## **CORAL BLEACHING** • What Is Coral Bleaching? | TIME



Module 1: Earth's	Biospł	iere: V	Vhat is (	Coral B	leachi	ng				
		Begin	$ning \triangle$	Develo	ping 🗆	Expand	ing (	Bri	$dging \diamond$	Reaching ☆
Critical Thinking (CT) Gathering Information		1	1.5	2	2.5	3	3.5	4	4.5	5
Critical Thinking (CT): Cause and Effect		1	1.5	2	2.5	3	3.5	4	4.5	5

## **Introduction:**

Coral bleaching is a major concern for reefs all over the world. Under certain environmental stresses, zooxanthellae algae will vacate their coral hosts. Without the zooxanthellae, corals lose their colors and appear pale or white, hence the name coral bleaching. Zooxanthellae are also coral's primary source of food and play a key role in helping coral polyps build skeletal reef material.

Bleaching can be caused by a number of different stresses including changes in ocean chemistry (particularly salinity or acidification), increased sedimentation in the water, high levels of solar irradiance, or pathogen infections. However, the primary cause of bleaching events is believed to be higher than normal sea surface temperatures.

## Part A: What do we know about corals and coral reefs?

Watch as a warm-up: (click the link) what is coral bleaching?

Background Information:	Answers:
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What are corals?	
Insert a picture of how a healthy coral looks like:	
Other interesting facts about corals	
What are coral reefs? Insert an image	
Give at least 3 reasons why coral reefs are important to humans.	
What is coral bleaching? Research on the different images of bleached corals and healthy corals. Compare how they look. (images)	

Based on what you observed in the photographs of bleached corals, what impact do you think coral bleaching has on biodiversity and the overall health of coral reef ecosystems? Explain your answer.	
Understanding Coral Bleaching:  From the video, explain HOW coral bleaching happens what is coral bleaching?	