

# Kids as Airborne Mission Scientists

## Lesson overview: Should Restrictions be Applied to Activities Around the Coral Reefs in Kailua Bay?

<u>FRAME</u>	<u>INFORM</u>	<u>EXPLORE</u>	<u>TRY</u>	<u>SUPPORT</u>
Students are introduced to a KaAMS mission by reading a mission request letter asking them to explore coral reefs on Kailua Bay.	Students are prompted to think about what they need to know about the problem scenario and are provided with information about how to report their findings.	Students explore what they need to know by participating in role-playing where they investigate coral reefs from their different perspectives.	Students generate a list of questions that need to be answered based on different perspectives.	Support materials for the teacher includes ideas to promote student reflection, sample answers to activities, and extension of ideas.

Click on FRAME, INFORM, EXPLORE, TRY, or SUPPORT above to view the detailed lesson plan.

**Lesson context:** This lesson provides an overall context for the KaAMS mission. First, it provides the students with an authentic and motivating problem to investigate. Second, it provides an explanation of the final project—describing how they will report their findings. Third, it prompts students to begin to think about the process of exploring the overall problem by having them take different roles in order to understand coral reefs from their different perspectives. Fourth, it prompts students to identify what they know, what they need to know, and what they should do to solve the KaAMS mission by having them explore answers to questions that prompt them to think about why, who, when, what, where, and how. Finally, it provides students with a framework for being scientists who perform different roles as airborne mission scientists.

### Key science concepts:

- Definition of airborne remote sensing
- The process of problem-solving

### Links to teacher resources:

- [The Mission Request Letter](#) (See Mission Request Letter – this document)
- Fact Sheet: Coral Reefs (<http://www.pacificwhale.org/childrens/fsreef.html>)

### Problems addressed in this lesson:

- What problem are we investigating?
- What are the important questions to be answered to investigate the overall problem?

### Activity bursts:

- Read [The Mission Request Letter](#) (See Mission Request Letter – this document)
- [Group 1- Exploring a commercial fisher’s perspective](#)  
([http://www.state.gov/www/global/global\\_issues/coral\\_reefs/fs-coral\\_overfish\\_981019.html](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_overfish_981019.html))
- [Group 2- Exploring a coastal developer’s perspective](#)  
([http://www.state.gov/www/global/global\\_issues/coral\\_reefs/fs-coral\\_coast\\_981019.html](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_coast_981019.html))
- [Group 3- Exploring an ocean tourist’s perspective](#)  
([http://www.state.gov/www/global/global\\_issues/coral\\_reefs/fs-coral\\_tourism\\_981019.html](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_tourism_981019.html))
- Group4- Exploring coral reef ecologist perspective
  - [Diseases of Reef-Building Corals](#)  
([http://www.state.gov/www/global/global\\_issues/coral\\_reefs/fs-coral\\_disease\\_981019.html](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_disease_981019.html))
  - [Coral Bleaching: An Ever-Increasing Problem?](#)  
([http://www.state.gov/www/global/global\\_issues/coral\\_reefs/fs-coral\\_bleach\\_981019.html](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_bleach_981019.html))
  - NOAA (National Oceanic and Atmospheric Administration)  
(<http://www.publicaffairs.noaa.gov/coral-reef.html>)

**Links to other resources:**

<b>Lesson</b>	<b><u>Teacher</u></b>	<b><u>Student</u></b>
EXPLOR E	Fact Sheet: Coral Reefs ( <a href="http://www.pacificwhale.org/childrens/fsreef.html">http://www.pacificwhale.org/childrens/fsreef.html</a> )	Fact Sheet: Coral Reefs ( <a href="http://www.pacificwhale.org/childrens/fsreef.html">http://www.pacificwhale.org/childrens/fsreef.html</a> )
	Exploring a commercial fisher’s perspective <a href="http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_overfish_981019.html">http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_overfish_981019.html</a>	Exploring fisher’s perspectives <a href="http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_overfish_981019.html">http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_overfish_981019.html</a>
	Exploring a coastal developer’s perspective <a href="http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_coast_981019.html">http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_coast_981019.html</a>	Exploring coastal developer’s perspectives <a href="http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_coast_981019.html">http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_coast_981019.html</a>
	Exploring an ocean tourist’s perspective <a href="http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_tourism_981019.html">http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_tourism_981019.html</a>	Exploring an ocean tourist’s perspective <a href="http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_tourism_981019.html">http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_tourism_981019.html</a>

