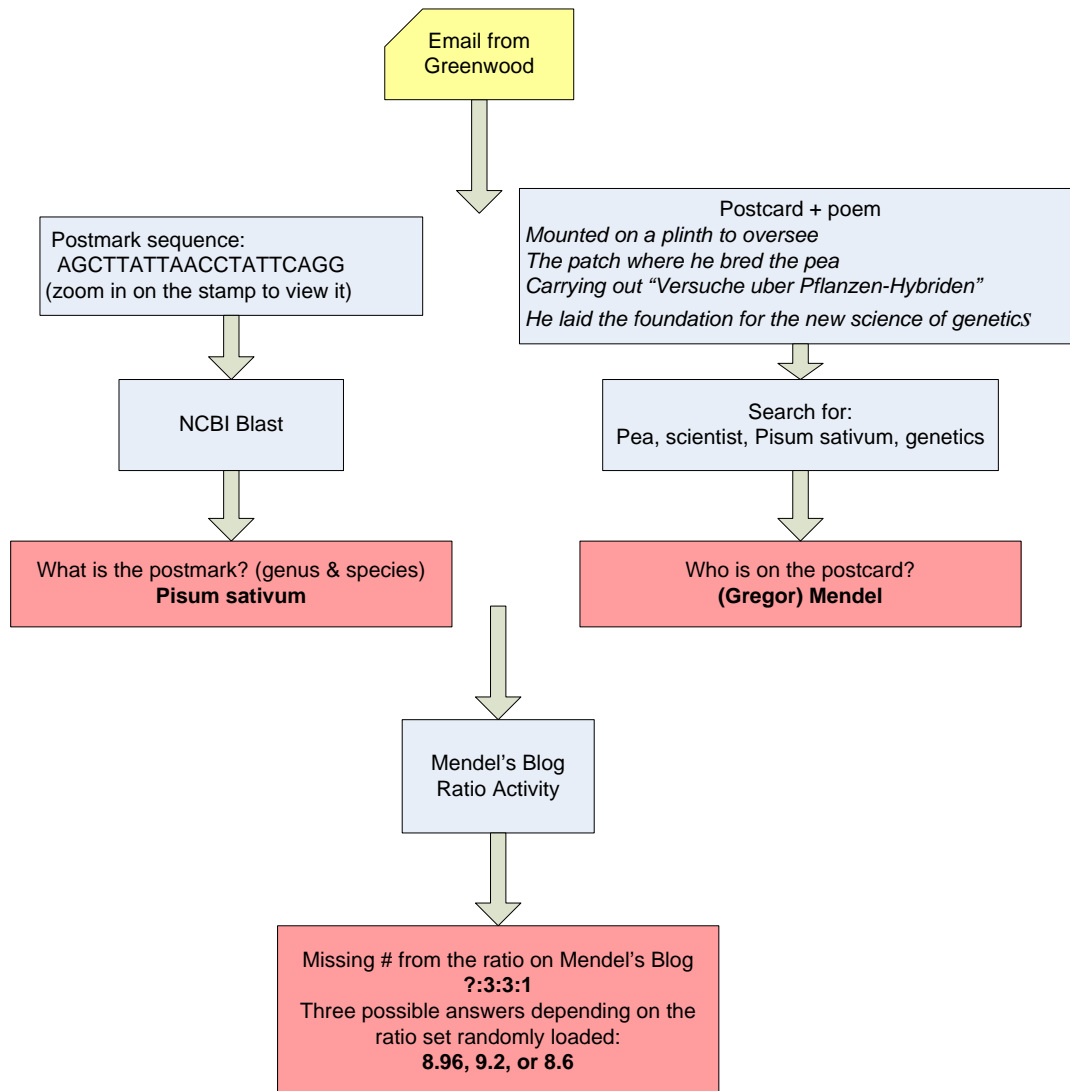


HISTORY OF BIOLOGY

■ Teacher's Walkthrough

MISSION 8: SWEET PEA

A) WORKFLOW



HISTORY OF BIOLOGY

■ Teacher's Walkthrough

B) EMAILS, CLUES, OBJECTS

	Contents	Explanation
EMAIL	<p>M08: INTRO EMAIL From: Dr. Jordan Greenwood Subject: An unusual postmark</p> <p>Dear user, Great work on using the flying frog stamp to link Wallace to Darwin. Those letters were more than 200 years old and provided great detail around what those scientists were thinking.</p> <p>When you were examining the envelope, did you notice the unusual postmark? I've tried many internet searches, but I've had no luck. Maybe you could try blasting it? Visit the BLAST site here</p> <p>I also got a postcard from Shyre - maybe it's related as well?</p> <p>It looks like we're definitely on our own - perhaps we can keep working together?</p> <p>Dr. Greenwood</p>	<p>Blasting the sequence on the postmark leads user to '<i>Pisum sativum</i>'</p> <p>Searching terms in the poem will lead user to Gregor Mendel</p>
OBJECT	<p>Envelope – Postmark</p> <p>The sequence is 'AGCTTATTAACCTATTTCAGG' and when blasted links to <i>Pisum sativum</i>.</p>	
OBJECT	<p>Postcard Poem</p> <p><i>Mounted on a plinth to oversee The patch where he bred the pea Carrying out "Versuche uber Pflanzen-Hybriden" He laid the foundation for the new science of genetics</i></p>	<p>Searching for any number of terms in the poem will lead the user to Gregor Mendel</p>
EMAIL	<p>M08: MENDEL'S BLOG ACTIVITY EMAIL From: Dr. Jordan Greenwood Subject: Mendel & the green pea</p> <p>Dear user, Ah, <i>Pisum sativum</i>! That is the garden pea plant that Gregor Mendel used for his genetic experiments. Gregor Mendel was a brilliant cleric, but often faired poorly in academic tests. He is known as the Father of Inheritance, however the significance of his work was not understood until after he died.</p>	

HISTORY OF BIOLOGY

Teacher's Walkthrough

