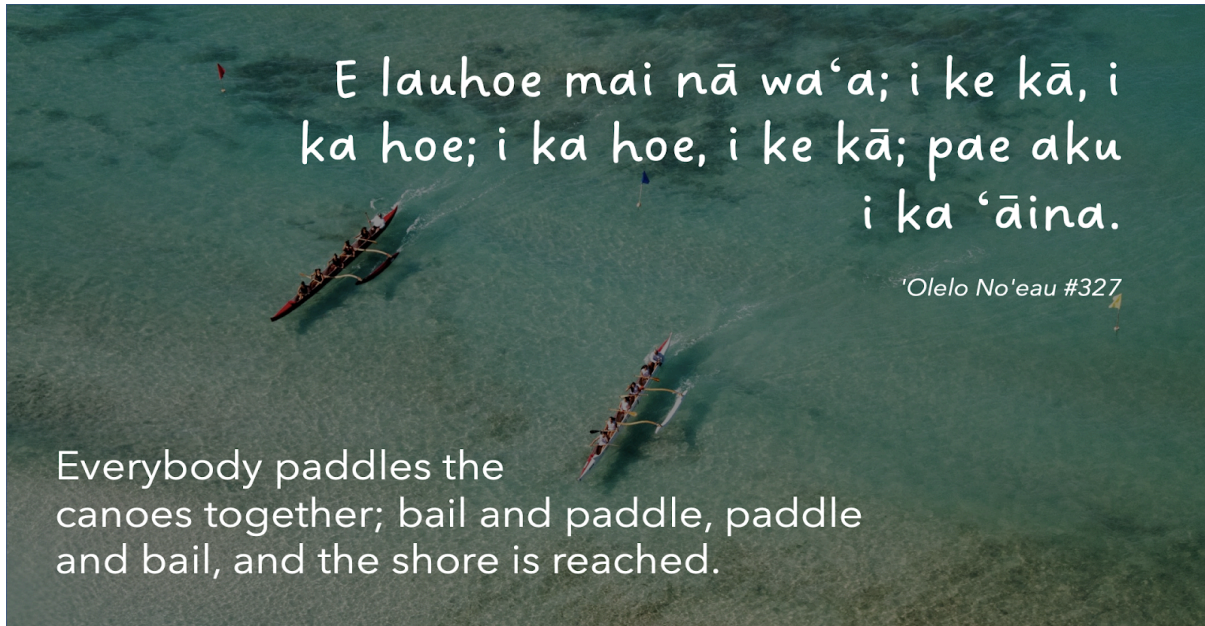


This is a living document

Please check back periodically for updated content materials



We invite you to contribute to the development of this
Hawai'i-based, science curriculum!

Ways to Collaborate:

1. Download a copy of this document to develop content, edit materials, and tailor content to your class's unique needs.
2. Take our [Open Source Contributor Feedback Form](#) to:
 - Share learning materials you've created (i.e., lesson plans, worksheets, assessments, videos of teaching techniques, and additional resources)
 - Provide editing suggestions
 - Give insight into classroom experiences
 - Share artifacts of learning (i.e., photos, learning materials, completed student work examples)

Take the Survey Here

<https://forms.gle/aBVQZXHzYmvkpcGm9>

RDC Lesson Plan

Each lesson in your unit should have a separate lesson plan, connected to the Unit Overview
Not all units will require all 10 Lessons represented by the template.