<p>NOAA (National Oceanin and Atmospheric Administration)  <a href="http://www.publicaffairs.noaa.gov/coral-reef.html">http://www.publicaffairs.noaa.gov/coral-reef.html</a> )</p>	<p>NOAA (National Oceanin and Atmospheric Administration)  <a href="http://www.publicaffairs.noaa.gov/coral-reef.html">http://www.publicaffairs.noaa.gov/coral-reef.html</a> )</p>
<p>Diseases of Reef-Building Corals  <a href="http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_disease_981019.html">http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_disease_981019.html</a></p>	<p>Diseases of Reef-Building Corals  <a href="http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_disease_981019.html">http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_disease_981019.html</a></p>
<p>Coral Bleaching: An Ever-Increasing Problem?  <a href="http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_bleach_981019.html">http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_bleach_981019.html</a></p>	<p>Coral Bleaching: An Ever-Increasing Problem?  <a href="http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_bleach_981019.html">http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_bleach_981019.html</a></p>
<p>The International Trade in Corals  <a href="http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_trade_981019.html">http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_trade_981019.html</a></p>	<p>The International Trade in Corals  <a href="http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_trade_981019.html">http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_trade_981019.html</a></p>
<p>Overfishing of target species  <a href="http://www.wri.org/wri/reefsatrisk/">http://www.wri.org/wri/reefsatrisk/</a></p>	<p>Overfishing of target species  <a href="http://www.wri.org/wri/reefsatrisk/">http://www.wri.org/wri/reefsatrisk/</a></p>
<p>Diminishing returns: World fisheries under pressure  <a href="http://www.igc.org/wri/trends/fishloss.html">http://www.igc.org/wri/trends/fishloss.html</a></p>	<p>Diminishing returns: World fisheries under pressure  <a href="http://www.igc.org/wri/trends/fishloss.html">http://www.igc.org/wri/trends/fishloss.html</a></p>

# Kids as Airborne Mission Scientists



## Problem Scenario: Should Restrictions be Applied to Activities Around the Coral Reefs in Kailua Bay?

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**Related subject area:** Science, Geography.

**Overall problem:** Which restrictions (if any) should be applied to activities around the coral reefs of Kailua Bay to insure their lasting protection?

**Relationship of problem in this lesson to overall problem:** This lesson provides students with a problem to investigate throughout the lessons. The task for this lesson is for students to generate a list of questions about what they need to know and to create an action plan about what they should do to evaluate the coral reefs in Kailua Bay. During this lesson, students will participate in an authentic and motivating problem. They will develop an understanding of key concepts to investigate, and build a framework for participating as airborne mission scientists who examine the problem from different roles and perspectives.

**Estimated time required:** 1 to 2 class periods

**Student outcomes/objectives:**

- Students will develop an understanding of the problem by generating who, what, where, when, why, and how questions that need to be answered in order to complete the KaAMS mission.

**Prerequisite skills or knowledge:**

- Basic internet skills
- Team work
- Basic understanding of problem solving
- Basic reading skills
- Basic presentation preparation

**Teacher preparation:**

- Print Student Journal /Activity sheets for these activities.
- Bookmark appropriate websites for students.
- It is highly recommended that teachers review the last lesson plan (**Go Public: What Conclusions Can I Draw and How Do I Present my Results?**)

[http://www.higp.hawaii.edu/kaams/lpreef/cr\\_conclude/over.html](http://www.higp.hawaii.edu/kaams/lpreef/cr_conclude/over.html) ) in the KaAMS series while preparing this lesson and share the final product assessment rubrics with their students. Time should be granted throughout the lessons for students to build components of their final projects.

