

El Cub Soma







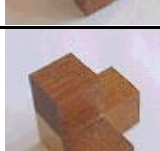
El cub Soma és un trencaclosques geomètric, amb 7 peces formades per cubs les quals formen un cub més gran.

Va ser creat pel poeta i matemàtic i inventor danès Piet Hein l'any 1936. Hom diu que durant una conferència pel matemàtic Heisenberg (Alemanya 1901-1976), Hein va començar a pensar amb els distints policubs que podrien obtenir unint diversos cubs de la mateixa grandària i va comprovar que tots els policubs irregulars formats per quatre o menys cubs formaven un total de 27 cubs i podien unir-se en un cub major amb tres cubs d'aresta.

Posteriorment, el matemàtic geòmetra John Conway va comprovar que hi havia 240 formes distintes de resoldre el problema.



Les peces del cub Soma són:

Policubs		
1	Tricub plano en forma de L	
2	Tetracub plano en forma de L	
3	Tetracub plano en forma de T	
4	Tetracub plano en forma de Z	
5	Tetracub tridimensional de forma helicoidal dextrògira	
6	Tetracub tridimensional de forma helicoidal levògira	
7	Tetracub tridimensional de forma de trípode	

Els policubs de 4 o menys cubs que no figuren en aquesta llista són tots regulars.

Cub Soma

Amb aquestes set peces:



