast and progress is happening quickly in a person's life, like a sudden burst of energy and forward momentum.

The **Nine of Wands** stands for resilience and determination in overcoming obstacles, but it also suggests a cautious approach to avoid further challenges or setbacks when approaching goals.

The **Ten of Wands** symbolizes being overwhelmed by the weight of numerous responsibilities or tasks. The tarot card emphasizes the importance of finding ways to alleviate the pressure and regain balance.

The **Page of Wands** stands for youthful curiosity and a sense of adventure, symbolizing a fresh perspective and an eagerness to embrace new opportunities and experiences.

The **Knight of Wands** represents a dynamic and adventurous spirit. This tarot card is usually associated with taking bold actions and taking on new opportunities with enthusiasm.

The **Queen of Wands**, as a symbol of feminine confidence, charisma, and independence, signifies a strong, passionate, and influential individual.

The **King of Wands** is a symbol of masculine leadership, ambition, and confidence. It signifies taking bold actions and being a charismatic and influential figure.

Cups

The **Suit of Cups** in Tarot represent the element of water: they embody the inner emotions and feelings, and primarily deal with subjects related to emotional consciousness, love and relationships.

The **Ace of Cups** stands for new beginnings and emotional fulfillment. The tarot card signifies the potential for deep emotional connections and contentment in life.

The **Two of Cups** represents a bond between two individuals, or two elements coming together in balance. The tarot card stands for harmony, partnership, and connection.

The **Three of Cups** stands for celebrations and happy gatherings with others, fostering a sense of joy and camaraderie. The tarot card represents moments of shared happiness and togetherness.

The **Four of Cups** stands for a time of thinking and considering one's options. It suggests a moment of contemplation and being open to new possibilities.

The **Five of Cups** focuses on disappointment, loss, and the presence of past regrets. This tarot card suggests the need to acknowledge what's been lost, but also encourages people to focus attention on the potential for new opportunities.

The **Six of Cups** stands for fond memories and connections to the past. This Minor Arcana tarot card symbolizes a sense of nostalgia and the revisiting of past experiences or relationships.

The **Seven of Cups** stands for choices, illusions, and daydreams. It suggests a need to evaluate options carefully and focus on realistic goals amid potential distractions.

The **Eight of Cups** represents leaving behind the past, searching for deeper meaning, and embarking on a spiritual journey. This tarot card signifies a period of personal growth through letting go of what no longer serves someone.

The **Nine of Cups** represents a state of contentment. Desires and wishes have been completely fulfilled. In essence, the meaning of this tarot card refers to a time of happiness and satisfaction.

The **Ten of Cups** stands for a state of emotional fulfillment and harmony. This tarot card is often associated with happy family dynamics. It signifies a collective sense of contentment and well-being.

The **Page of Cups** is a symbol for the exploration of emotions and creativity. This tarot card signifies a period of discovering and nurturing one's emotional and artistic side.

The **Knight of Cups** represents the pursuit of dreams, passions, and romantic endeavors. This tarot card signifies a period of following one's heart's desires with emotional dedication.

The **Queen of Cups** stands for emotional maturity, intuition, and compassion. This tarot card symbolizes a time of nurturing and understanding people's feelings, both internal and external.

The **King of Cups** stands for emotional balance, wisdom, and a calm demeanor. This tarot card symbolizes the ability to handle emotions with maturity and understanding.

Swords

The **Suit of Swords** in Tarot represents the element of air: they embody the realm of the mind, thoughts, communication, intellect, and challenges. The suit deals with subjects related to action, change, and conflict, but also sorrow and misfortune.

The **Ace of Swords** stands for clarity, truth, and intellectual breakthroughs. The tarot card signifies a period of clear thinking, new ideas, and victories in the realm of the mind.

The **Two of Swords** stands for decision-making and the need to find equilibrium. This card signifies weighing viable options and finding the middle ground in situations.

The **Three of Swords** represents emotional pain, heartache, and facing difficult emotions. This card symbolizes a time of dealing with inner turmoil and emotional challenges.

The **Four of Swords** represents rest, recuperation, and taking a break. This card stands for a well-deserved and needed time of relaxation, recovery, and self-care.

The **Five of Swords** represents conflicts and disagreements. This card often reflects a period when disputes or challenges are prominent. Try to choose battles wisely.

The **Six of Swords** symbolizes a transition, moving away from difficulties, and finding a path to a calmer and more peaceful situation. This card represents being able to leave behind challenges in order to seek a more peaceful journey.

The **Seven of Swords** represents secrecy, deception, and the need to be cautious. This card stands for a situation where one must navigate with care.

The **Eight of Swords** symbolizes a feeling of being trapped or restricted in a situation, often due to one's own perceptions or limitations. The card suggests a need to reevaluate current circumstances and seek solutions.