# Kids as Airborne Mission Scientists

Problem Scenario: Should Restrictions be Applied to Activities Around the Coral Reefs in Kailua Bay?

(Continued)

Student reflection and assessment: [Student reflection activity:](#) | [Assessment](#)

Education standards supported by this lesson:

[National Science Education Standards](#) | [Project 2061 Benchmarks](#)

[National Standards for School Mathematics](#) | [National Technology Standards](#) | [National Geography Standards](#)

Cross-curricular connections to National Education Standards for this lesson:

[Math](#) | [Technology](#) | [Geography](#)

Teacher activities	Student activities
<p><b>FRAME</b> ideas by introducing the problem scenario and the problem for the unit.</p> <p><b>Refer</b> students to <a href="#">The Mission Request Letter (PS-1)</a>(See Mission Request Letter – this document below) in their journal.</p> <p><b>Prompt</b> students to read (or read to them) the mission request letter that defines the KaAMS mission.</p> <p><b>Ask</b> students to identify what problem needs to be investigated.</p> <ul style="list-style-type: none"> <li>Ask students to define the main problem. To find the main problem, lead students to underline the major problem discussed in the letter.</li> </ul> <p><b>Ask</b> students to conjecture about the</p>	<p>Student activity:</p> <ul style="list-style-type: none"> <li>Read <a href="#">The Mission Request Letter (PS-1)</a>(See Mission Request Letter – this document below)</li> </ul> <p>Underline the words: the CRS has tried to collect a variety of information in order to reach an appropriate recommendation about which restrictions (if any) should be applied to activities around the coral reefs of Kailua Bay to insure their lasting protection.</p>

<p>causations, effects, and possible resolutions of problem.</p> <ul style="list-style-type: none"> <li>• Why do we need to know to investigate coral reef problem in Kailua Bbay?</li> <li>• If there are no restrictions over activities around the coral reefs in Kailua Bbay, what will happen?</li> <li>• What kind of activity occurs around beaches?</li> <li>• What type of restrictions can help solve this coral reef problem? What are your initial resolutions to this problem?</li> </ul>	
<b>Teacher activities</b>	<b>Student activities</b>
<p><b>Inform</b> students of key topics in the problem scenario by asking what, why, where, who, when, and how questions and ask students to think about how to present their final recommendations.</p> <p><b>Prompt</b> students to think about what they need know after reading the problem scenario. To find what they know, ask students to answer the following prompting questions.</p> <ul style="list-style-type: none"> <li>• What am I studying?</li> <li>• Why do I need to study this problem?</li> <li>• Where is Kailua Bay located?</li> <li>• Who studies the problem?</li> <li>• When can I study the problem?</li> <li>• How do I study this problem?</li> </ul>	<p>Sample students responses:</p> <ul style="list-style-type: none"> <li>• Evaluation of the state of coral reefs in the Kailua Bay</li> <li>• It is an mission request from a Government Agency</li> <li>• Kailua Bay is on the island of Oahu in Hawaii.</li> <li>• Airborne mission scientists.</li> <li>• Based on available airborne remote sensing data, we can evaluate the state of coral reefs in the Kailua Bay.</li> </ul>

<p><b>Teacher note:</b></p> <ol style="list-style-type: none"> <li>To diversify this activity you may add one or two additional roles related to the coral reefs problem.</li> <li>To record brainstormed ideas, you may want to use <a href="#">a table summarizing what students know</a> (See Activity sheet: what do I know about the problem? (PS-2) below) about problem scenario.</li> </ol> <p><b>At this point</b>, it is appropriate to motivate students and prompt their thinking about the final project they will build during KaAMS. Describe the KaAMS final report:</p> <ul style="list-style-type: none"> <li>Students will work in groups and role-play different types of airborne mission scientists while planning an airborne remote sensing mission ultimately gathering and analyzing real NASA remote sensing data.</li> <li>At the end of their scientific exploration students will develop a final product that describes the decision-making and problem solving they utilized as well as their findings.</li> <li>Students will work in groups throughout the unit to create their final project.</li> </ul> <p><b>Explain</b> to students that they will now participate in a short activity to explore different perspectives that can be inferred from the problem scenario</p>	
<b>Teacher activities</b>	<b>Student activities</b>
<b>EXPLORE</b> the important questions based	Student activity:

on the given roles.

