

How to Solve Quip-Find™ Puzzles

Quip-Find word puzzles are based on the game Quipto® (currently in development), which uses the surface of a 3x3x3 cube as its “playing space.” Those who are familiar with the first book of these puzzles, *Never Play Leapfrog with a Unicorn*, will recognize the story of how I got the idea for the game – and thus for the puzzles based on it.

It was 1970, about four years before the invention of Rubik’s Cube, the puzzle that would make the 3x3x3 cube almost universally familiar. I had just solved an older puzzle – Soma Cubes – by assembling the seven puzzle pieces to create a 3x3x3 cube.

While I was holding up the cluster of cubes and admiring the elegance of this arrangement, I observed that one of the 27 smaller cubes was totally surrounded, like the core of an apple, leaving 26 exposed. I wondered: What would happen if you had 26 **letter cubes** – one for each letter of the alphabet, the same letter on all its faces – and you played the letter cubes into the cubicles of a 3x3x3 **rack**? Could you spell out words as a path between cubes that were adjacent on the surface of the rack?

Thus was the 3-D word game Quipto conceived. I soon discovered that it is easy to spell out almost any word in this way – but that it is more challenging to spell out a whole sentence as one continuous path.

Quip-Find is a puzzle version of the Quipto game concept. A two-dimensional diagram of a three-dimensional 3x3x3 cube contains a hidden quip (a short proverb or other quotation) and the solver tries to find the quip with the aid of a cryptogram.

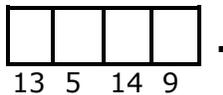
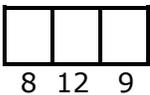
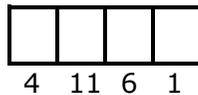
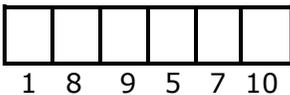
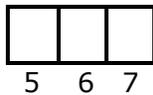
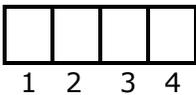
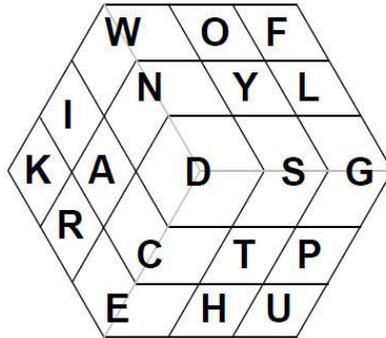
On the following pages, I will show you how a Quip-Find puzzle works, and then I will give you some suggestions about how to solve them, using several examples. I hope that you enjoy this new and original kind of word puzzle!

How a Quip-Find™ Puzzle Works

A Quip-Find puzzle has two parts:

- A **diagram** of three faces of a 3x3x3 cube (or “rack”) where each smaller-cube space (or “cubicle”) has been filled with a different letter of the alphabet. The diagram contains the hidden quip.
- A **cryptogram** in which sets of blank tiles represent the words of the quip. The numbers underneath the tiles stand for the letters in the quip, a different number for each letter.

To learn how words and quips are spelled out in Quip-Find puzzles, consider this example:



Notice that each letter is printed only once in each cubicle space and that no letter appears more than once in a diagram.

Two cubicles are adjacent if they touch in the diagram (and thus on the surface of the 3x3x3 "rack") either:

- side-to-side (like A and R in the puzzle diagram above) or
- corner-to-corner (like A and D).

A word is spelled out if its letters are consecutively adjacent in the diagram. Words that are spelled out in the above diagram include ARE, CARE, DARE, and AWARE, but **not** AWAY (A is not adjacent to Y) or AWARD (R is not adjacent to D).

A few of the other words that are spelled out in this diagram are ADD (double letters are always permitted), ANNOY, ANY, CANCER, DANCE, DARK, EAR, ERECT, ERR, FOLLOW, GLOW, KIND, NOW, PUT, SPHERE, TERRACE, THERE, WIRE, and YON.