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Lesson 6	Lesson 7	Lesson 8	Lesson 9	Lesson 10

Lesson 1

NGSS -BASED LESSON PLAN		
Name: Jaime Lewis	Date: SY 2022	Lesson Length:
Materials		
Materials and quantities Needed:		
Materials needed to be printed for this lesson:		
Unit Topic: Kōlea Identification: Comparison of similar species	Lesson Title:	Lesson # 1 out of 6 (total lessons)
NGSS Performance Expectations		
3-LS3-1. Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.		
Hawaiian Cultural Standards (HA or other)		
Na Hopena A'o HĀ 3: Strengthen Sense of Excellence - <i>Assess and make improvements to produce quality work</i>		
Additional Content Standards		
National Core Arts Standards <i>Creating: Conceiving and developing new artistic ideas and work</i>		
OBJECTIVES (Student-level Explanation)		
<i>Kōlea are called different names in different parts of the globe, but they are all the same species. American Golden Plovers and black bellied plovers look very similar and have similar traits to Pacific Golden Plovers, but are not the same species of bird. These birds are so similar that the Pacific (Kōlea) and American Golden Plovers were thought to be a single species up until 30 years ago. In 1993 bird scientists recognized them as being separate species using their physical appearance and their behavior of traveling to specific breeding and wintering locations.. They have slightly different physical features and their environments cause them to have different traits. These small differences are enough that they don't breed with each other. Scientists and community scientists use these predictable and consistent differences in physical and behavioral traits to tell these species apart even though they look very similar</i>		
Lesson Phenomena Statement		

Kōlea are called different names in different parts of the globe, but they are all the same species.

Lesson Instructions

Lesson Sequence

How will you provide meaningful, engaging and instructional opportunities for your students to DEMONSTRATE the lesson objective(s)?

Time: The amount of time each activity will take in the classroom

Activity and key teacher moves: Activity name, sequence, and instructions. (Ex: Introduce, Discuss, Examine, Observe, Investigate, Describe, Identify, Define, Process, Design, Develop, Construct, Compare, Analyze, Model, Represent, Optimize, Engage, Predict, Communicate)

Materials: Add links to handouts, online resources, slides, etc

Time	Activity and key teacher moves	Materials
Introduction Activity:		
	- Analyze and interpret data: Visit Pacific Golden-Plover Sightings Map, All About Birds, Cornell Lab of Ornithology Also Pacific Golden-Plover Audubon Field Guide	
	Look at maps and pictures of the Pacific Golden Plover. "All About Birds": (ID information, Range Map, Sighting Maps)	
Main Activity 1:		
	Compare those pictures and maps to the American Golden Plover and the Black Bellied Plovers. (Use "similar species" tab in the ID Information page of Pacific Golden Plover page)	
	Make a list of the traits that the birds have in common. Make a list of the unique traits that make the species different	
Main Activity 2:		

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Main Activity 3:		
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Conclusion Activity:		
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ASSESSMENT (Performance Expectations)		
Identify assessments to measure lesson objectives. Match lesson assessment to each lesson objective.		
Teacher Background Information		
Add any pertinent information that educators should know prior to teaching the lesson.		
Advanced Preparation		
Add activities that the teacher will need to complete prior to teaching the lesson.		
• Review the materials and Teacher background information. •		
ACCOMMODATIONS		
How does your lesson accommodate the following?		
SPECIAL NEEDS (includes Gifted & Talented)		
ENGLISH AS A SECOND LANGUAGE (ESL)		

CULTURE & DIVERSITY (Socioeconomic Status, Race/ethnicity, LGBT)

Lesson 2

NGSS -BASED LESSON PLAN		
Teacher:	Date:	Lesson Length:
Materials		
Materials and quantities Needed:		
Materials needed to be printed for this lesson:		
Unit Topic:	Lesson Title:	Lesson # _ out of _ (total lessons)
NGSS Performance Expectations		
Hawaiian Cultural Standards (HA or other)		
Additional Content Standards		
OBJECTIVES (Student-level Explanation)		
Lesson Phenomena Statement		