**Prompt** students to think about why different perspectives are required to answer the above-stated questions

**Break** students into groups, assign each group to different roles. .

- [Group 1- Exploring a commercial fishers' perspective](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_overfish_981019.html)  
([http://www.state.gov/www/global/global\\_issues/coral\\_reefs/fs-coral\\_overfish\\_981019.html](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_overfish_981019.html))
- [Group 2- Exploring a coastal developer's perspective](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_coast_981019.html)  
([http://www.state.gov/www/global/global\\_issues/coral\\_reefs/fs-coral\\_coast\\_981019.html](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_coast_981019.html))
- [Group 3- Exploring an ocean tourist's perspective](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_tourism_981019.html)  
([http://www.state.gov/www/global/global\\_issues/coral\\_reefs/fs-coral\\_tourism\\_981019.html](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_tourism_981019.html))
- Group4- Exploring coral reef ecologist's perspectives
  - 1) [Diseases of Reef-Building Corals](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_disease_981019.html)  
([http://www.state.gov/www/global/global\\_issues/coral\\_reefs/fs-coral\\_disease\\_981019.html](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_disease_981019.html))
  - 2) [Coral Bleaching: An Ever-Increasing Problem?](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_bleach_981019.html)  
([http://www.state.gov/www/global/global\\_issues/coral\\_reefs/fs-coral\\_bleach\\_981019.html](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_bleach_981019.html))
  - 3) [The International Trade in Corals](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_trade_981019.html)  
([http://www.state.gov/www/global/global\\_issues/coral\\_reefs/fs-coral\\_trade\\_981019.html](http://www.state.gov/www/global/global_issues/coral_reefs/fs-coral_trade_981019.html))
  - 4) NOAA (National Oceanic and Atmospheric Administration)  
<http://www.publicaffairs.noaa.gov/coral-reef.html>

**Have** students brainstorm their roles in each group

- Assign each group to different roles as a commercial fisher, a coastal developer, an ocean tourist, or a coral reef ecologist.

Sample students responses

- A commercial fisher: catches ocean fish and other marine life using nets, cages, and other devices.
- A coastal developer: develops luxury hotels, championship golf courses, tennis courts, conference rooms, residential resort homes, etc

- What is your assigned role in your group?
- What does a commercial fisher/ a coastal developer/ an ocean tourist/ coral reef ecologist do?

**Ask** each group to define their role and develop an understanding of the relationship between their roles and coral reefs problem (**Activity Sheet: What do I know about the problems, PS-3**).

**Circulate** around to the group and ask

- An ocean tourist: experiences the beauty of the ocean environment, to engage in recreational activities including diving, snorkeling, and boating
- A coral reef ecologist: studies the relationship between organisms and their environments. Coral reefs are very closely tied to their surrounding environment.

Each group explores the U.S. Coral Reef Task Force Fact Sheet website and related websites and record their responses to the questions on [the activity sheet](#) (See Activity sheet: Exploring the different perspectives to the coral reef problem? This document below, PS-3)

- **Research Background**

- [Fact Sheet: Coral Reefs](http://www.pacificwhale.org/childrens/fsreef.html) (<http://www.pacificwhale.org/childrens/fsreef.html> )
- Fisheries
  - [Over fishing of target species](http://www.wri.org/wri/reefsatrisk/) (<http://www.wri.org/wri/reefsatrisk/>)[Diminishing returns: World fisheries under pressure](http://www.igc.org/wri/trends/fishloss.html) (<http://www.igc.org/wri/trends/fishloss.html>)

