Academic Standards Met in the Earthship Journey Program

SCIENCE STANDARDS (IAS + NGSS)

Fourth Grade:

4-LS1-1 – Construct an argument that plants and animals have internal and external growth structures that function to support survival, growth, behavior and reproduction.

*4-LS1-2 – Use a model to describe that animals receive different types of information through their senses, process the information in their brain and respond to the information in different ways.

Fifth Grade:

5.LS.3 – Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.

*5-LS2-1 – Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

5-LS1-1 – Support an argument that plants get the materials they need for growth chiefly from air and water

5-ESS2-1 – Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact

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

Sixth Grade:

*MS-LS2-2 Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.

*MS-LS1-6 – Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.

MS-LS2-1 – Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.

*MS-LS2-3 – Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem

* These standards are also met on the Nature Center trail, which is not described in this manual.

MATH STANDARDS

Fourth Grade:

4.CA.1 – Multiply a whole number of up to four digits by a one-digit whole number and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Describe the strategy and explain the reasoning.

Fifth Grade:

5.CA.1 – Solve real-world problems involving multiplication and division of whole numbers (e.g. by using equations to represent the problem). In division problems that involve a remainder, explain how the remainder affects the solution of the problem.

5.M.1 – Convert among different sized standard measurement units within a given measurement system, and use these conversions in solving multi-step, real-world problems.

Sixth Grade:

6.DS.1 – Select, create, and interpret graphical representations of numerical data, including line plots, histograms, and box plots.

ENGLISH AND LANGUAGE ARTS STANDARDS

Most of the following standards are met in the context of discussion that takes place throughout the EJ trails as camp staff and teachers engage with the students, and thus are not listed under each specific activity in the manual.

Fourth Grade:

4.CC.1 – Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) on grade-appropriate topics and texts, building on others' ideas and expressing personal ideas clearly.

4.CC.2 – Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

4.CC.3 – Summarize major ideas and supportive evidence from text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally

4.CC.5 – Using appropriate language, report on a topic or text or provide a narrative in an organized manner, with effective introductions and conclusions, using appropriate structure, appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly and concisely at an understandable pace.

Fifth Grade:

5.CC.1 – Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) on grade-appropriate topics and texts, building on others' ideas and expressing personal ideas clearly.

5.CC.2 – Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.

5.CC.3 – Orally summarize or respond to a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

Sixth Grade:

6.CC.1 – Engage effectively in a range of collaborative discussions (one-on-one, in groups and teacher-led) on grade-appropriate topics, texts, and issues, building on others' ideas and expressing personal ideas clearly.

6.CC.2 – Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion

6.CC.3 – Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing