



## GORONGOSA TIMELINE SOCIAL AND ENVIRONMENTAL SCIENCE WORKSHEETS

Both worksheets complement the Click and Learn “Gorongosa Timeline” developed in conjunction with the short film *The Guide: A Biologist in Gorongosa* (<http://www.hhmi.org/biointeractive/the-guide-a-biologist-in-gorongosa>) and provide questions that allow students to discuss events in the history of Gorongosa National Park from either a social science or environmental science perspective. The focus is primarily on modern human impacts as a result of Mozambique’s Civil War, the development of the area surrounding Gorongosa National Park, and the more recent work on the part of philanthropists, scientists, locals, and the Mozambique government to restore and manage one of the most biodiverse locations on the planet. It is recommended that students watch the video first, followed by a discussion of the content. Students may also benefit from reading the article “Gorongosa: Restoring Mozambique’s National Treasure” (<http://www.hhmi.org/biointeractive/gorongosa-restoring-mozambiques-national-treasure>). The article can be used as a homework assignment prior to viewing the film or as a catalyst for discussion afterward.

The **social science worksheet** focuses on Common Core ELA standards in history and social studies. Chronologically organized short-answer questions are followed by concluding and extended learning questions. The latter should be answered in the form of a short essay and may be completed on a separate sheet of paper. Students also have the opportunity to express their opinion about specific events in four chronologically organized opinion questions.

In the **environmental science worksheet**, students analyze timeline events, describe how human activities have changed the ecology of the area, and use data provided from wildlife counts to link human activity to changes in populations of native species. The activity culminates with an analysis of the needs and impacts of both the regional wildlife and the poorest human populations in the surrounding area. Students are additionally asked to predict how positive changes due to conservation and intervention will impact future challenges and successes in the park.

The resource materials provided for the Gorongosa Timeline Click and Learn are intended to take one to two 45-minute class periods and, if possible, should be used as independent work for students. The assignment is targeted to upper-level high school classes but can be adapted to lower-level classes by letting students work in groups to discuss the answers. Alternatively, students can be assigned selected questions for completion. The timeline table itself is appropriate for grade levels 7–12.

### CURRICULUM CONNECTIONS

**Common Core ELA Standards:** CCSS.ELA-LITERACY.RH.9-10.3, CCSS.ELA-LITERACY.RH.9-10.2, CCSS.ELA-LITERACY.RH.9-10.1.

**NGSS (2013):** MS-LS2-4, MS-LS2-5, MS-ESS3-3, MS-ESS3-4, HS-LS2-6, HS-LS2-7, HS-ESS3-4

**AP Biology (2012–13):** 2.D.1, 2.D.3, 4.A.5, 4.A.6, 4.B.3, 4.B.4

**IB Biology (2009):** G.3.3, G.4.3, G.4.4

**AP Environmental Science:** Themes 1, 4, 5, 6; Topics II.A, II.C, IV.D.3, IV.D.4, IV.D.5, VII.C.1, VII.C.2

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