<p>questions about why it is important to know about the coral reefs, what problems they need to address regarding the coral reef problem, and what actions they need to take in order to address the problem based on their roles.</p>	
<p><b>Teacher activities</b></p>	<p><b>Student activities</b></p>
<p><b>TRY</b> to find action plans investigating the coral reefs problem of Kailua Bay. They can compare these to their own.</p> <p><b>Prompt</b> each group, one at a time, to present their investigation results that include the definition of their role, the relationship between their role and the coral reef problem, problem/issues to be investigated for their given roles, and action plans to address.</p> <ul style="list-style-type: none"> <li>• Four groups present their important results</li> </ul> <p><b>Discuss</b> each group’s investigation results.</p> <ul style="list-style-type: none"> <li>• Each group provides feedback about other groups’ selection.</li> <li>• Be sure to point out the given roles for each group and how the important questions from different perspectives can vary <del>be different</del>.</li> <li>• During these presentations the students construct <b><u>an overall table with all different perspectives</u></b>. (See Activity sheet: Creating an action plan summarizing all the different perspectives. In this document below, PS-4)</li> </ul> <p><b>Teacher note:</b> Students may record notes on the provided worksheets that they did not complete during the group work or perhaps the class should create a combined table on the chalkboard or poster paper.</p>	<p>Student activity</p> <ul style="list-style-type: none"> <li>• Students present their exploration results.</li> </ul> <ul style="list-style-type: none"> <li>• Students assess and provide feedback about other groups’ presentation using the provided <b><u>Activity sheet: Presentation rubric</u></b>. See Activity sheet: Presentation rubric (<del>ARSM-9 below</del> PS-5)</li> <li>• Students can identify similarities and differences between different perspectives in <b><u>an overall table with all different perspectives</u></b>. (See Activity sheet: Creating an action plan summarizing all the different perspectives,PS-4. This document below)</li> </ul>

<b>Discuss</b> next steps: Now you will look for the answers to answer to your question	
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**Student reflection activity:**

- Prompt students to think about how they will report their final project.
  - Prompt students to think about why different perspectives are required to understand the problem scenario.
  - Prompt students to identify what they know about the problem scenario.
  - Prompt students to develop types of questions they would need to answer to address the overall problem.
  - Prompt students to develop action plans they would need to do in order to address the problems identified from their perspectives.
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**Assessment:**

- Check for key characteristics of the problem scenario, including:
    - Why study this problem?
    - What are they studying?
    - Where are the coral reefs?
    - Who studies the problem?
    - When can we study the problem?
    - How do they study the problem?
  - Check the list of questions generated by further investigation. It should include:
    - Aeronautic science (e.g., how planes fly, how they can be used for remote sensing, different types of aircraft, etc)
    - Remote sensing science (e.g. what is remote sensing, how do they plan a remote sensing mission, etc)
    - Coral reef science (what is a coral reef, what are the threats to the coral reefs?)
    - Government (why is government interested in coral reef problem? who are the concerned groups for coral reef problems?)
  - Check the validity of statements between what they know, what they need to know, and what they should do in the activity sheet.
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**Ideas for math lesson connections**

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### **Related National Education Math Standards**

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### **Ideas for geography lesson connections**

- Students identify the geographic location of the Hawaiian Islands. For example, the students might create a report describing the location and geography of the island.

### **Related National Education Geography Standards**

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### **Ideas for technology lesson connections**

- Students create their own electronic journal for keeping notes on KaAMS project.
- Students create a database of vocabulary words and terms they will learn throughout KaAMS.
- Students learn to use presentation software while preparing a presentation on their investigation results.
- Students begin to develop a web site to report their progress and what they learn during the KaAMS project.