Try tracing the path of each of these words – and any additional words that you find – until you are confident that you understand which letters are considered adjacent and how a word is spelled out in a Quip-Find puzzle diagram.

Notice that punctuation marks (commas, periods, apostrophes, etc.) and the spaces between words are included in the cryptogram, but they are **not** used in the spelling out of the quip in the diagram.

The answer to the above puzzle is "Slow and steady wins the race," the moral of Aesop's fable, "The Tortoise and the Hare." Try tracing the whole proverb as a continuous path between adjacent letters in the diagram.

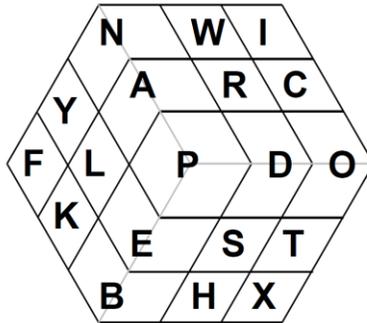
As you have just seen, in a Quip-Find puzzle, each word in the hidden quip is spelled out in the diagram – **and the entire quip is spelled out as one continuous path**, as though it were a single word. This is a key feature of Quip-Find puzzles that makes it possible to solve them through logical reasoning.

What is a “Wraparound” or “Hidden Adjacency”?

All of the Quip-Find puzzles in this book use only half of the rack; that is, the diagram in each puzzle shows only three mutually-adjacent faces of the 3x3x3 cube, and the quip is hidden within that “half-rack”.

Because the diagram shows only three faces, cubicles that **do not appear** to be adjacent actually **are** adjacent – on a “hidden” face of the rack. This occurs in precisely three instances on any half-rack diagram. In those cases, we refer to the adjacency of the two cubicles as a “wraparound” or a “hidden adjacency”. Some of the puzzles in this book involve wraparounds; others (including all the puzzles on pages 1 through 26) do not.

To illustrate, here is a diagram that hides the familiar proverb, “An apple a day keeps the doctor away”:



Notice that in the diagram, the letters C and T (as in DOCTOR) do not **appear** to be adjacent; however, they actually do touch – on a hidden face of the rack, just as A and E are adjacent on the visible opposite face. This kind of hidden adjacency occurs at exactly three of the six outer corners of the diagram; in the diagram above, the other wraparounds, besides C-T, are H-K and Y-W.

Solving Quip-Find™ Puzzles

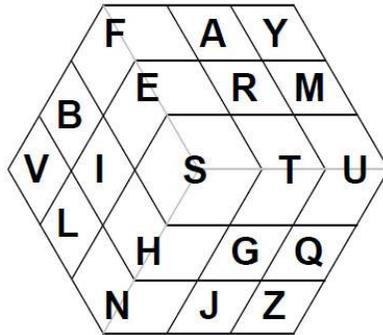
To solve a Quip-Find puzzle, work back and forth between the rack diagram and the cryptogram. You may find these suggestions helpful.

- In the cryptogram:
 - Start by scanning for any **words that have unusual features** (for example, apostrophes, or letters repeated within a word – particularly double letters), and for any **repetitions of words or other sequences** of letters. Circle or otherwise highlight these unusual patterns. (Common words that have distinctive patterns include ALWAYS, BETTER, NEVER, and THAT.)
 - Notice any **short words** (words of 1-4 letters). (Short words are generally easier to find in the diagram, and it is usually more fruitful to start your solving with them.)
- In the diagram:
 - Search for **words that are spelled out**, particularly those that are the **same length** as words in the cryptogram. Make lists, by word-length, of these words.
 - In searching for short words, take note of any **common short words** – for example, among three-letter words, watch for ones like AND, FOR, THE, and YOU.
 - Look for words that **fit the pattern** of words in the cryptogram – particularly any words that have double-letters or other unusual features – and any patterns of letters that are found in two or more different words.
- A **two-diagram puzzle** is a puzzle where *two* diagrams are used to hide one or more quips. (See pages 151-152 for a discussion of the two kinds of two-diagram puzzles found in this book.) In a two-diagram puzzle, any word found in **both cryptograms** must be spelled out in **both diagrams**.