	<p>You should check out Mendel's Garden. It's a blog containing some of the entries from Mendel's lab books. The entries will give you an idea of the daily struggles he went through to achieve the results that changed the course of genetics. Click here to access his blog.</p> <p>Dr. Greenwood</p>																									
ANSWER KEY LETTERS	<p>Mendel's blog</p> <p>There are three possible sets of pea counts that could appear when the blog is loaded:</p> <table><thead><tr><th></th><th>Ratio #1</th><th>Ratio #2</th><th>Ratio #3</th></tr></thead><tbody><tr><td>Yellow Round</td><td>1120</td><td>276</td><td>1247</td></tr><tr><td>Green Round</td><td>375</td><td>90</td><td>435</td></tr><tr><td>Yellow Wrinkled</td><td>375</td><td>90</td><td>435</td></tr><tr><td>Green Wrinkled</td><td>125</td><td>30</td><td>145</td></tr><tr><td>?:3:3:1</td><td>8.96</td><td>9.2</td><td>8.6</td></tr></tbody></table>		Ratio #1	Ratio #2	Ratio #3	Yellow Round	1120	276	1247	Green Round	375	90	435	Yellow Wrinkled	375	90	435	Green Wrinkled	125	30	145	?:3:3:1	8.96	9.2	8.6	<p>One of the three sets of numbers is randomly loaded for each user.</p> <p>Goal is to illustrate that not all of Mendel's experiments may have worked out exactly to 9:3:3:1</p>
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EMAIL	<p>M08: VICTORY EMAIL</p> <p>From: Dr. Jordan Greenwood</p> <p>Subject: Mendel's Ratios</p> <p>Dear user,</p> <p>There have been rumors that Gregor Mendel had some flaws in his data. The hereditary ratios obtained from his experiments were skewed. The false allegations were never proved and hence no one knows the true story. Mendel's work in plant genetics was ground breaking. His work built the foundation for hereditary genetics and hence he is also called the "Father of Genetics".</p> <p>Each of the scientists that we learnt about had all worked to prove that concept of evolution and the importance of genetic characters which differ on being from the other. We can learn so much from history and I can see why Shyre wanted us to know about these scientists.</p> <p>I wonder what Shyre has planned for us next...</p> <p>Dr. Greenwood</p>																									