### **Related National Education Science Technology Standards**

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## Mission request letter (PS-1)

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July 30, 2002



Dear Airborne Mission Scientist,

Coral reefs provide invaluable resources to both human and marine life. However, coral reefs are currently in serious dangers due to both natural and man-made causes. In December 2000, President Clinton signed the Executive Order (EO) for establishing the Reserve of the coral reefs in the Northwestern Hawaiian Islands area. It recognizes the importance of conserving coral reef ecosystems, establishes the Coral Reef Task Force to take steps to protect, manage, research, and restore such ecosystems. The Coral Reef Task Force suggested a new recommendation that another EO should be established for preserving the coral reefs of Kailua Bay located on the main Hawaiian island of Oahu.

The recommendation from the Coral Reef Task Force led to intense debates regarding coral reef reserve policy. Some concerned groups consider it overly restrictive and therefore detrimental to the fishing industry, coastal development, and tourism in Hawaii. Other groups worry that the review of the EO will result in weakening the Reserve. A report by the Congressional Research Service (CRS) stated that the current data about the coral reefs in Kailua Bay are not well documented. For this reason, the CRS has tried to collect a variety of information in order to reach an appropriate recommendation about which restrictions (if any) should be applied to activities around the coral reefs of Kailua Bay to insure their lasting protection.

We would like to request your help by asking you to provide us with your professional knowledge about coral reefs, remote sensing, and aeronautics in order to evaluate the state of Kailua's coral reefs based on available airborne remote sensing data. According to your given role, prepare a report or presentation in which you and your team make recommendations, predictions, inferences, or resolutions based on your different perspectives about the problem.

Thank you for your time and cooperation in this matter. I look forward to receiving your report after completing your study and data analyses.

Sincerely,

Fredrick, A, Daniel, Director  
The Congressional Research  
Service

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## Activity sheet: What do I know about the problem?(PS-2)

What are we studying?	Why study this problem?	Where are the coral reefs?	Who studies the problem?	When can we study the problem?	How do I study and report about this problem?
<p>Coral reef ecosystem</p> <p>The threats to the coral reefs</p>	<p>Value of Coral reefs to life</p> <p>Government Executive Order</p>	<p>Northwestern Hawaiian Island</p> <p>Kailua Bay on the island of Oahu, in the main Hawaiian Islands</p>	<p>Airborne mission scientists</p> <p><del>Aeronautics Professionals</del></p> <p>Remote Sensing Scientists</p> <p>Environmental Scientists</p> <p>Coral Reefs Specialists</p>	<p>Planning a remote sensing mission</p> <p>Develop mission flight plan</p>	<p>Using airborne remote sensing data</p> <p>Investigating different roles</p> <p>Using scientific data</p> <p>Preparing presentation</p>

## **Activity sheet: Exploring the different perspectives to the coral reef problem (PS-3)**

### **Team members:**

#### **1. What do I know?**

1. Choose your role (circle one)  
(Commercial fisher, Coastal developer, ocean -tourist, Coral reef ecologist)
2. Describe and illustrate your role. You may want to draw a picture illustrating the role.
3. How does your role relate to the coral reef problem?

#### **2. What do I need to know?**

What problems/issues do you need to address regarding the coral reef?

Why is it important to study those problems/issues?

#### **3. What should I do?**

What actions are required to address your problems?

**Activity sheet: Creating an action plan summarizing all the different perspectives (PS-4)**

	<b>What do I know?</b>	<b>What do I need to know?</b>	<b>What should I do?</b>
<b>Commercial Fisher</b>			
<b>Coastal developer</b>			
<b>Ocean Tourist</b>			
<b>Coral reef ecologist</b>			
<b>Add an additional role</b>			

# Kids as Airborne Mission Scientists

## Activity sheet: Presentation rubric (PS-5)

- Presenters:
- Reviewers:
- Date of review:

Presentation elements	Rating		
	Strong	Good	Needs more work
In general, the definition of given roles was clearly stated.			
In general, the relationship between their role and coral reef problem was stated clearly.			
In general, the questions to be investigated were stated clearly.			
In general, the types of actions listed were important to solve the problems/issues for their given role.			
Evidence was presented that justified each of the questions.			
The presenters provided evidence of working effectively as a team.			

Specific comments:

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