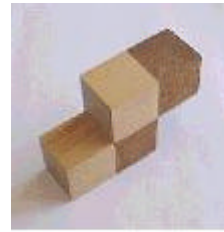
Peça 1



Peça 2



Peça 3



Peça 4



Peça 5

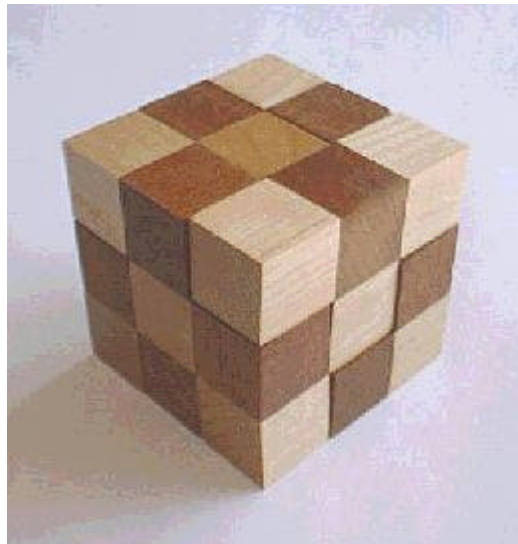


Peça 6

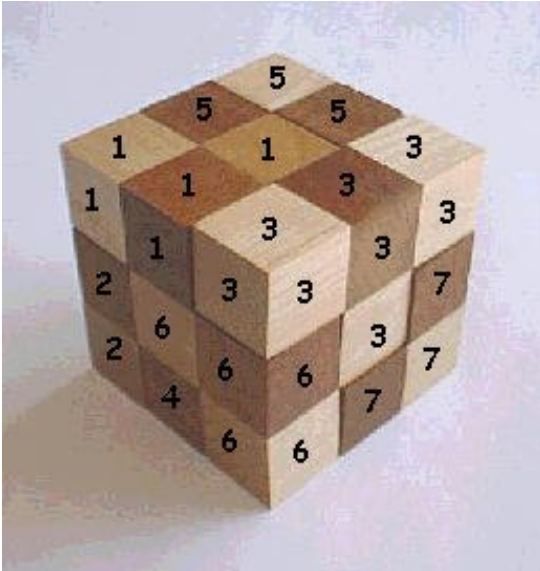


Peça 7

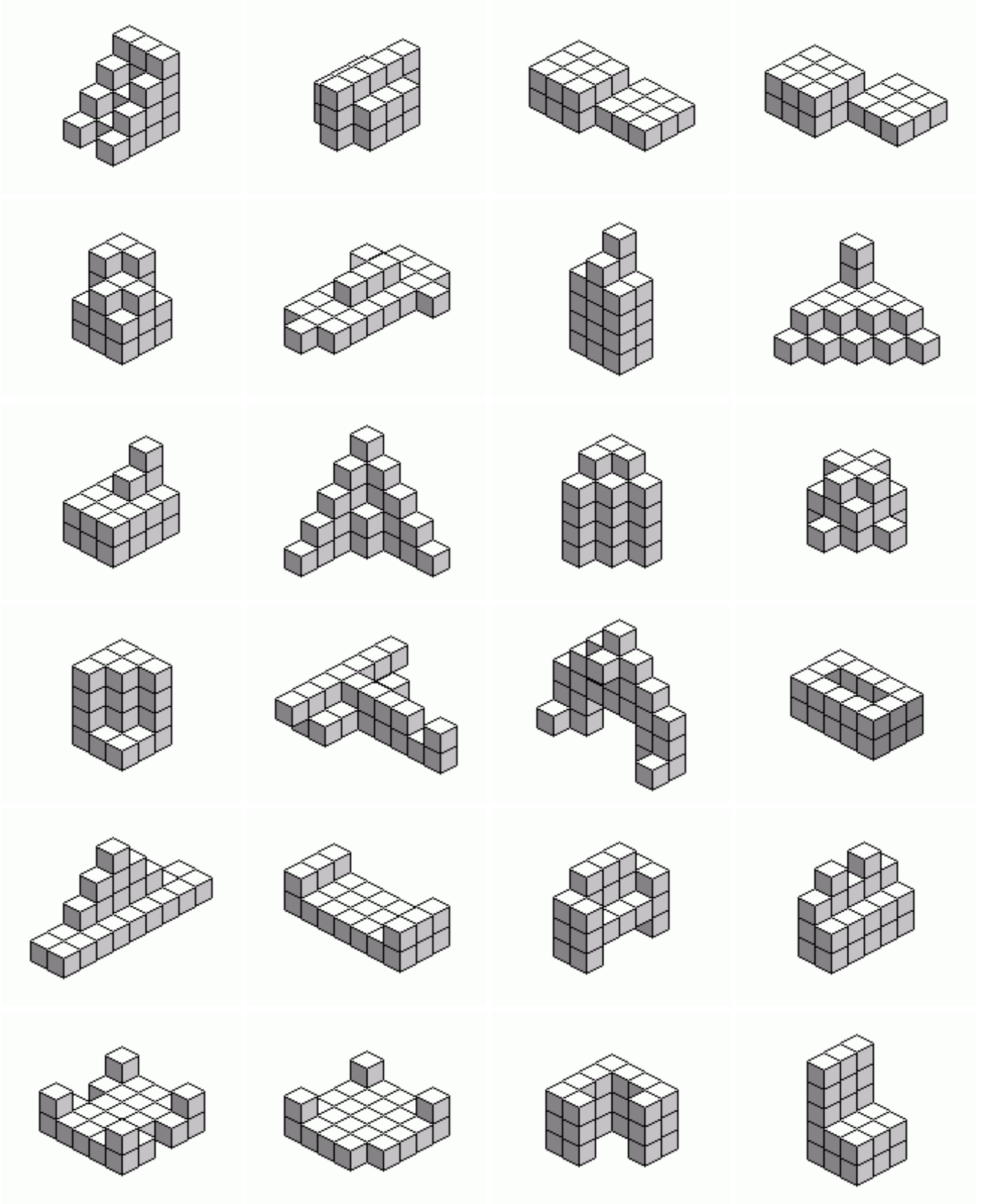
construeix un cub de dimensions 3 x 3 x 3.

