

About this Issue

The article "[Malaria molecule lures mosquitoes](#)" (12.9 readability score) reports new clues about how mosquitoes may be preferentially attracted to malaria-infected individuals. Red blood cells with more of a molecule produced by the malaria parasite release more carbon dioxide and more airborne chemicals known to attract mosquitoes. Students can focus on details in the article; find connections to earlier articles about malaria, parasites or other diseases; explore cross-curricular connections to other major science topics; and learn about how diseases affect the blood by comparing malaria-infected blood with healthy blood and other samples under the microscope.

Science News for Students provides another version of this article written at a lower Lexile level (8.0 readability score): "[Malaria molecule lures mosquitoes](#)." [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: [Finding new uses for nature's poisons](#) by *Science News for Students*.

Connections to Curricula

Public health
Biochemistry
Microscopy
Blood and cells
Protists
Viruses
Molecular structure
Epidemiology
Disease

What's in this Guide?

- [Article-Based Observation](#): These questions focus on reading and content comprehension by drawing on information found in the article "[Malaria molecule lures mosquitoes](#)." Questions focus on a recent research finding that connects malaria parasites in hosts to a host's attractiveness to mosquitoes.
- [Quest Through the Archives](#): Mosquitoes that carry the Zika virus have received a lot of attention in the last year, but mosquitoes play a big role in the spread of many other diseases. With Internet access and your school's digital access to *Science News*, your students can use this short section to explore the history of diseases carried by mosquitoes as reported by *Science News* since 1922.
- [Cross-Curricular Discussion](#): These questions and extension prompts connect to the article "[Malaria molecule lures mosquitoes](#)" and encourage students to think in more detail about scientific areas related to the article. The section is divided roughly by science subdiscipline for educators who would like to focus on one particular topic area. The extension prompts are either more topic specific or more conceptually advanced. **Biological Sciences** questions concern the life cycle of malaria parasites and related organisms. **Chemical and Physical Sciences** questions focus on molecular

March 18, 2017

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structures of biomolecules and the benefits of understanding their properties. **Engineering and Experimental Design** questions cover potential applications of the new research and explore other host-controlling parasites.

- **Activity:** **Malaria Under the Microscope** gives students the opportunity to explore differences between healthy and infected cells by comparing prepared microscope slides of mosquitoes, human blood, malaria-infected blood and other related samples. Students will also explore the basis of some disease symptoms.

Standards Alignment

Next Generation Science	Common Core
From Molecules to Organisms: Structures and Processes: HS-LS1-2	ELA Standards: Reading Informational Text (RI): 1, 2, 4, 5, 7
Ecosystems: Interactions, Energy and Dynamics: HS-LS2-8 , HS-LS2-4 , HS-LS2-6 , HS-LS2-8	ELA Standards: Writing (W): 1, 2, 3, 4, 6, 7, 9
Biological Evolution: Unity and Diversity: HS-LS4-3 , HS-LS4-4 , HS-LS4-6	ELA Standards: Speaking and Listening (SL): 1, 2, 4, 6
Earth and Human Activity: HS-ESS3-5 , HS-ESS3-6 , HS-ESS3-8	ELA Standards: Reading for Literacy in Science and Technical Subjects (RST): 1, 2, 3, 4, 5, 7, 8, 9
Engineering Design: HS-ETS1-1 , HS-ETS1-2	ELA Standards: Writing Literacy in History/Social Studies and Science and Technical Subjects (WHST): 1, 2, 4, 7, 9