

## On the Subject of 3D Chess

*e2* → *a8*#

- There are seven chess pieces that are placed on a 5×5×5 chessboard.
- You may see the each piece's position by pressing on its corresponding button. Doing so will change the screen to display a coordinate in the format of [Letter][Roman Numeral][Letter][Numeral]. The first letter represents the piece that is in that position, the Roman Numeral represents which layer the piece is on, and the second letter/numeral pair represents a standard chess coordinate in that layer.
- Each of the seven pieces will attack the next piece in order (wrapping from VII to I) with the exception of one piece attacking nothing.

Consequently, there will also be one piece that is not being attacked.

Find a piece in the table below using the intersection of the piece that is not being attacked (piece 1) and the piece that is not attacking (piece 7) to use as your eighth piece. Place your eighth piece such that it is being attacked by piece 7, and also attacks piece 1.

	N	B	R	Q	K
N	B	R	Q	K	N
B	R	Q	K	N	B
R	Q	K	N	B	R
Q	K	N	B	R	Q
K	N	B	R	Q	K

- The movement of each chess piece for a 3D grid can be determined by using its 2D movements and rotating it about the X axis 90 degrees as well as rotating it about the Z axis 90 degrees.

