PART 2: Growth and Degradation of Hawaiian Volcanoes

At the end of the activity, each group member will turn in:

1. *One completed figure of the Growth and Degradation of Hawaiian Volcanoes*.

2. *A two to three paragraph summary of the Life and Death of a Hawaiian Volcano.*

Overview

• You will fill out the figure of the Growth and Degradation of Hawaiian Volcanoes using the experience from all the specialists in your Synthesis group.
• Then you will summarize the Life and Death of a Hawaiian Volcano for a short article to be published in *Scientific American* magazine in several paragraphs.

Directions

1) **TEACH YOUR FELLOW STUDENTS:** Now that you have become a specialist in an aspect of the Life and Death of Hawaiian Volcanoes, you need to teach the other members in your synthesis group about your specialty.

Each Specialist should present to the Synthesis group **(in about 5 minutes)**:

—What you looked at and did in your Specialty Group? [**SHOW BY EXAMPLE AT THE LARGE MAP]

—Show the GRAPH or MAP you completed.

—Summarize your observations and possible explanations.

2) **COMPLETE THE FIGURE PROVIDED:** With your Synthesis Group, look at the figure of the **Growth and Degradation of Hawaiian Volcanoes**.
Using all of the collective information you have just learned from one another, and from your Specialty Group and the Pre-activity Reading, answer the questions and fill in (or circle) the answer for all **seven stages** in the Growth and Degradation of Hawaiian Volcanoes figure (not for the last Guyot, or Seamount, Stage).

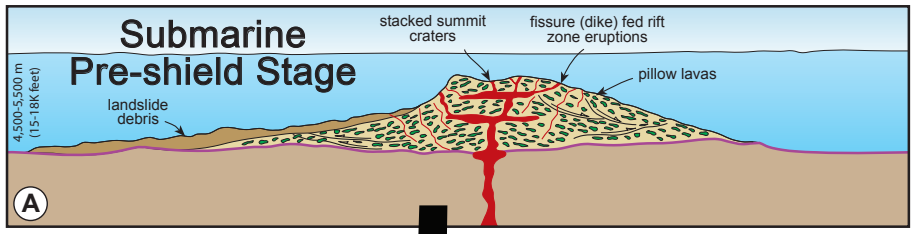
3) **Summarize the Life and Death of a Hawaiian Volcano**. Once your Synthesis Group has completed the questions on the diagram:

—Individually write a several paragraph summary describing what happens during the lifetime of a Hawaiian volcano.

—Write this article for a general audience, accessible to readers who are not at all familiar with Hawaiian volcanism, as if you plan on submitting it as a short publication in *Scientific American* magazine.

—Assume your article will be published alongside the figure of the Growth and Degradation of Hawaiian Volcanoes. You can organize the article based on different specialties (ages, volumes, shield volcanoes, landslides, subsidence) or based on the stages of the growth and degradation of Hawaiian volcanoes.

Growth of Hawaiian Volcanoes



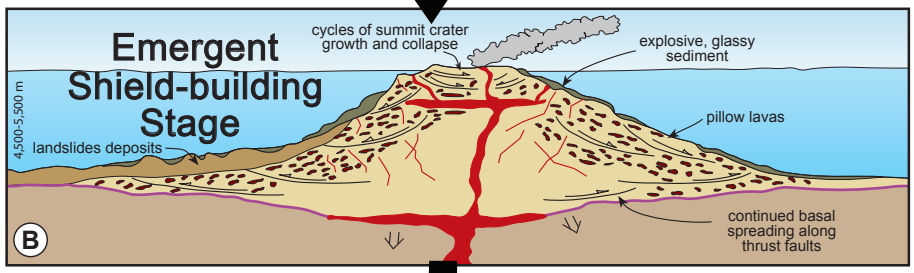
Volcano Ages: Age range of volcano in this stage?

Example of volcano in this stage:

Volcano Volumes: High or low magma eruption rate?

Giant Landslides: High or low probablility of giant landslide?

Subsidence: Uplift or subsidence? High or low rate?



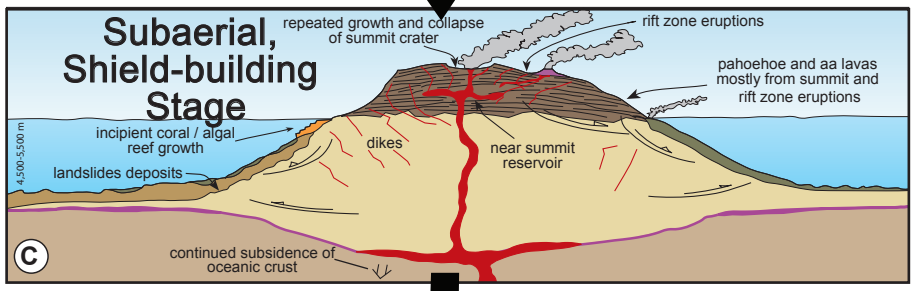
Volcano Ages: Age range of volcano in this stage?

Example of volcano in this stage:

Volcano Volumes: High or low magma eruption rate?

Giant Landslides: High or low probablility of giant landslide?

Subsidence: Uplift or subsidence? High or low rate?



