

Lesson Plan #1

This lesson plan was created by Deborah Clevenger of Waipahu Intermediate School.

FORMATIVE ASSESSMENT TOOL

Lesson Plan #1 Coconut Rhinoceros Beetle

Name: Deborah Clevenger

Mentor: N/A

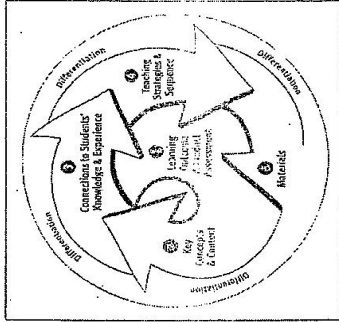
Grade Level/Subject Area: 7G Science

School: Waipahu Inter

Date: Feb 2017

Content Standard: BS.3.4 Interdependence - Explain dynamic equilibrium in organisms, populations, and ecosystems; explain equilibrium shifts

Materials: Photos, Short paper, Sentence frames (discussions), Vocabulary list
 Student: Paper, Pencil
 Estimated Time: 50 min. class period
 Composition book - note taking, sketches



Learning Outcomes	Key Concepts & Content	Connections to Students' Knowledge, Skills, Experience
SWBT <ul style="list-style-type: none"> id CRB know what to do if find CRB understand what could happen if CRB invades HI 	Key Concepts & Content <ul style="list-style-type: none"> Identify Coconut rhinoceros beetle (CRB) explain where it lives Teaching Strategies and Sequence <p>Opening Pre-Summary - Show a detailed photo of the CRB & ask... "Has anyone ever seen this before?"</p> <p>Instruction</p> <p>Pictorial chart w/ photos of the CRB's life cycle, its characteristics, where it lives, the damage it causes, the methods humans use to eradicate this invasive species</p> <p>Learning Log:</p> <p>Guided Practice</p> <p>Partner sharing in answering discussion questions - Q: stems... "One thing I learned from what we just learned is..." "One thing I learned..." "One thing I'd like to learn more about..." "It's good to learn this today..."</p> <p>Closure</p> <p>Exit ticket</p>	<ul style="list-style-type: none"> Previous lesson on introduction to the North American Bull Terrier an invasive species invasive species coming into new area flourish b/c lack of native predators Outcompetes new area organisms Population of invasive species explodes
Evidence of Learning (product or assessment) <ul style="list-style-type: none"> discussions - Partner whole class answers / responses on the exit tickets "One thing I learned today is..." Sketch of CRB 	Extension Activities or Independent Practice <p>Homework: look for signs of CRB</p>	
<p>Notes remember to bring class up close to the Pictorial Input Chart - they are to be sorted close w/ their Partners (A-B intentional partners) for 10/2 discussions</p>		

Student Samples

CRB Learning Logs

[illegible]

Proficient

Sample #2

(17)

P. 3

Learning Log

2010 017

Text

You

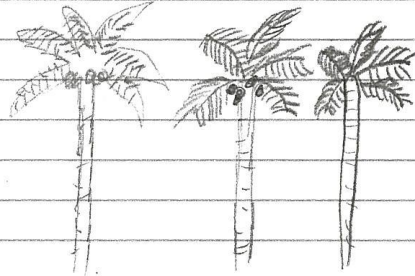
The description of the Coconut Rhinoceros Beetle is, an invasive specie that kills coconut palms. And is killing a lot of them fast.

This relates to my life/me because, if the CRB kills the trees there won't be enough oxygen that they produce. There won't be any more coconut palms if we don't stop it.



- People fighting against CRB in Guam after 40% of coconut palms are killed.

