

Name: \_\_\_\_\_

## FIJI Schoolwide STEM Challenge

### Coral Reefs



**Problem:** Oceans are threatened by pollution and unsustainable fishing methods. **Create** a new coral to add to the water that can filter trash and fishing pollution. *Abril- Yendo a los problemas de la isla Fiji: los océanos están en peligro de polución y hay abuso de métodos de pesca. Crear un nuevo coral para agregar al agua así filtra la basura y reduce la polución pesquera.*

**Ask:** Corals are beautifully created living creatures! (They are animals not plants! Polyps) What makes corals so special?

*\*\*And unlike plants, **corals** do not make their own food. **Corals** are in fact **animals**. The branch or mound that we often call “a **coral**” is actually made up of thousands of tiny **animals** called polyps. A **coral** polyp is an invertebrate that can be no bigger than a pinhead to up to a foot in diameter.*

**Imagine:** If you could engineer an animal to filter chemicals in the water and trash, what would it look like and why?

**Constraints:**

1. Coral must have moving parts
2. Coral must be bright and vibrant
3. Coral must be made out of recycled materials
4. Coral must be between 10-12” inches in height and width

**Plan:** Design a new coral that could be placed in Fiji to help continue to filter the water, be a habitat for other animals, and survive global warming.

***(Be sure to label and design a BRIGHT, vibrant, beautiful coral out of recycled materials.) Can you do multiple designs in this table? Circle the one you make!***

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**Improve:** What changes did you need to make in order to fit all your constraints?