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THRESHOLD

NEW CHEMICAL ELEMENTS

The Universe was a relatively simple place until the first stars aged and died. You couldn't make much with just hydrogen and helium. Dying stars were another story. They created the extremely high temperatures necessary to fuse nuclei and create new chemical elements. All had distinct properties and provided the raw material for a nearly infinite number of new possibilities.



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THRESHOLD

NEW CHEMICAL ELEMENTS

INGREDIENTS

Aging and
dying stars

Very high
temperatures



GOLDBLOCKS CONDITIONS

Stars running out of
hydrogen fuel

Leads to their producing elements as
heavy as iron through nuclear fusion

Giant stars collapsing

Leads to supernovae with the necessary
conditions to forge most of the elements
of the periodic table, scattering them as
they explode



NEW COMPLEXITY

Chemistry is born

Ninety-two elements,
each with its own distinct
structure and properties,
scatter throughout space
and combine with one
another to form chemical
compounds that interact
in complex ways