Oriigami – once considered merely a craft – is today recognized as sophisticated paper sculpture, celebrated for its intricate fold patterns. Fold processes are used not only by artists and crafters, but also by scientists and engineers who employ similar folds to create heart stents, space telescopes, and vehicle air bags from materials other than paper.

Whether a craft project, art form, or mathematical model, a common language describes the folds and fold patterns.

Find the origami terms in the puzzle below and think about how each word suggests an action.

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In celebration of the 100th birthday of Alberta Cunningham, an advocate for education and the arts, contributions from her family and friends support this Activity Guide.

Robert J. Lang, *Raven, Opus 422*, 2004, one uncut square of Korean hanji and foil paper.
A recent *New York Times* article referred to origami as the **science of paper folding** – a combination of geometry, math theory, and patterns – single squares of paper transformed into intricate 3-D sculptures.

This science can be shared in words and in diagrams called “crease patterns.” Artist and physicist Robert J. Lang developed a computer program that generates crease patterns for his origami sculptures.

Lang writes: “Origami crease patterns serve many purposes: to the designer, they provide a structural representation of the artwork. To a folder, they can provide signposts on the way to a fold. To the everyday viewer, they provide an alternate way of looking at the folded subject: in a crease pattern, you can see everything that is hidden in the folded work.”

Beautiful crease patterns can be art, too.

Lang folded *The Sentinel II, Opus 627* (above) based on the crease pattern sheet shown in miniature.

Add color to the enlarged detail to create something new.

**BONUS:** For more information on crease patterns visit langorigami.com.