OVERALL PROGRAM GUIDING QUESTIONS:

- What is a Nassau Grouper?
- What is the role of the Nassau Grouper in maintaining a healthy, reef ecosystem?
- What is a keystone species?
- What is a spawning aggregation?
- What is the role of the Nassau Grouper in the Cayman fishing community?
- How do we protect the survival of the Nassau Grouper and the health of the reef, while meeting the needs of the fishing community?

GENERAL CONCEPT: In a town (community/city) we have shelter (buildings) and inhabitants (people). People make their livings in various ways (jobs/niches) and work together to make a working economy (this is one the community level). On a more personal level, we (people) need to eat. This idea can be extrapolated to the coral reef community. In a coral reef community the reef provides structure/shelter, the inhabitants are many and diverse – each with its importance to the reef to ensure a smooth-functioning community. They need food shelter, protection from enemies, etc. All of these elements of the city, maintain a healthy balance as well. This metaphor is helpful for students to understand this idea. An example would be: What happens to a city that becomes over-populated? Food shortage, not enough jobs, too much trash, etc. Developing a general understanding of this idea is the primary intention behind these pre-activities.

ACTIVITY 1:

Extreme Coral Reef: READ ALOUD AND COMPREHENSION QUESTIONS. Part 1. 50 min.

DESCRIPTION: Read Aloud the first section of Extreme Coral Reef. This is followed by a whole group discussion of the reading and then students will work independently or with partners to answer the comprehension questions.
**ACTIVITY 2:**
Extreme Coral Reef: READ ALOUD AND COMPREHENSION QUESTIONS. Part 2. 50 min.

**DESCRIPTION:** Read Aloud the second section of Extreme Coral Reef. This is followed by a whole group discussion of the reading and then students will work independently or with partners to answer the comprehension questions.

**ACTIVITY 3:**
FOOD CHAIN & KEYSTONE SPECIES ACTIVITY. 50 min.

**DESCRIPTION:** Students will use a set of laminated, marine species cards to learn about the variety of life that exists in the Caribbean coral reef. Students will also explore how each species is connected through the food web. This activity provides a concrete, hands-on opportunity for students to see the interconnectedness of all living things in the coral reef ecosystem and the vital role played by the Nassau Grouper.

**ACTIVITY 4:**
VIRTUAL DIVE & PROJECT INTRODUCTION. 50 min.

**DESCRIPTION:** Students will view a 15 minute video showing actual REEF scientists diving with Nassau Grouper on their home reefs off Little Cayman. This activity will allow students to see how grouper really behave and their friendly demeanor towards divers. Students will also learn a brief history of the Grouper Moon Project and the role they will now be playing in saving the Nassau Grouper!