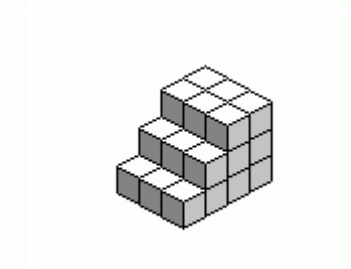
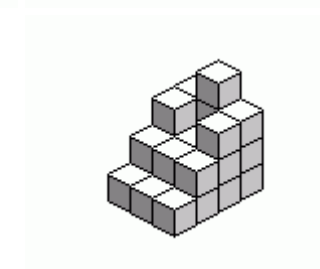
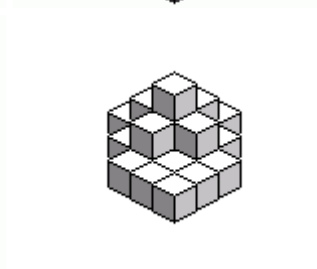
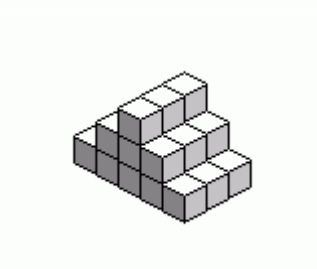
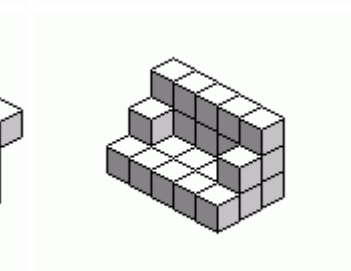
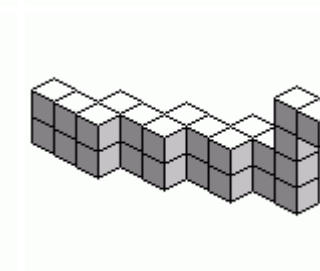
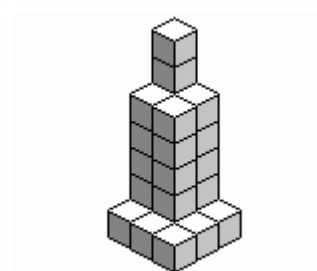
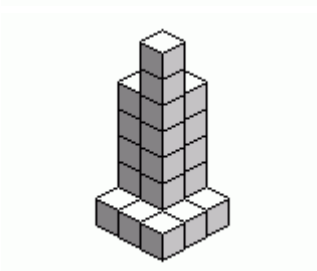
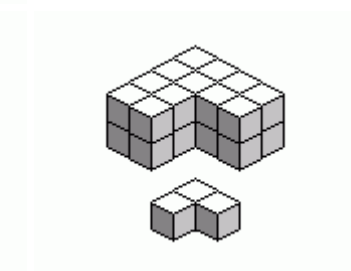
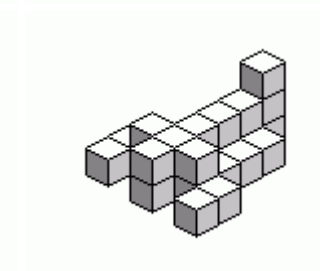
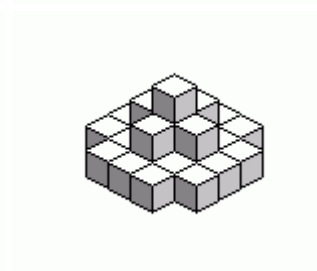
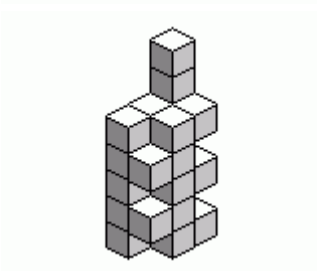
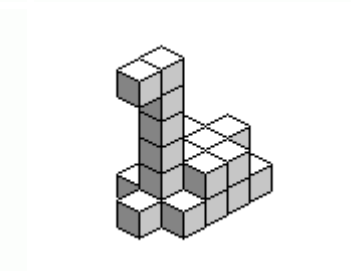
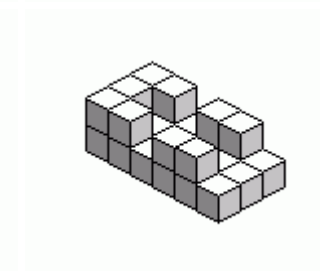
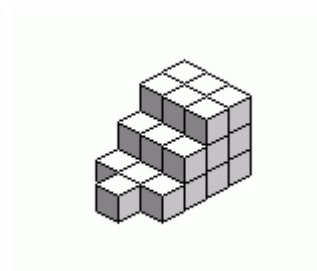
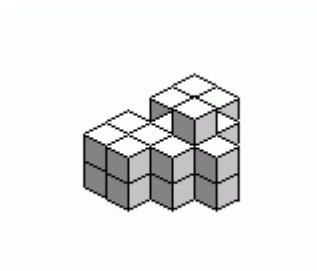
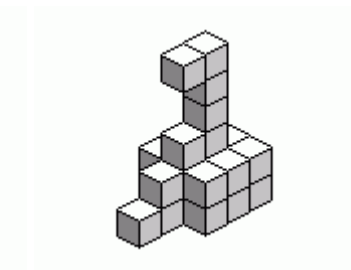
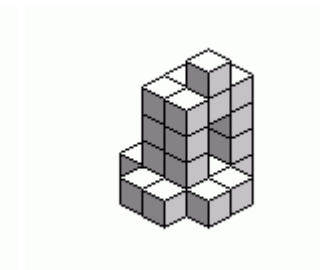
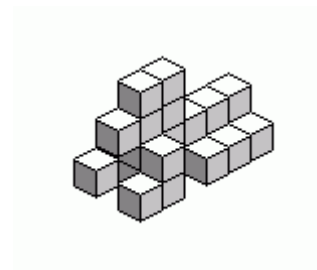
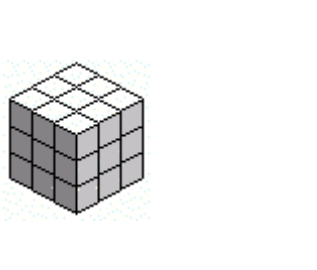
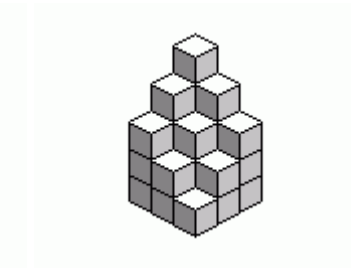
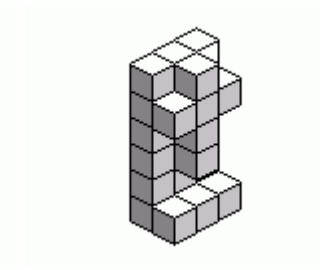
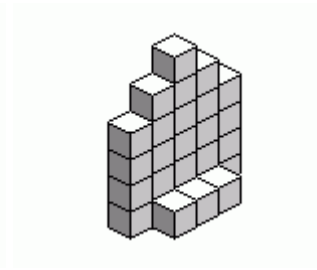
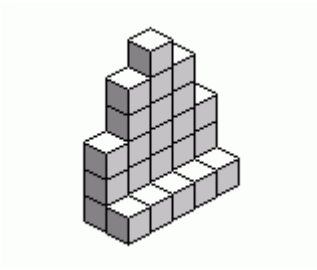