Lesson Instructions		
Lesson Sequence How will you provide meaningful, engaging and instructional opportunities for your students to DEMONSTRATE the lesson objective(s)?		
Time: The amount of time each activity will take in the classroom Activity and key teacher moves: Activity name, sequence, and instructions. (Ex: Introduce, Discuss, Examine, Observe, Investigate, Describe, Identify, Define, Process, Design, Develop, Construct, Compare, Analyze, Model, Represent, Optimize, Engage, Predict, Communicate) Materials: Add links to handouts, online resources, slides, etc		
Time	Activity and key teacher moves	Materials
Introduction Activity:		
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Main Activity 1:		
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Main Activity 2:		
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Main Activity 3:		
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Conclusion Activity:		
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ASSESSMENT (Performance Expectations)		
Identify assessments to measure lesson objectives. Match lesson assessment to each lesson objective.		
Teacher Background Information		
Add any pertinent information that educators should know prior to teaching the lesson.		
Advanced Preparation		
Add activities that the teacher will need to complete prior to teaching the lesson.		
• Review the materials and Teacher background information. •		
ACCOMMODATIONS		
How does your lesson accommodate the following?		
SPECIAL NEEDS (includes Gifted & Talented)		
ENGLISH AS A SECOND LANGUAGE (ESL)		
CULTURE & DIVERSITY (Socioeconomic Status, Race/ethnicity, LGBT)		

Lesson 3

NGSS -BASED LESSON PLAN		
Teacher:	Date:	Lesson Length:
Materials		
Materials and quantities Needed:		
Materials needed to be printed for this lesson:		
Unit Topic:	Lesson Title:	Lesson # _ out of _ (total lessons)
NGSS Performance Expectations		
Hawaiian Cultural Standards (HA or other)		
Additional Content Standards		
OBJECTIVES (Student-level Explanation)		
Lesson Phenomena Statement		
Lesson Instructions		
Lesson Sequence		

How will you provide meaningful, engaging and instructional opportunities for your students to DEMONSTRATE the lesson objective(s)?		
Time: The amount of time each activity will take in the classroom Activity and key teacher moves: Activity name, sequence, and instructions. (Ex: Introduce, Discuss, Examine, Observe, Investigate, Describe, Identify, Define, Process, Design, Develop, Construct, Compare, Analyze, Model, Represent, Optimize, Engage, Predict, Communicate) Materials: Add links to handouts, online resources, slides, etc		
Time	Activity and key teacher moves	Materials
Introduction Activity:		
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Main Activity 1:		
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Main Activity 2:		
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Main Activity 3:		
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Conclusion Activity:		
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ASSESSMENT (Performance Expectations)		
Identify assessments to measure lesson objectives. Match lesson assessment to each lesson objective.		
Teacher Background Information		
Add any pertinent information that educators should know prior to teaching the lesson.		
Advanced Preparation		
Add activities that the teacher will need to complete prior to teaching the lesson.		
• Review the materials and Teacher background information. •		
ACCOMMODATIONS		
How does your lesson accommodate the following?		
SPECIAL NEEDS (includes Gifted & Talented)		
ENGLISH AS A SECOND LANGUAGE (ESL)		
CULTURE & DIVERSITY (Socioeconomic Status, Race/ethnicity, LGBT)		

Lesson 4

Teacher:	Date:	Lesson Length:
Materials		
Materials and quantities Needed:		
Materials needed to be printed for this lesson:		
Unit Topic:	Lesson Title:	Lesson # _ out of _ (total lessons)
NGSS Performance Expectations		
Hawaiian Cultural Standards (HA or other)		
Additional Content Standards		
OBJECTIVES (Student-level Explanation)		
Lesson Phenomena Statement		
Lesson Instructions		
Lesson Sequence How will you provide meaningful, engaging and instructional opportunities for your students to DEMONSTRATE the lesson objective(s)?		

