Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_

Citing Textual Evidence Teacher \_\_\_\_\_\_\_\_\_\_\_

Question: *How does the author try to help you understand the term “tensile strength”? Answer the question using the steps of citing textual evidence: state your idea, cite what in the text led you to that idea, and explain the evidence.*

Big marine predators that try to snack on a hagfish get a nasty surprise. When threatened, the slender hagfish releases enough snotty goo to gag a shark. Materials scientists from Douglas Fudge’s laboratory at the University of Guelph in Canada have now found a way to create strong, stretchy fibers from the slime.

Hagfish slime contains tiny fibers that give it strength and help keep it from tearing apart. (Those fibers also help gag any shark or other hungry predator.) The fibers are made of proteins similar to those found in fingernails and hair. (Proteins are often called the “building blocks of life.”) The Canadian scientists used the slime proteins to create threads about as long as an unsharpened No. 2 pencil, but much skinnier.

Hagfish threads have remarkable tensile strength: That means they can stretch a long way before breaking — almost as far as spider silk can, explains Fudge. What’s more, he notes, fabrics from hagfish threads would be more environmentally friendly than many modern materials, like nylon (which comes from petroleum).

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