

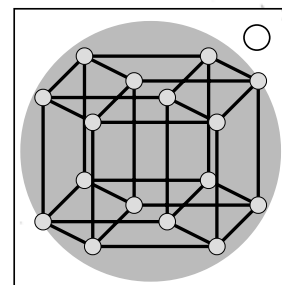
On the Subject of The Hypercube

This device looks like it was recovered from an alien spacecraft. It moves in strange ways. What does it want from us?

Observe the sequence of five 4D rotations of the hypercube. There is a brief pause when the sequence repeats.

From the first four rotations, obtain four hypercube faces as listed in the Face column in the below table.

From the fifth rotation, obtain a sequence of colors as listed in the Order column in the below table.



Rotation	Face	Order
XY	back-right	GYRB
XZ	zig-right	RYBG
XW	zig-back	BRYG
YZ	top-right	BYRG
YW	back-left	YBGR
ZW	bottom-right	YRBG

Rotation	Face	Order
YX	zag-bottom	BGRY
ZX	zig-bottom	GYBR
WX	zag-back	GBRY
ZY	zag-right	YBRG
WY	top-front	GRBY
WZ	top-back	BGYR

The rotations are identified by which positive axis direction rotates into which other positive axis direction.

To begin, touch any vertex of the hypercube. This will cause the rotations to cease.

On the face identified by the first rotation, touch the vertex of the color identified by the first color in the color order obtained earlier.

Repeat this with the remaining rotations and colors in the sequence.

A mistake will cause the rotations to resume. The sequence of rotations remains the same, but the vertices may be colored differently.

The Y axis not shown has +Y/top and -Y/bottom and is perpendicular to X and Z.