Time: The amount of time each activity will take in the classroom

Activity and key teacher moves: Activity name, sequence, and instructions. (Ex: Introduce, Discuss, Examine, Observe, Investigate, Describe, Identify, Define, Process, Design, Develop, Construct, Compare, Analyze, Model, Represent, Optimize, Engage, Predict, Communicate)

Materials: Add links to handouts, online resources, slides, etc

Time	Activity and key teacher moves	Materials
Introduction Activity:		
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Main Activity 1:		
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Main Activity 2:		
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Main Activity 3:		
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Conclusion Activity:		
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ASSESSMENT (Performance Expectations)		
Identify assessments to measure lesson objectives. Match lesson assessment to each lesson objective.		
Teacher Background Information		
Add any pertinent information that educators should know prior to teaching the lesson.		
Advanced Preparation		
Add activities that the teacher will need to complete prior to teaching the lesson.		
• Review the materials and Teacher background information. •		
ACCOMMODATIONS		
How does your lesson accommodate the following?		
SPECIAL NEEDS (includes Gifted & Talented)		
ENGLISH AS A SECOND LANGUAGE (ESL)		
CULTURE & DIVERSITY (Socioeconomic Status, Race/ethnicity, LGBT)		

Lesson 5

NGSS -BASED LESSON PLAN		
Teacher:	Date:	Lesson Length:

Materials		
Materials and quantities Needed:		
Materials needed to be printed for this lesson:		
Unit Topic:	Lesson Title:	Lesson # _ out of _ (total lessons)
NGSS Performance Expectations		
Hawaiian Cultural Standards (HA or other)		
Additional Content Standards		
OBJECTIVES (Student-level Explanation)		
Lesson Phenomena Statement		
Lesson Instructions		
Lesson Sequence How will you provide meaningful, engaging and instructional opportunities for your students to DEMONSTRATE the lesson objective(s)?		
Time: The amount of time each activity will take in the classroom Activity and key teacher moves: Activity name, sequence, and instructions. (Ex: Introduce, Discuss, Examine, Observe, Investigate, Describe, Identify, Define, Process, Design, Develop, Construct, Compare, Analyze, Model, Represent, Optimize, Engage, Predict, Communicate) Materials: Add links to handouts, online resources, slides, etc		

Time	Activity and key teacher moves	Materials
Introduction Activity:		
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Main Activity 1:		
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Main Activity 2:		
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Main Activity 3:		
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Conclusion Activity:		
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ASSESSMENT (Performance Expectations) Identify assessments to measure lesson objectives. Match lesson assessment to each lesson objective.		

Teacher Background Information Add any pertinent information that educators should know prior to teaching the lesson.
Advanced Preparation Add activities that the teacher will need to complete prior to teaching the lesson.
• Review the materials and Teacher background information. •
ACCOMMODATIONS How does your lesson accommodate the following?
SPECIAL NEEDS (includes Gifted & Talented)
ENGLISH AS A SECOND LANGUAGE (ESL)
CULTURE & DIVERSITY (Socioeconomic Status, Race/ethnicity, LGBT)

Lesson 6

NGSS -BASED LESSON PLAN		
Teacher:	Date:	Lesson Length:
Materials		
Materials and quantities Needed:		
Materials needed to be printed for this lesson:		

Unit Topic:	Lesson Title:	Lesson # _ out of _ (total lessons)
NGSS Performance Expectations		
Hawaiian Cultural Standards (HA or other)		
Additional Content Standards		
OBJECTIVES (Student-level Explanation)		
Lesson Phenomena Statement		
Lesson Instructions		
Lesson Sequence How will you provide meaningful, engaging and instructional opportunities for your students to DEMONSTRATE the lesson objective(s)?		
Time: The amount of time each activity will take in the classroom Activity and key teacher moves: Activity name, sequence, and instructions. (Ex: Introduce, Discuss, Examine, Observe, Investigate, Describe, Identify, Define, Process, Design, Develop, Construct, Compare, Analyze, Model, Represent, Optimize, Engage, Predict, Communicate) Materials: Add links to handouts, online resources, slides, etc		
Time	Activity and key teacher moves	Materials
Introduction Activity:		
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Main Activity 1:		
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Main Activity 2:		
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Main Activity 3:		
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Conclusion Activity:		
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ASSESSMENT (Performance Expectations)		
Identify assessments to measure lesson objectives. Match lesson assessment to each lesson objective.		