- Choose a word in the cryptogram for which you can make a **reasonable guess** as to what it might be, and start with that guessed word. (**Use a pencil** so that you can erase any wrong guesses and false starts.)
- **Enter the letters** you guess in the cryptogram *and* mark them as used letters in the diagram (with circling or shading, or with check marks or dots).
- Based on the guessed letters, **use logic to fill in the remaining gaps** in the cryptogram, knowing that the entire hidden quip is spelled out as a single continuous path in the diagram.

We will now apply these suggestions in solving three Quip-Find puzzles rated "Easy," "Medium," and "Hard" in our first book of puzzles, *Never Play Leapfrog with a Unicorn*.

An Example Rated "Easy"



1	2	3

4	3	5	1

1	2	6	7	8	5

6	7

9	6	10	3

11	12	3

10	12	3	3

Let's examine this puzzle in light of a couple of the puzzle-solving suggestions we have made above.

- **Words that have unusual patterns** – Particularly noteworthy is the last word ("10-12-3-3") because it ends in double letters. We might also notice that the sequence "12-3" occurs in both of the last two words.
- **Short words** – The hidden quip contains one two-letter word ("6-7"), two three-letter words ("1-2-3" and "11-12-3"), and three four-letter words ("4-3-5-1", "9-6-10-3", and "10-12-3-3").

One way to proceed is to make lists of the two-, three-, and *perhaps* four-letter words that you can find spelled out in the diagram. (The following lists are not exhaustive.)

Two-letter words (some possibilities for "6-7") – AM, BE, HE, IF, IN, IS, MA, MY

(Perhaps the most common of these words are IF, IN, and IS.)

Three-letter words (with no repeated letters; some possibilities for "1-2-3" and "11-12-3") – ARE, ARM, ART, BET, BIN, ERA, FAR, GUM, GUT, HIS, LIE, MAR, MAY, NIB, NIL, RAM, RAY, REF, RUG, RUM, RUT, SEA, SET, SIB, SIN, TEA, THE, TUG, VIE, YAM

(The most common of these words are ARE, HIS, and THE.)

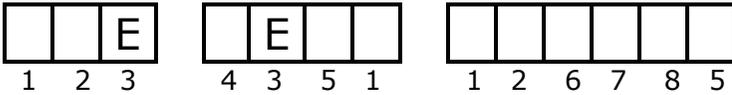
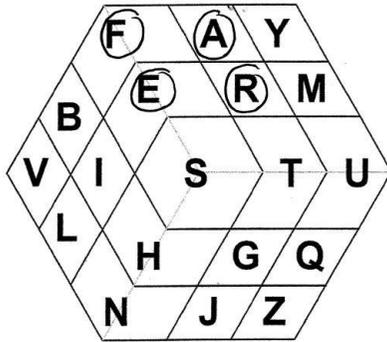
Four-letter words: Instead of trying to make a list of *all* the four-letter words spelled out in the diagram, it seems more fruitful to focus on the final word of the quip – the one that ends in double letters. Carefully looking for words in the diagram that fit this word's pattern ("10-12-3-3"), we find the following:

Some possibilities for "10-12-3-3": BILL, FILL, FREE, HILL, HISS, TREE

We have already noted that the middle two letters of this word will also be the last two letters of the preceding word. Accordingly,