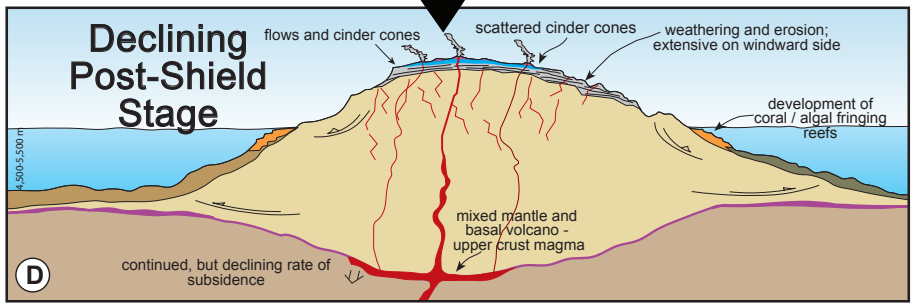
Volcano Ages: Age range of volcano in this stage?

Example of volcano in this stage:

Volcano Volumes: High or low magma eruption rate?

Giant Landslides: High or low probablility of giant landslide?

Subsidence: Uplift or subsidence? High or low rate?



Volcano Ages: Age range of volcano in this stage?

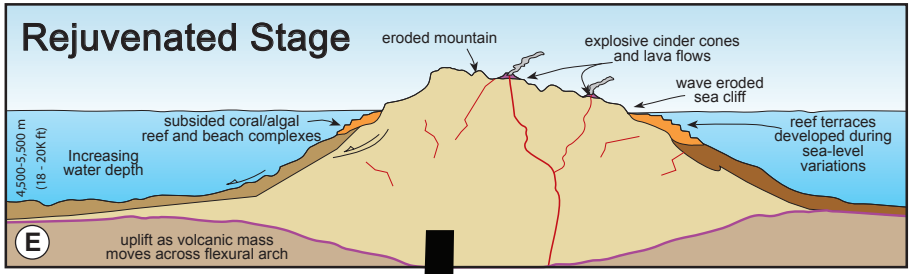
Example of volcano in this stage:

Volcano Volumes: High or low magma eruption rate?

Giant Landslides: High or low probablility of giant landslide?

Subsidence: Uplift or subsidence? High or low rate?

Degradation of Hawaiian Volcanoes



Volcano Ages: Age range of volcano in this stage?

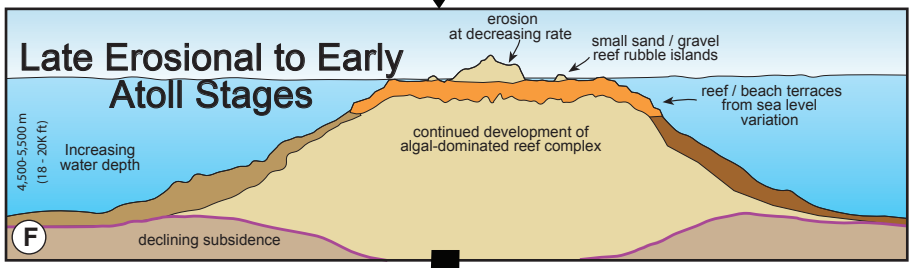
Example of volcano in this stage:

Volcanism: *Any volcanic activity* during this stage?

Giant Landslides: High or low probablility of giant landslide?

Subsidence: Uplift or subsidence? High or low rate?

Primary processes during this stage?



Volcano Ages: Age range of volcano in this stage?

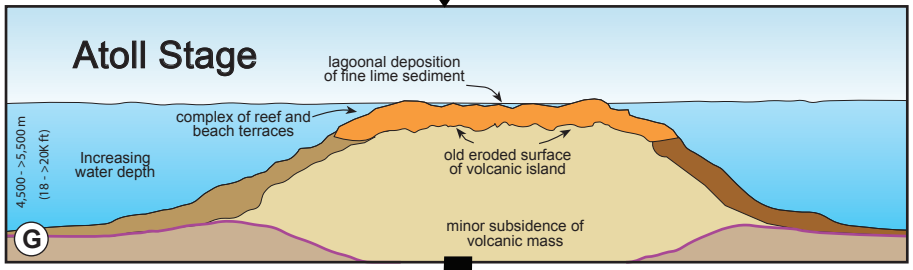
Example of volcano in this stage:

Volcanism: *Any volcanic activity* during this stage?

Giant Landslides: High or low probablility of giant landslide?

Subsidence: Uplift or subsidence? High or low rate?

Primary processes during this stage?



Volcano Ages: Age range of volcano in this stage?

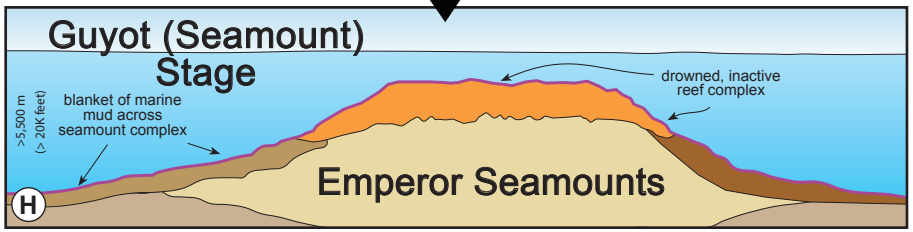
Example of volcano in this stage:

Volcanism: *Any volcanic activity* during this stage?

Giant Landslides: High or low probablility of giant landslide?

Subsidence: Uplift or subsidence? High or low rate?

Primary processes during this stage?



Emperor Seamounts

--Gathering sediments--