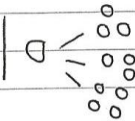
- CRB bores big hole in coconut palm



Learning Log

Text

invasive
species



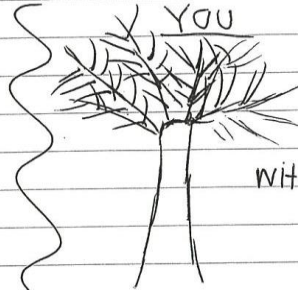
its like spreading

example: CRB

↓
one CRB can
lay more eggs
and it will spread

factual info

- kills palm trees (damage)
- from the egg to larvae
- to pupae and becomes adult.



without CRB



W/CRB

Lesson Plan #2

This lesson plan was created by Deborah Clevenger of Waipahu Intermediate School.

CRB egg laying Graphs

<p>IVE ASSESSMENT TOOL</p> <h2>Lesson Plan #2</h2> <p>Population growth of the CRB</p> <p>Name: <u>Deborah Clevenger</u> Mentor: <u>N/A</u></p> <p>Grade Level/Subject Area: <u>7G Science</u> School: <u>Waipahu Intermediate</u> Date: <u>Feb 2017</u></p> <p>Content Standard: <u>7.3.3 Explain how the biotic & abiotic factors in an ecosystem. 7.2.2 Explain the interdependence of organisms on one another</u></p> <p>Estimated Time: <u>one class period</u></p> <p>Student: <u>Pencil</u> <u>data table</u> <u>graph paper</u></p>			
<p>Outcomes</p> <p>Plot the data produced & analysis from their</p>	<p>Key Concepts & Content</p> <ul style="list-style-type: none"> Plot a proper graph of # eggs produced over time Write an accurate <p>Teaching Strategies and Sequence</p> <p>Opening Students copy graphing checklist (items needed for a proper graph)</p>	<p>Connections to Students' Knowledge, Skills, Experience</p> <ul style="list-style-type: none"> Previous lesson about invasive species - the Coconut Rhinoceros Beetle (CRB) their skills with graphing their experience with writing analyzes, & conclusions 	<p>Learning Assessment</p> <p>produced an analysis graph</p> <p>Conclusion graph</p>
<p>Instruction</p> <ul style="list-style-type: none"> review; items needed for graph analysis Conclusion Coconut Rhinoceros Beetle (CRB) data <p>Guided Practice</p> <ul style="list-style-type: none"> circulate around room during class assist those I see having difficulty or "on the way foot" <p>Closure</p>		<p>Extension Activities or Independent Practice</p> <p>Watch for CRB eggs in brush piles, mulch piles etc.</p>	
<p>5. I'm circulating around the room watch for graphing, reanalysis, or conclusion problems</p>			

Analyze the data from the graph:

Write a conclusion about the experiment.

7th Grade SLO/School Rise Rubric

	<u>Well Below Proficiency (0)</u>	<u>Developing Proficiency (1)</u>	<u>Proficient (2)</u>	<u>Exceeds Proficiency(3)</u>
Data/Graph	-Inappropriate graph and missing requirements OR appropriate graph and missing 4 or more requirements	-Inappropriate graph and OR appropriate graph and missing 3 requirements	-Appropriate graph. Missing 1-2 requirements.	Appropriate graph that includes: 1. Descriptive Title 2. Correct labeling with proper unit 3. Appropriate Scale 4. Graph is neat and legible 5. Includes key/legend as needed
Analysis	-Analysis not related to the graph	-Analysis includes who did best or worst without evidence	-Analysis includes who did best and worst with data from the graph	-Analysis includes which factor did the best and which factor did the worst using data from the graph. Comparisons are made between the control and experimental groups.
Conclusion	Questions are answered but incomplete	All questions are answered in paragraph form but missing supporting evidence and/or specific examples.	All questions are answered in paragraph form with supporting evidence and examples.	All questions are answered thoroughly in paragraph form with supporting evidence and provides

