

of gravity and light

a contemporary ballet and orchestral concert work
by composer Beau Kenyon and produced by Ballet Des Moines

Composition & Concept Beau Kenyon Choreography Tom Mattingly Media Projection Yu-Wen Wu

The 50-minute staged work interprets the science of the solar system, translating astrophysical concepts into musical structures and choreographed movement. Scientific concepts taken directly from the 7th Grade Next Generation Science Standards, like cyclical patterns of the Sun-Earth-Moon System and the role of gravity in motions within the solar system, are interpreted into an interdisciplinary staged work of live music for choir and mixed ensemble, contemporary ballet, and large-scale projection.

In addition to this new creative work, Kenyon developed a companion science curriculum in collaboration with Dr. Sara Nelson (Iowa State University and the NASA Iowa Space Grant Consortium), Dr. Shawn Stevens (GBH Education), and Tiffany Morgan and Cody Smith (Iowa PBS). Additional advisors include Dr. Ilya Vidrin (Northeastern University), Dr. Mariel Pettee (UC Berkeley) and Dr. Merritt Moore. The modular science curriculum uses excerpts from **Of Gravity and Light** to teach the science of the solar system to 7th grade students.

Of Gravity and Light: Teaching the Science of Our Solar System With Creativity and Curiosity is a modular science curriculum that meets Next Generation Science Standards. Learning materials serve as a companion to Beau Kenyon's new ballet **Of Gravity and Light**, which draws from the science of our solar system as source material for his new work. Music, dance, and media arts are integrated with hands-on activities and multimedia resources developed by NASA, GBH, and Iowa PBS. Students explore the science of our solar system through creativity and artwork while using these same tools to demonstrate understanding of a scientific concept. All four learning modules draw examples from **Of Gravity and Light** as examples of how professional artists interpret science through their respective disciplines while prompting learners to use the creative arts to demonstrate understanding of scientific concepts.



Of Gravity and Light learning material uses hand on activities, creativity, and artworks as tools to better understand the science of our solar system. Creativity is a learning tool to support curiosity-led learning. It also becomes a mode for students to display understanding of a scientific principle.

The curriculum is free for all, published through Iowa State University, and distributed by 4-H Youth Development, Iowa PBS/PBS Learning Media, and Ballet Des Moines. A detail below lists all partners engaged to create **Of Gravity and Light** and the companion curriculum. A complete list of partners are below:

National Partners

GBH
Research and Education Partner

PBS Learning Media
Outreach Partner

Northeastern University
Research Partner

UC Berkeley
Research Partner

Iowa Statewide Partners

NASA Iowa Space Grant Consortium
Research, Education, and Outreach Partner

Iowa PBS
Research, Education, and Outreach Partner

Iowa Department of Cultural Affairs
Program Outreach and Engagement Partner

Science Center of Iowa
Program Engagement Partner

Des Moines Partners

Ballet Des Moines
Producing Partner

Harkin Institute
Program Engagement Partner

Mainframe Studios
Program Engagement Partner

Des Moines Art Center
Program Engagement Partner

From the Composer and Creator Beau Kenyon "I built **Of Gravity and Light** on the scientific principles of our solar system, but as much as this ballet maps musical systems onto our solar system, it is not purely about the science, alone. The science also provides a series of rich metaphors and questions to explore. As this piece progresses, I would ask you to consider the title of each movement (phrases that were lifted verbatim from scientific texts) and contemplate what anchored light means to you. I would also invite you to consider how our lived experiences are comprised of **gravity and light** – how these two seemingly simple and familiar concepts are so complex in and of themselves – working together to pull us down, root our feet to stand upright, illuminate our consciousness, breath light onto our planet, and pull us into each others' orbits. **Of Gravity and Light** emerged from these ideas and questions to create an incredibly personal new work, built from a language of scientific experiences that are universally experienced."

Watch **Of Gravity and Light**
with Iowa PBS



Learn more at
oakleycollective.org/gravity



Learn more at
balletdesmoines.org/gravity