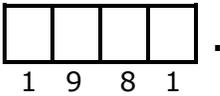
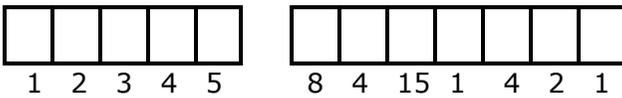
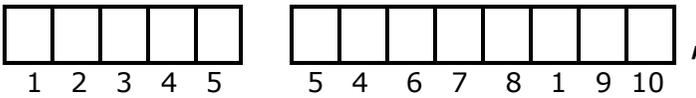
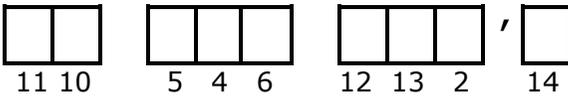
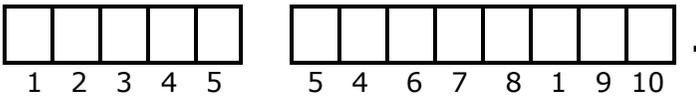
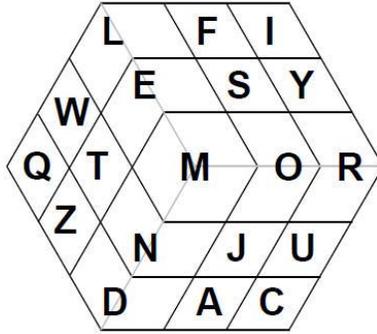
referring to our list above of three-letter words, we see that the only combinations that might work for these two words ("11-12-3 10-12-3-3") are NIL BILL, NIL HILL, ARE FREE, and ARE TREE. (HIS HISS won't work since "11" and "10" have to be two different letters. And NIL FILL won't work because L and F are not adjacent in the diagram.) Of these possible combinations, only ARE FREE makes potential sense.

If we guess ARE FREE for the last two words, then fill in the letters throughout the cryptogram and check off the used letters by circling them in the diagram, we get:



The solution to this puzzle is probably obvious at this point. However, even if we don't immediately recognize the familiar proverb, we can guess the first word (FIE, HIE, LIE, SHE, THE and VIE are all possibilities, with THE being the most promising choice), guess "4" and "5" (both adjacent to E) and thus the second word, and then continue filling in the gaps between guessed letters.

An Example Rated "Medium"



Once again, we will follow some of the steps suggested above:

- **Short words** – We note that there is one two-letter word ("11-10"), one three-letter word ("5-4-6"), and two four-letter words ("12-13-2-'-14" and "1-9-8-1").
- **Words that have unusual patterns** – Here we might note that the last two letters of the first word (which repeats as the sixth and eighth words) are the first two letters, reversed, of

the second, fourth and seventh words; the fourth word is also the beginning of the second and seventh words; the fifth word contains an apostrophe; the ninth word has a pattern of repeating letters ("4" and "1"); and the last word begins and ends with the same letter.

- **Words or sequences that repeat** – We see that the first two words (a sentence) repeat as the sixth and seventh words. In addition, the first word repeats yet again as the eighth word.

A good place to begin your solving of this puzzle might be to make lists of two-letter, three-letter, and appropriate four-letter words spelled out in the diagram. For example, you might find the following words (these lists are not exhaustive):

Two-letter words (some possibilities for "11-10"): AD, AN, EM, EN, IF, IS, ME, NO, ON, OR, SO, WE

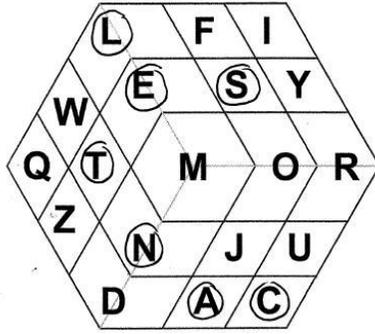
Three-letter words (with no repeating letters; some possibilities for "5-4-6"): AND, ANT, CAD, CAN, ELF, END, FEN, FEW, JOY, LET, MEN, MET, MEW, NET, NEW, ONE, ROE, SEW, SON, SOY, TEN, WEN, WET, YON, YOU

Four-letter words with an apostrophe (with no repeating letters; some possibilities for "12-13-2'-14") – CAN'T, ELF'S, JOY'S, ONE'S, ROE'S

Four-letters words that begin and end with the same letter (some possibilities for "1-9-8-1") – ELSE, NEON, SOYS, TENT

Several of the two-letter words listed here are quite common. Among the three-letter words, AND and YOU are probably most common. And in the last two categories above, CAN'T and ELSE are probably the most common words.

