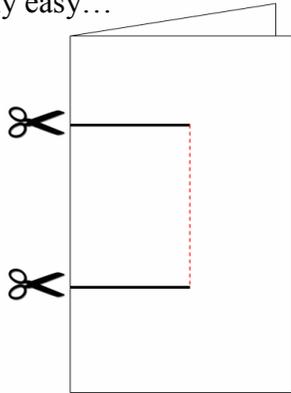
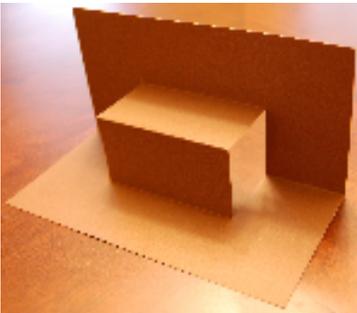


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## pop-ups

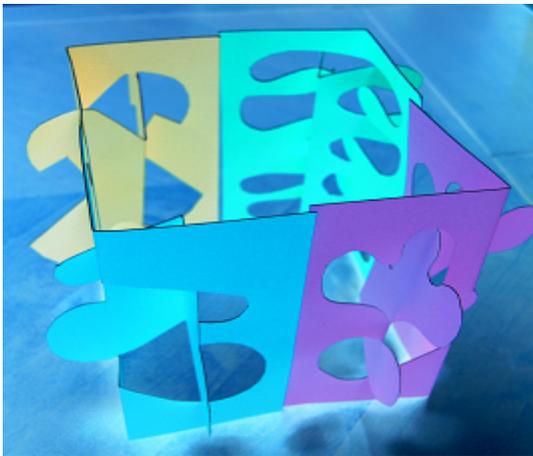
Pop-up books date back to the late 1800s. Incised (or single sheet) models have a simple elegance and their method of construction is fairly easy...

### The double slit method



After folding a sheet of crisp paper in half, cut two separate lines starting from the closed crease. Now fold the loose section between the slits forwards and backwards (the red line in the diagram) and open the paper. Lastly, recrease the fold of the loose section in the opposite direction to transform the paper from two dimensions into three!

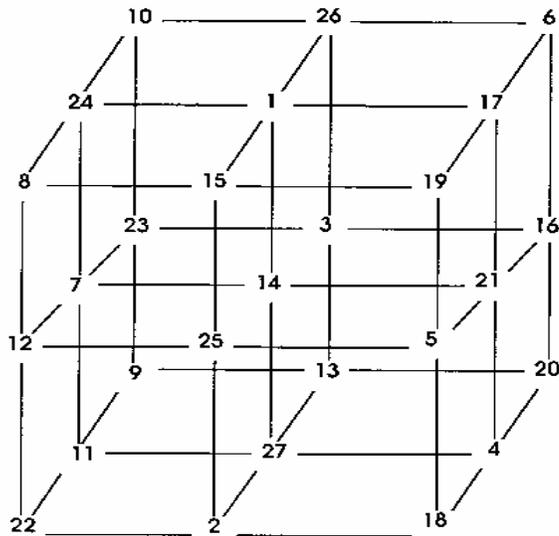
Now instead of cutting two straight lines, experiment!



Ready for more? Check out Paul Jackson's book *Artistry in Paper* or his website at [http://www.origami-artist.com/pop\\_ups.htm](http://www.origami-artist.com/pop_ups.htm)

## THE 42 CONUNDRUM

Science fiction author Douglas Adams immortalized the number "42" thirty years ago in his book *The Hitchhiker's Guide to the Galaxy* as "the Answer to the Ultimate Question of Life, the Universe, and Everything." When asked to explain, Adams said it was a joke. Fans, however, were spiritedly unconvinced. Numerous websites are devoted entirely to unmasking the 42 enigma. Here's one possibility... Consider the context in which Adams gives the answer. 42 is derived from the sentence the main character spells from pulling random Scrabble tiles out of a bag: **What you get if you multiply nine by six.** Everyone knows  $9 \times 6$  is 54 not 42. But 9, 6, and 42 do have a connection in this magic cube!



6 sides, 9 numbers on each, and the sum of each row or column is 42!

This illustration is from Theoni Pappas' 1986 book *The Joy of Mathematics*. Most of Pappas' sources are pre-1980. It's at least plausible that Adams may have been familiar with this puzzle. Alas, he died in 2001 so the world may never know!