



Applying the Scientific Method and Experimental Design to *Star Wars*®: The Gungan Frontier™

Curriculum Connection: “For students to develop the abilities that characterize science as inquiry, they must actively participate in scientific investigations, and they must actually use the cognitive and manipulative skills associated with the formulation of scientific explanations.”

National Science Education Standards

Lesson Plan (Grades 5-10):

As part of a study of ecology, allow your students to apply and extend what they’re learning in the following activity.

For Your Students:

Using your current understanding of ecological concepts, formulate a question regarding the interaction of organisms with each other and their surroundings.

Example --

Can a single species of plant establish and maintain a stable ecosystem?

Once you have formulated your research question:

- _ Formulate a hypothesis to this question.
- _ Considering the capabilities of **The Gungan Frontier** simulation, make a prediction (if/then statement) that addresses your question and tests your hypothesis.
- _ Use **The Gungan Frontier** simulation to test your hypothesis, describing your procedure in a way that anyone would be able to repeat what you have done.
- _ Identify and document key data collected from the simulation.
- _ Using the data collected, formulate a conclusion that addresses your hypothesis.

(Thanks to Eric Thiel, Science Teacher, Amador High School, Pleasanton, California for this idea.)