

About this Issue

The article "[Flamingos' bones favor one-leg stance](#)" (10.8 readability score) discusses recent experiments that measured how difficult it is for flamingos to balance on one leg and explores flamingo anatomy to determine how it might account for the unusual pose. Students can focus on details reported in the article, follow connections to earlier articles about birds and balance, explore cross-curricular connections to other major science topics, and test the balance of structures that they build.

Science News for Students provides another version of this article written at a lower Lexile level (7.4 readability score): "[Flamingos' bones favor one-leg stance](#)." [Power words](#) are defined at the end of the *Science News for Students* article.

Want to introduce your students to an interesting STEM career related to this article? Check out [Cool Jobs: Motion by the numbers](#) (7.9 readability score) by *Science News for Students*.

Read more about the flamingo and its place in the bird family tree by reading "[Bird DNA leads to strange family tree](#)" (7.6 readability score) in *Science News for Students*. Or, find out more about technology that flies like a bird by reading "[These drones are for the birds](#)" (6.4 readability score) in *Science News for Students*.

Connections to Curricula:

Bird Anatomy	.....
Evolution	.....
Muscles	.....
Feedback control	.....
Stability	.....
Center of mass	.....
Center of gravity	.....
Force	.....
Balance	.....
Buoyancy	.....

What's in this Guide?

- [Article-Based Observation](#): These questions focus on reading and content comprehension by drawing on information found in the article "[Flamingos' bones favor one-leg stance](#)." Questions focus on flamingo anatomy and center of gravity and recent research measuring how well flamingos balance on one leg.
- [Quest Through the Archives](#): With Internet access and your school's digital access to *Science News*, your students can use this short section to explore other articles about the history of research on birds as well as about balance problems in humans as reported by *Science News* since 1924.
- [Cross-Curricular Discussion](#): These questions and extension prompts connect to the article "[Flamingos' bones favor one-leg stance](#)" and encourage students to think in more detail about scientific areas related to the article. The section is subdivided roughly by science discipline for educators who would like to focus on one particular topic area. The extension prompts are either

more topic specific or more conceptually advanced. **Physical Sciences** questions focus on stability and center of mass. **Engineering and Experimental Design** questions discuss the stability of a wide variety of structures and vehicles.

- **Activity:** Like flamingos, students can perform their own balancing act. They can create their own structures, note where the center of gravity is and test how well the structures balance.

Standards Alignment

Next Generation Science	Common Core
Motion and Stability: Forces and Interactions: HS-PS-2-1 , HS-PS-2-2 , HS-PS-2-3 , HS-PS2-6	ELA Standards: Reading Informational Text (RI): 1, 2, 4, 5, 7
From Molecules to Organisms: Structures and Processes: HS-LS1-1 , HS-LS1-2 , HS-LS1-3 , HS-LS1-6	ELA Standards: Writing (W): 1, 2, 3, 4, 6, 7, 9
Biological Evolution: Unity and Diversity: HS-LS-4-2 , HS-LS-4-3 , HS-LS-4-4	ELA Standards: Speaking and Listening (SL): 1, 2, 4, 6
Engineering Design: HS-ETS1-1 , HS-ETS1-2	ELA Standards: Reading for Literacy in Science and Technical Subjects (RST): 1, 2, 4, 7, 8, 9
	ELA Standards: Writing Literacy in History/Social Studies and Science and Technical Subjects (WHST): 1, 2, 4, 6, 7, 9