Lesson Title	Gregor Mendel: A Brief Biography
Length of Lesson	One (50 minute) class period
Created By	Rob Thornton, Will McBryde
Subject	General Science
Grade Level	8th grade
State Standards	8th: 1b, d (Inquiry); 3d (Life Science)
DOK Level	DOK 2
DOK Application	Identify, Distinguish, Define
National Standards	5-8: A (Inquiry); C (Life Science)
Graduate Research Element	Learning about Mendel's discoveries helps one to understand modern genetics. Weather and climate affect how organisms adapt differently to their own environments.

Student Learning Goal:

MS 8th Grade:

1(b) Distinguish between qualitative and quantitative observations make inferences based on observations. (d) Analyze evidence that is used to form explanations and draw conclusions. 3(d) Describe heredity as the passage of instructions from one generation to another and recognize that heredity information is contained in genes, located in the chromosomes of each cell.

National Science Education Standards of Content 5-8:

A: Inquiry: Abilities necessary to do scientific inquiry, Understandings about scientific inquiry.

C: Life Science: Reproduction and heredity.

Materials Needed (supplies, hand-outs, resources):

PowerPoint file (see INSPIRE_Thornton_04.15.11_PP), laptop and projector.

Lesson Performance Task/Assessment:

The PowerPoint will introduce students to Gregor Mendel and his discoveries. The instructor can assess students' knowledge through questioning during the lecture. The instructor can also ask students about some of the terminology used in the lecture. For example, terms like "trait," "abbott," and "monastery" could be highlighted. This may introduce students to terms they may have not heard before.

Lesson Relevance to Performance Task and Students:

The lesson will give students a good introduction to what Gregor Mendel discovered and why it is important to us today. This will help students make the connection of the past to the present in genetics.

Anticipatory Set/Capture Interest:
The lesson itself will serve as an anticipatory set as students will see images of the past and other images that will capture their interest.

Guided Practice:
The instructor will lead the class through the PowerPoint lesson and ask them questions along the way.

Independent Practice:
Students will answer questions asked by the instructor.

Remediation and/or Enrichment:
Remediation- Individual IEP; Make PowerPoint available to resource teacher;
Enrichment – Have students do a report on a disease or diseases, which are inherited.

Check(s) for Understanding:
Observe students during lecture. Ask students questions regarding the lecture.

Closure:
Question 1: What is a trait?

Question 2: What does is mean to cross pea plants with different traits?

Possible Alternate Subject Integrations:
Biology, History

Teacher Notes:
The instructor could use this as part of another lesson or an introduction into a genetics unit.

A website for reference**:**

The instructor could also use BrainPOP in the lesson. www.brainpop.com
BrainPOP is a resource that provides concise videos and quizzes on a variety of science topics. The quizzes can be taken as a group. Below is a link to a short video on heredity. After the video, the instructor has the option of giving a group quiz.

http://www.brainpop.com/science/cellularlifeandgenetics/heredity/