Perhaps our best bet is to begin by guessing CAN'T or ELSE – or perhaps *both*. (Again, it is advisable to use a pencil in solving so that we can easily erase any unfruitful guesses.) Here is what we get if we venture both of these guesses simultaneously:



E	N			
1	2	3	4	5

				S	E	L	
5	4	6	7	8	1	9	10

11	10	5	4	6

C	A	N	'	T
12	13	2		14

E	N			
1	2	3	4	5

				S	E	L	
5	4	6	7	8	1	9	10

E	N			
1	2	3	4	5

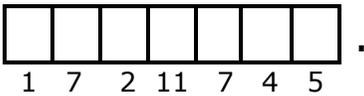
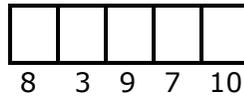
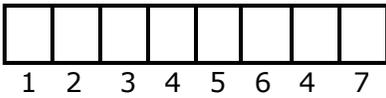
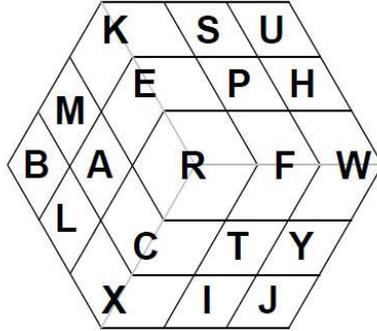
S			E	N	E
8	4	15	1	4	2

E	L	S	E
1	9	8	1

The rest of the solution is a matter of filling in the gaps; for example, "10" must be adjacent to both E and L and the only unused letters that qualify are W and F. Thus the ending of the second and seventh word clearly has to be -SELF. Then the second and seventh words must be YOURSELF and the fourth word must be YOU.

The list of two-letter words may come in handy when you are solving the third word in this puzzle. (In general, the lists that you make of words spelled out in the diagram should prove a useful resource as you solve.)

An Example Rated "Hard"



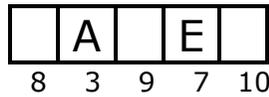
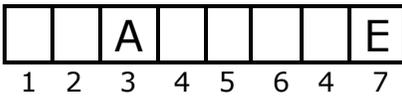
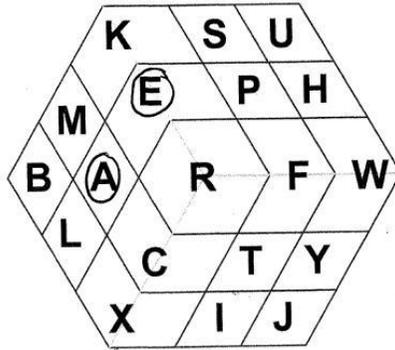
A Quip-Find puzzle tends to be more difficult if the quip is short and the words are long. Short quips provide a limited context in which to solve, while long words are harder to spot than short ones. This puzzle consists of only three words and none of them are really short, the shortest being the second word (five letters).

Probably the best place to start is to search the diagram and find as many five-letter words as you can where none of the letters repeat. Here is our list (not exhaustive):

Five-letter words (without repeating letters) – BALMS*, BARES, BLAME, BLARE, CARES, CREAK, CREAM, FREAK, FRESH, LACES, LAKES, LAMER, MAKES, MARES, PUSHY*, REALM, REAMS*, SMEAR*, SPEAR

* Each of these words involves a wraparound.