Teacher Background Information Add any pertinent information that educators should know prior to teaching the lesson.
Advanced Preparation Add activities that the teacher will need to complete prior to teaching the lesson.
• Review the materials and Teacher background information. •
ACCOMMODATIONS How does your lesson accommodate the following?
SPECIAL NEEDS (includes Gifted & Talented)
ENGLISH AS A SECOND LANGUAGE (ESL)
CULTURE & DIVERSITY (Socioeconomic Status, Race/ethnicity, LGBT)

Lesson 7

NGSS -BASED LESSON PLAN		
Teacher:	Date:	Lesson Length:
Materials		
Materials and quantities Needed:		
Materials needed to be printed for this lesson:		
Unit Topic:	Lesson Title:	Lesson # _ out of _ (total lessons)

NGSS Performance Expectations		
Hawaiian Cultural Standards (HA or other)		
Additional Content Standards		
OBJECTIVES (Student-level Explanation)		
Lesson Phenomena Statement		
Lesson Instructions		
Lesson Sequence How will you provide meaningful, engaging and instructional opportunities for your students to DEMONSTRATE the lesson objective(s)?		
Time: The amount of time each activity will take in the classroom Activity and key teacher moves: Activity name, sequence, and instructions. (Ex: Introduce, Discuss, Examine, Observe, Investigate, Describe, Identify, Define, Process, Design, Develop, Construct, Compare, Analyze, Model, Represent, Optimize, Engage, Predict, Communicate) Materials: Add links to handouts, online resources, slides, etc		
Time	Activity and key teacher moves	Materials
Introduction Activity:		
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Main Activity 1:		
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Main Activity 2:		
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Main Activity 3:		
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Conclusion Activity:		
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ASSESSMENT (Performance Expectations)		
Identify assessments to measure lesson objectives. Match lesson assessment to each lesson objective.		
Teacher Background Information		
Add any pertinent information that educators should know prior to teaching the lesson.		

Advanced Preparation
Add activities that the teacher will need to complete prior to teaching the lesson.
• Review the materials and Teacher background information. •
ACCOMMODATIONS
How does your lesson accommodate the following?
SPECIAL NEEDS (includes Gifted & Talented)
ENGLISH AS A SECOND LANGUAGE (ESL)
CULTURE & DIVERSITY (Socioeconomic Status, Race/ethnicity, LGBT)

Lesson 8

NGSS -BASED LESSON PLAN		
Teacher:	Date:	Lesson Length:
Materials		
Materials and quantities Needed:		
Materials needed to be printed for this lesson:		
Unit Topic:	Lesson Title:	Lesson # _ out of _ (total lessons)
NGSS Performance Expectations		
Hawaiian Cultural Standards (HA or other)		

Additional Content Standards		
OBJECTIVES (Student-level Explanation)		
Lesson Phenomena Statement		
Lesson Instructions		
Lesson Sequence How will you provide meaningful, engaging and instructional opportunities for your students to DEMONSTRATE the lesson objective(s)?		
Time: The amount of time each activity will take in the classroom Activity and key teacher moves: Activity name, sequence, and instructions. (Ex: Introduce, Discuss, Examine, Observe, Investigate, Describe, Identify, Define, Process, Design, Develop, Construct, Compare, Analyze, Model, Represent, Optimize, Engage, Predict, Communicate) Materials: Add links to handouts, online resources, slides, etc		
Time	Activity and key teacher moves	Materials
Introduction Activity:		
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Main Activity 1:		
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Main Activity 2:		
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Main Activity 3:		
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Conclusion Activity:		
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ASSESSMENT (Performance Expectations)		
Identify assessments to measure lesson objectives. Match lesson assessment to each lesson objective.		
Teacher Background Information		
Add any pertinent information that educators should know prior to teaching the lesson.		
Advanced Preparation		
Add activities that the teacher will need to complete prior to teaching the lesson.		
• Review the materials and Teacher background information. •		

