## Juno's Spinner Truncated Icosahedron

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## Abstract

Juno's spinners are polyhedral models that Junichi Yananose has discovered that links and transforms. With a simple operation, it expands and shrinks. The usual model of the Juno's spinner consists of two elements. A rotational joint that connects the end of each element, and the whole model transform together by a motion being transmitted through the joint. Rotational movement of an element changes the distance of each element. The Truncated Icosahedrons' model for the workshop consists of 4 types of elements (two types of narrow inner elements and pentagonal and hexagonal outer elements) and 150 rotational joints.



## **To Expand and Shrink**

When you expand Juno's Spinner, hold opposite sides of outer elements. Then move your each hand away. You may also spin and throw it up like professional bowlers.









When you shrink Juno's Spinner, bounce it in your hands gently. If you made mistake at top and bottom of elements, you wouldn't shrink it.









## Number of elements and assembly of the Juno's Spinner

A pentagonal and hexagonal element should always be placed outside of the model.