The **Nine of Swords** stands for anxiety, worry, and inner turmoil. This tarot card suggests a need to address and manage overwhelming thoughts and fears.

The **Ten of Swords** represents a hurtful disastrous ending, a situation where the lowest point is reached. The card suggests it's important to let go of the past, embrace change, and somehow find hope in this new beginning.

The **Page of Swords** symbolizes a period of curiosity, exploration, and the pursuit of knowledge or new ideas. This tarot card encourages vigilance and a fresh perspective.

The **Knight of Swords** represents swift action, determination, and the pursuit of goals with a focused and assertive approach.

The **Queen of Swords** is an archetype for female wisdom. The card symbolizes intellect, clear judgment, and independence. She embodies wisdom and the ability to make rational decisions.

The **King of Swords** symbolizes authority, rationality, and intellectual prowess. He signifies the importance of clear thinking, wise decisions, and assertive leadership.

Pentacles

The **Suit of Pentacles** in tarot represents the element of earth and the season of winter. The cards in the Suit of Pentacles represent physical or external consciousness, such as health, finances, work, and creativity. They also deal with ego and self-image.

The **Ace of Pentacles** stands for fresh opportunities and a new beginning in material or practical aspects of life. The card symbolizes the potential for prosperity, success, and the realization of goals in the physical world.

The **Two of Pentacles** stands for balance and adaptability. The tarot card highlights the need to skillfully juggle responsibilities and resources to find harmony in life.

The **Three of Pentacles** represents the concepts of collaboration, teamwork, and skilled craftsmanship. This card symbolizes the successful implementation of plans through cooperation and expertise.

The **Four of Pentacles** focuses on concepts regarding financial stability, security, and possessions. The card generally suggests a need for balance between financial security and the fear of losing what one has.

The **Five of Pentacles** represents hardship and financial struggles, indicating a challenging period on both a financial and emotional level. Try to seek support from peers during these hard times.

The **Six of Pentacles** represents the concepts of generosity, fairness, and balance in giving and receiving. The card symbolizes individuals who may be in a position to help others, or are in need of assistance themselves.

The **Seven of Pentacles** represents a phase of contemplation and patience. It suggests efforts are starting to bear fruit. However, one should consider taking a break to assess the current progress before proceeding with the next phase.

The **Eight of Pentacles** symbolizes the path to skill mastery. This tarot card represents the concepts of dedication, a strong work ethic, and good craftsmanship. Using focused effort and commitment on a specific project or task, success, and personal growth are around the corner.

The **Nine of Pentacles** is a tarot card that represents the concepts of self-sufficiency, abundance, and enjoying the fruits of one's labor. It is a card with a positive meaning, often associated with the enjoyment of success in the material world.

The **Ten of Pentacles** means either financial security, or a feeling of fulfillment in one's endeavors. The card suggests long-term stability and abundance in the culmination of material and financial achievements. There is a special focus on legacy and family values.

The **Page of Pentacles** represents a youthful and curious energy focused on learning and practical matters. This tarot card symbolizes the potential for growth, responsibility, and a diligent approach to earthly pursuits.

The **Knight of Pentacles** can best be translated into the concepts of dedication, hard work, and a methodical approach to life's challenges. The tarot card focuses on reliability and long-term stability, with a tangible result as the final goal.

The **Queen of Pentacles** represents practicality, nurturing, and financial stability in tarot. The card generally symbolizes a down-to-earth and dependable person, mainly focused on material well-being.

The **King of Pentacles** generally stands for a mature, successful, and responsible individual who is grounded in reality and approaches matters in a practical way. This card symbolizes mastery over material matters and is deeply connected to the Earth element.

The Zodiac

The **zodiac** is a belt-shaped region of the sky that extends approximately 8° north and south (as measured in celestial latitude) of the ecliptic, the apparent path of the Sun across the celestial sphere over the course of the year. Also within this zodiac belt appear the Moon and the brightest planets, along their orbital planes. The zodiac is divided along the ecliptic into 12 equal parts ("signs"), each occupying 30° of celestial longitude. These signs roughly correspond to the astronomical constellations with the following modern names: Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn, Aquarius, and Pisces.

The signs have been used to determine the time of the year by identifying each sign with the days of the year the Sun is in the respective sign. In Western astrology, and formerly astronomy, the time of each sign is associated with different attributes.



Aries: March 21 -
April 19

Taurus: April 20 - May
20

Gemini: May 21 -
June 20

Cancer: June 21 -
July 22

Leo: July 23 - August
22

Virgo: August 23 -
September 22

Libra: September 23 -
October 22

Scorpio: October 23 -
November 21

Sagittarius: November
22 - December 21

Capricorn: December 22 - January 19

Aquarius: January 19 - February 18

Pisces: February 19 - March 20