Student Sample

Sample #1 continued

~~Melissa Kura~~ ~~W. Kura~~

p. 3

CRB Egg Data
Date (2016)

of CRB eggs laid / week

26156/17

June 19
" " 26

24 87
33

July 2

64 174

" " 13

30

" " 17

45 261

" " 27

106

Aug 3

68 348

" " 7

123

" 19

286 435

" 26

314

" 28

514 522

Sept 2

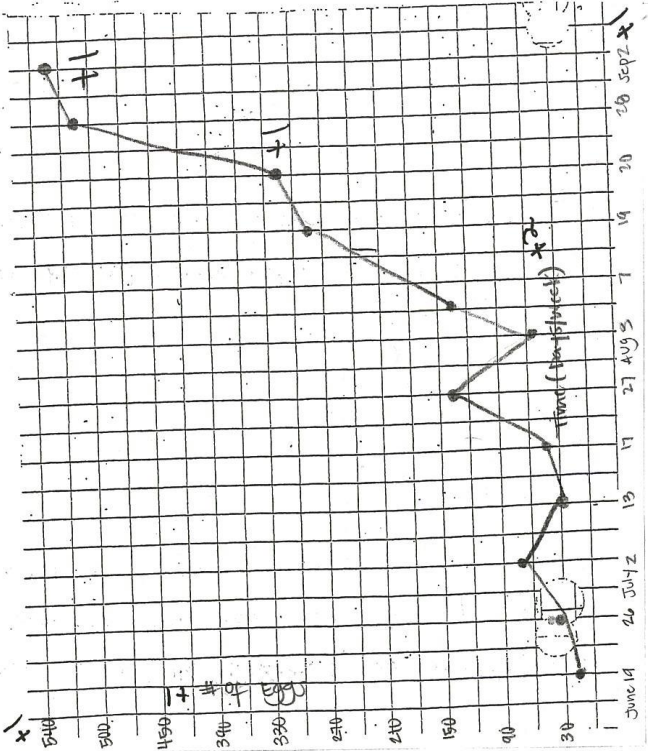
836

87
56
48
561
87
2
261
17
4
3
87
55
435
348
87
522

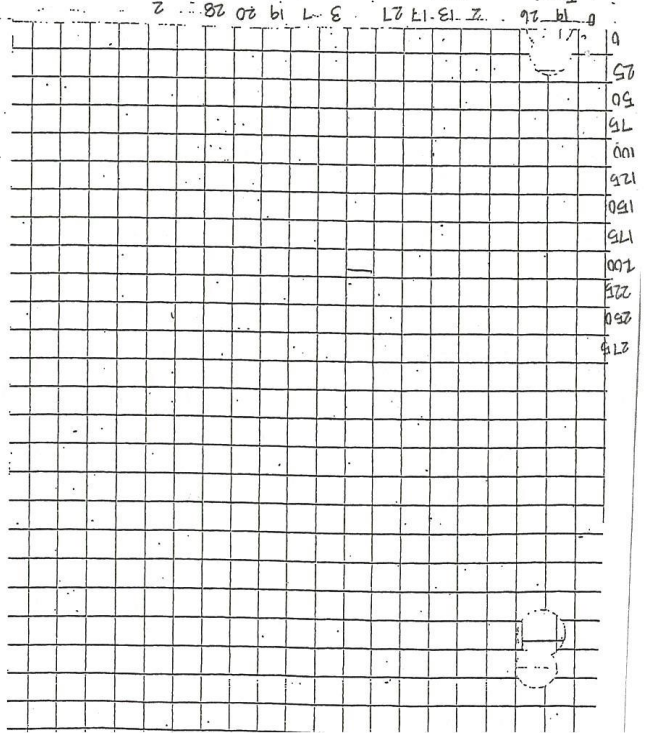
Sample #2

$\frac{+9}{11}$ 81% Proficient

Post
M.S. 2/17



Numbers of CRB eggs laid/week



June 14 19 26 7 13 17 27 3 7 19 20 28
Junc DATE (2015) Aug
Junc

M.S. 2/15

9