



Name: _____

Date: _____

Grade: _____

How do living things and nonliving things interact in a coral reef ecosystem?

If I build a model of a coral reef,
then I think I will observe _____

because _____

- Clear container (aquarium, plastic bin, or large bowl)
- Sand or small gravel
- Rocks or coral skeleton pieces (dry)
- Model or toy marine animals (fish, sea turtle, crab, etc.)
- Artificial or craft coral (or make your own)
- Water
- Blue food coloring (optional)
- Small shells
- Plastic or real plants/seaweed
- Labels or index cards
- Tape
- Magnifying glass (optional)
- Notebook and pencil

- Ecosystem – a community of living things and their nonliving environment
- Coral – tiny animals that build hard structures called reefs
- Habitat – the natural home of an organism
- Symbiosis – a close relationship between two different organisms
- Biodiversity – the variety of living things in an area

1. Add a layer of sand or small gravel to the bottom of your container.
2. Arrange rocks or coral pieces to form the reef structure.
3. Add artificial or craft coral, shells, and plants to create hiding places and variety.
4. Add model marine animals around the reef.
5. Slowly pour in water until it covers the base of the reef.
6. Add a drop or two of blue food coloring (optional) to make the water look like the ocean.
7. Label the living things (biotic) and nonliving things (abiotic) in your model.
8. Observe your model and record your findings.

What did you observe about how the living and nonliving parts of the reef work together?

Draw your model and label the living (biotic) and nonliving (abiotic) parts.

[illegible]

Did your observations support your hypothesis? Circle one:

Yes No

Explain why or why not.

- How might a change in water temperature affect your coral reef?
- What happens if reefs lose their coral (coral bleaching)?
- What can people do to help protect coral reef ecosystems?

