

JENGA: PROTECTING CORAL REEFS

Nature Foundation St. Maarten edition



Protecting the reef is more than just a game... it's a balancing act!

Students will learn that there are several factors that affect the health of St. Maarten's reef, both negative and positive. To preserve and protect our coral reefs, we must address all of these factors.

HIGHLIGHTS

- Negative and positive human impacts on coral reefs
- Extent to which human activity can cause or mitigate damage

CONSIDERATIONS

- Limited participation
- Optimal 3 participants at a time

TOOLS NEEDED

- Jenga game
- Presentation about the effects of human impact on coral reefs
- Impact Cards (**attached below**)

INSTRUCTIONS

Set up the Jenga game normally. Print out the Impact Cards (**attached below**) and cut them, stacking them face-down in a single pile. Each game card represents a positive or negative impact on the reef. Players will choose one card each when it is their turn. Based on the card, players will remove blocks from different parts of the Jenga tower. All positive impact cards remove blocks from the top, making the tower shorter and more stable. All negative cards remove blocks from a row at least two beneath the top, threatening the integrity and stability of the tower so it might eventually collapse.

Having about twice the amount of negative impact cards as positive impact cards ensures long gameplay while still creating a challenge. Cards can be specified to your area. The number of blocks to remove should reflect the level of impact. For example, the more impactful a factor is, the more blocks would be removed, using a maximum of 3 blocks at one time.

<p>All coral reefs on St. Maarten become marine preserves. <i>Take 4 blocks off the top</i></p>	<p>Caribbean Cinemas shows a film about coral reefs, increasing public awareness and interest. <i>Take 1 block off the top</i></p>	<p>A new treatment for a human disease is discovered on a coral reef, prompting protection and restoration of the reef. <i>Take 2 blocks off the top</i></p>	<p>The Nature Foundation receives funding for Coral Week to educate local children about the reef. <i>Take 2 blocks off the top</i></p>
<p>A new species of fish is discovered on a reef. <i>Take 1 block off the top</i></p>	<p>An Eco Tour is established to teach tourists about how to protect the environment. <i>Take 1 block off the top</i></p>	<p>Intellireefs uses St. Maarten as their pilot program for their new coral restoration program. <i>Take 2 blocks off the top</i></p>	<p>A Category 3 hurricane passes St. Maarten and causes significant damage to the reef. <i>Remove 3 blocks</i></p>
<p>A resort is allowed to build directly on the beach. <i>Remove 1 block</i></p>	<p>Garbage bins on Mullet Beach overflow, causing people to dump their trash in the sand. <i>Remove 1 block</i></p>	<p>A new marina is built near Simpson Bay Bridge. Silt from construction enters the water each time it rains. <i>Remove 1 block</i></p>	<p>A boat pumps its black water (sewage) into the lagoon. <i>Remove 1 block</i></p>
<p>A resident's septic tank overflows and the waste runs into Simpson Bay. <i>Remove 1 block</i></p>	<p>A sailor ties their boat onto the mangroves as a storm approaches St. Maarten. <i>Remove 1 block</i></p>	<p>Residents use pesticides to clear weeds in their garden. The chemicals wash into the water in Point Blanche. <i>Remove 1 block</i></p>	<p>Reef toxic chemicals are not banned. The majority of tourists use sunscreen with Oxybenzone. <i>Remove 1 block</i></p>

<p>A section of Simpson Bay is dredged to create an artificial shoreline <i>Take 2 blocks off the top</i></p>	<p>Sargassum collects on Guana Bay, and sea turtles are unable to use the beach to lay their eggs. <i>Remove 1 block</i></p>	<p>A beach bar uses plastic cups and plastic straws for all the drinks served during high season. <i>Remove 1 block</i></p>	<p>Residents participate in a beach clean-up in Great Bay. <i>Take 1 block off the top</i></p>
<p>ReGreening SXM plants native plants in Madame Estate <i>Take 1 block off the top</i></p>	<p>Local students use the Literatti app to organize a clean up around MPC. <i>Take 2 blocks off the top</i></p>	<p>An oil spill occurs near Pelican. <i>Remove 2 blocks</i></p>	<p>The plastic ban is postponed by St. Maarten Parliament. <i>Remove 1 block</i></p>
<p>Local businesses require shoppers to bring their own reusable bags. <i>Take 1 block off the top</i></p>	<p>A dolphinarium is built in the Beacon Hill area. <i>Remove 3 blocks</i></p>	<p>Tour boats switch to reusable cups and do not offer straws. <i>Take 1 block off the top</i></p>	<p>Heineken Regatta allows single-use plastic in the Regatta village. <i>Remove 1 block</i></p>
<p>Local businesses require shoppers to bring their own reusable bags. <i>Take 1 block off the top</i></p>	<p>Residents install bright lights on the beach. Sea Turtles avoid the area for nesting. <i>Remove 1 block</i></p>	<p>ATVs drive over the sand in a sea turtle nesting area, crushing eggs from existing nests. <i>Remove 2 blocks</i></p>	<p>A contagious coral disease spread from other areas arrives in St. Maarten's reefs. <i>Remove 2 blocks</i></p>