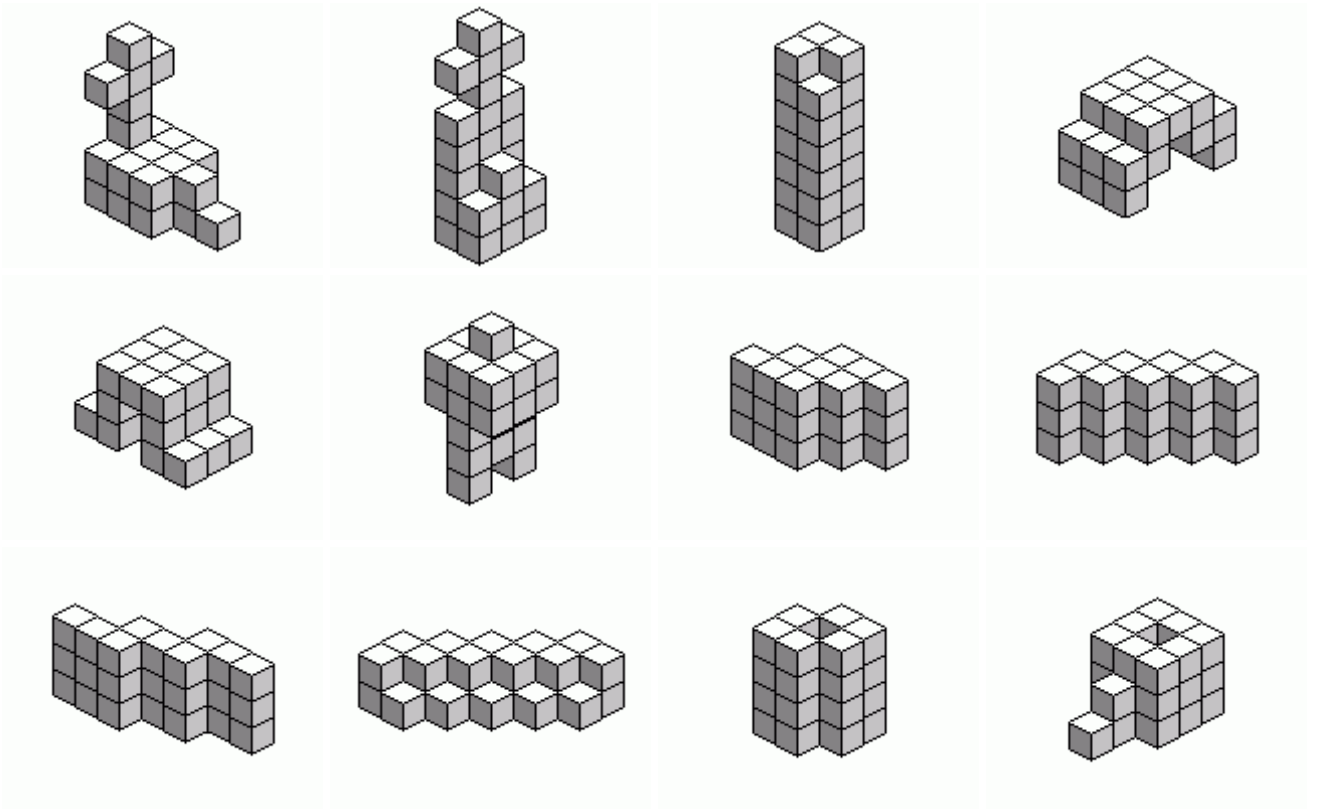
Una de les solucions:



Altres construccions per fer amb les peces del Cub Soma







Adreces del Cub Soma

<http://www.fam-bundgaard.dk/SOMA/SOMA.HTM>

<http://puzzlesolver.com/index.php>

<http://www.sectma.pe.gov.br/notitia/administracao/espacociencia/mat/conteudo/cubosoma.htm>

<http://www.piethein.com/usr/piethein/HomepagUK.nsf>

Pàgina de l'inventor del Cub Soma