



CURRICULUM CONNECTIONS

Island of Lemurs: Madagascar 3D

<http://www.thehenryford.org/events/lemurs3D.aspx>

IMAX film in 3D, with Educator Guide (see below).

FILM: After viewing the IMAX film *Island of Lemurs: Madagascar 3D* and with some guidance from teachers, students should be able to:

Michigan Science Grade Level Content Expectations

Grade 3

- L.EV.03.12 Relate characteristics and functions of observable body parts to the ability of animals to live in their environment (sharp teeth, claws, color, body coverings).
- S.RS.03.18 Describe the effect humans and other organisms have on the balance of the natural world.
- S.RS.03.19 Describe how people have contributed to science throughout history and across cultures.
- E.ES.03.43 Describe ways humans are protecting, extending, and restoring resources (recycle, reuse, reduce, renewal).
- E.ES.03.51 Describe ways humans are dependent on the natural environment (forests, water, clean air, Earth materials) and constructed environments (homes, neighborhoods, shopping malls, factories, and industry).
- E.ES.03.52 Describe helpful or harmful effects of humans on the environment (garbage, habitat destruction, land management, renewable, and non-renewable resources).

Grade 4

- L.EC.04.11 Identify organisms as part of a food chain or food web.
- S.RS.04.18 Describe the effect humans and other organisms have on the balance of the natural world.
- S.RS.04.19 Describe how people have contributed to science throughout history and across cultures.

Grade 5

- L.EV.05.11 Explain how behavioral characteristics (adaptation, instinct, learning, habit) of animals help them to survive in their environment.
- L.EV.05.12 Describe the physical characteristics (traits) of organisms that help them survive in their environment.
- S.RS.05.17 Describe the effect humans and other organisms have on the balance in the natural world.
- S.RS.05.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.

Next Generation Science Standards:

Life Science: Ecosystems: Interactions, Energy and Dynamics

Grade 3

3-LS2-1. Construct an argument that some animals form groups that help members survive.

Life Science: Biological Evolution: Unity and Diversity

Grade 3

3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

Earth and Space Sciences: Earth and Human Activity

Grade 5

5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Common Core State Standards in English Language Arts

Speaking and Listening

Grade 3

SL.3.2 Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

Grade 4

SL.4.2 Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

Grade 5

SL.5.2 Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

EDUCATOR GUIDE: http://islandoflemurs.imax.com/downloads/educator_guide_complete.pdf

Michigan Science Grade Level Content Expectations

Grade 2

S.IA.02.14 Develop strategies and skills for information gathering and problem solving (books, internet, ask an expert, observation, investigation, technology tools).

S.RS.02.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.

Grade 3

S.IA.03.14 Develop research strategies and skills for information gathering and problem solving.

S.RS.03.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.

S.RS.03.18 Describe the effect humans and other organisms have on the balance of the natural world.

S.RS.03.19 Describe how people have contributed to science throughout history and across cultures.

E.ES.03.43 Describe ways humans are protecting, extending, and restoring resources (recycle, reuse, reduce, renewal).

- E.ES.03.51 Describe ways humans are dependent on the natural environment (forests, water, clean air, Earth materials) and constructed environments (homes, neighborhoods, shopping malls, factories, and industry).
- E.ES.03.52 Describe helpful or harmful effects of humans on the environment (garbage, habitat destruction, land management, renewable, and non-renewable resources).
- Grade 4
- S.IA.04.14 Develop research strategies and skills for information gathering and problem solving.
- S.RS.04.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
- S.RS.04.18 Describe the effect humans and other organisms have on the balance of the natural world.
- S.RS.04.19 Describe how people have contributed to science throughout history and across cultures.
- Grade 5
- S.RS.05.15 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
- S.RS.05.17 Describe the effect humans and other organisms have on the balance in the natural world.
- S.RS.05.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.

Next Generation Science Standards:

Life Science: Biological Evolution: Unity and Diversity

Grade 3

- 3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

Common Core State Standards in English Language Arts

Reading Informational Text

Grade 2

- RI.2.1 Ask and answer such questions as *who*, *what*, *where*, *when*, *why*, and *how* to demonstrate understanding of key details in a text.
- RI.2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
- RI.2.4 Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*.
- RI.2.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.
- RI.2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Grade 3

- RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

- RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
- RI.3.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 3 topic or subject area*.
- RI.3.5 Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.
- RI.3.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.
- Grade 4
- RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
- RI.4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a *grade 4 topic or subject area*.
- RI.4.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.
- Grade 5
- RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.
- RI.5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 5 topic or subject area*.
- RI.5.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently.
- Writing
- Grade 2
- W.2.7 Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).
- Grade 3
- W.3.7 Conduct short research projects that build knowledge about a topic.
- Grade 4
- W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- Grade 5
- W.5.7 Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.