We may notice that, in this word list, seven of the nineteen words have E as the fourth letter, and that *all of these* have A as the second letter. Accordingly, we might start by guessing that "3" is A and "7" is E. With these guesses, the puzzle looks like this:



Again, the key to solving the puzzle, once we have made an initial guess, is filling in between the guessed letters to create a continuous path that makes sense. The sequence "E-2-11-E" in the third word might catch our eye. Obviously both "2" and "11" must be adjacent to E *and* adjacent to one another.

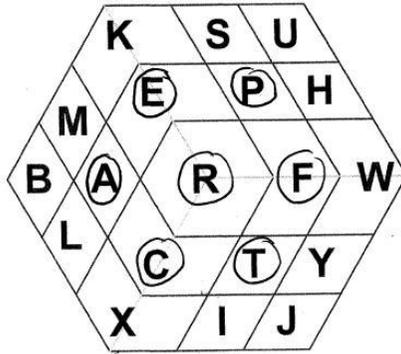
If we look at the letters adjacent to E in the diagram (other than A), we might come up with a list of letter sequences that could fit here and conceivably be part of an English word; for example:

Some possibilities for "E-2-11-E": ECRE, ERCE, ERFE, ERPE

The first of these could be part of the word SECRETS, but this word can't be spelled out in the diagram (T is not adjacent to E or S). ERCE could be part of PERCENT – but N does not appear in the diagram.

ERFE could be part of PERFECT – and this word *can* be spelled out! ERPE could be part of SERPENT – but, again, there is no N in the diagram.

It appears that PERFECT is the best guess for the last word. When we update the cryptogram and diagram accordingly, we get:



P	R	A	C	T	C	E
1	2	3	4	5	6	4

	A	E	
8	3	9	7

P	E	R	F	E	C	T
1	7	2	11	7	4	5

The answer is obvious at this point. We can confirm that the remaining letters in the answer do indeed form one continuous path in the diagram.

A Note about Some "Special" Puzzles

Generally, the puzzles in this book involve **one** diagram in which **one** quip is spelled out. However, *some* puzzles deviate from this norm:

Two-in-One (Two Quips, One Diagram) – There is one puzzle (Puzzle No. 104, page 129) that has **two** separate but related quips in **one** diagram. One quip is labeled "(1)" and the other "(2)". The code

in the cryptogram is the same for both quips; for example, "5" in the second quip stands for the same letter as "5" in the first quip.

A **special rule** applies to this kind of puzzle: Any time there are two separate quips in one diagram, the last letter of (1), the first quip, is *not necessarily* adjacent to the first letter of (2), the second quip. The two quips involve *two separate* continuous paths, one for each quip; they do not necessarily involve a *single* continuous path, as all single-quip puzzles do.

One-in-Two (One Quip, Two Diagrams) – This book also introduces puzzles that present **one** quip using **two** diagrams; the diagrams and cryptograms of such puzzles always appear on facing pages. There are 24 such puzzles in the book.

The two parts of the quip are labeled "(1)" and "(2)". The code in the two cryptograms is the same for both parts; for example, in Puzzle No. 30 (pages 30-31), "6" in the cryptogram for part (2) stands for the same letter as "6" in the cryptogram for part (1).

Two-in-Two (Two Quips, Two Diagrams) – There are two other puzzles in the books (Puzzle No. 33, pages 36-37, and Puzzle No. 61, pages 74-75) that involve **two** quips split between **two** diagrams. In each case, the first quip begins as part (1) in the first diagram and concludes as part (2) in the second diagram. The second quip – the name of the author of the quip in each case – is labeled "(3)" and is found in the second diagram.

The **special rule** (above) applies to the two quips in the second diagram: The last letter of (2), the second part of the first quip, is *not necessarily* adjacent to the first letter of (3), the second quip.

I hope that you have found these suggestions and examples of how to solve Quip-Find puzzles helpful. Above all, I hope that you enjoy solving the puzzles in this book, and in future Quip-Find puzzle books.

—Jim Rader