ACCOMMODATIONS	
How does your lesson accommodate the following?	
SPECIAL NEEDS (includes Gifted & Talented)	
ENGLISH AS A SECOND LANGUAGE (ESL)	
CULTURE & DIVERSITY (Socioeconomic Status, Race/ethnicity, LGBT)	

Lesson 9

NGSS -BASED LESSON PLAN		
Teacher:	Date:	Lesson Length:
Materials		
Materials and quantities Needed:		
Materials needed to be printed for this lesson:		
Unit Topic:	Lesson Title:	Lesson # _ out of _ (total lessons)
NGSS Performance Expectations		
Hawaiian Cultural Standards (HA or other)		
Additional Content Standards		
OBJECTIVES (Student-level Explanation)		

Lesson Phenomena Statement		
Lesson Instructions		
Lesson Sequence How will you provide meaningful, engaging and instructional opportunities for your students to DEMONSTRATE the lesson objective(s)?		
Time: The amount of time each activity will take in the classroom Activity and key teacher moves: Activity name, sequence, and instructions. (Ex: Introduce, Discuss, Examine, Observe, Investigate, Describe, Identify, Define, Process, Design, Develop, Construct, Compare, Analyze, Model, Represent, Optimize, Engage, Predict, Communicate) Materials: Add links to handouts, online resources, slides, etc		
Time	Activity and key teacher moves	Materials
Introduction Activity:		
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Main Activity 1:		
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Main Activity 2:		

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Main Activity 3:		
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Conclusion Activity:		
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ASSESSMENT (Performance Expectations)		
Identify assessments to measure lesson objectives. Match lesson assessment to each lesson objective.		
Teacher Background Information		
Add any pertinent information that educators should know prior to teaching the lesson.		
Advanced Preparation		
Add activities that the teacher will need to complete prior to teaching the lesson.		
• Review the materials and Teacher background information. •		
ACCOMMODATIONS		
How does your lesson accommodate the following?		
SPECIAL NEEDS (includes Gifted & Talented)		

ENGLISH AS A SECOND LANGUAGE (ESL)
CULTURE & DIVERSITY (Socioeconomic Status, Race/ethnicity, LGBT)

Lesson 10

NGSS -BASED LESSON PLAN		
Teacher:	Date:	Lesson Length:
Materials		
Materials and quantities Needed:		
Materials needed to be printed for this lesson:		
Unit Topic:		
Lesson Title:	Lesson # _ out of _ (total lessons)	
NGSS Performance Expectations		
Hawaiian Cultural Standards (HA or other)		
Additional Content Standards		
OBJECTIVES (Student-level Explanation)		

Lesson Phenomena Statement		
Lesson Instructions		
Lesson Sequence How will you provide meaningful, engaging and instructional opportunities for your students to DEMONSTRATE the lesson objective(s)?		
Time: The amount of time each activity will take in the classroom Activity and key teacher moves: Activity name, sequence, and instructions. (Ex: Introduce, Discuss, Examine, Observe, Investigate, Describe, Identify, Define, Process, Design, Develop, Construct, Compare, Analyze, Model, Represent, Optimize, Engage, Predict, Communicate) Materials: Add links to handouts, online resources, slides, etc		
Time	Activity and key teacher moves	Materials
Introduction Activity:		
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Main Activity 1:		
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Main Activity 2:		

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Main Activity 3:		
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Conclusion Activity:		
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ASSESSMENT (Performance Expectations)		
Identify assessments to measure lesson objectives. Match lesson assessment to each lesson objective.		
Teacher Background Information		
Add any pertinent information that educators should know prior to teaching the lesson.		
Advanced Preparation		
Add activities that the teacher will need to complete prior to teaching the lesson.		
• Review the materials and Teacher background information. •		
ACCOMMODATIONS		
How does your lesson accommodate the following?		
SPECIAL NEEDS (includes Gifted & Talented)		

ENGLISH AS A SECOND LANGUAGE (ESL)
CULTURE & DIVERSITY (Socioeconomic Status, Race/ethnicity, LGBT)