WORD CHANGING

SICK
SILK
SILL
SELL
WELL

Here we have changed SICK to WELL in four steps. In each step only one letter is allowed to change, and each line must be a proper word. I call this a direct change, an indirect one would be, for instance, "change DRY to WET in five steps" with the answer DRY Pry PAY PET WET, because D does not change directly to W, but first changes to P, and then P changes to W, and again the middle letter R does not change directly to E, but changes first to A. A direct change from DRY to WET would only need three steps (one for each letter), but this would only be possible with nonsense words – DRY DEY DET WET, for example. Indirect changes are harder to guess, because any letter of the alphabet might come into the intermediate steps. (Try changing WORK into PLAY in seven steps, if you want to see how hard it can be.)

With direct changes no new letters are brought in. We only have to decide whether to change the first letter first, or the second letter first and so on.

I find it helpful to us to use small letters for the word we start with (sick): and capitals for the one we finish with (WELL). Then we can see what has been changed and what has not.

If we began by changing the first letter of sick we should get wick, which is a word. If we began by changing the second letter we should get sEck, which is not a word, so we cannot start this way. Changing the third letter would give us siLk, which is a word. If we began by changing the fourth letter we should get sicL, which is not a word. We can put all of this into diagram, like this

\[
\begin{array}{c}
\text{sick} \\
\text{Wick} \\
\text{siLk} \\
\text{sicL}
\end{array}
\]

(please note this last line was missing and we have guessed) from Anne