3rd Grade QUESTs
Guam Solution-based STEM Design Challenges

Design Challenge, Anchor Question	NGSS Performance Expectation	Description
QUEST: Design Traps to Catch Non-native Animals How can we help Guam's native plants and animals by trapping non-native animals?	3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.* NGSS 3-LS4-4 page	Non-native plants and animals can cause severe changes to local environments. This alters the normal balance between the plants and animals. *Design a model of a trap that could catch one specific non-native animal that now lives on Guam (invasive species). Examples include the brown tree snake, coconut rhinoceros beetle, the greater banded hornet, and the giant African land snail. Explain why your trap is an effective design to catch the animal and reduce the harm they are causing to our island's native animals and/or plants.
QUEST design challenge description is in the 3rd grade folder.		

Resources for more Guam-STEM design challenge ideas you could try on your own

Design Challenge	NGSS Performance Expectation*	Lesson Resources
Compare places around school that flood and don't flood in heavy rains, and make recommendations for a design that might reduce the flooding.	3-ESS3-1. Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.* NGSS 3-ESS3-1 page	● Are our homes built for severe weather? (modify for 3rd?) https://weather.thinkport.org/severe-weather.html (All unit lessons https://weather.thinkport.org/home.html) ● Floodplain modeling (6th - modify for 3rd?) https://www.teachengineering.org/activities/view/cub_natdis_lesson07_activity1