

# INTRODUCTION TO CARTOGRAPHY / LESSON OVERVIEW

## **Objectives**

#### The students will:

- identify the five basic elements of a map;
- collect data and construct maps using key features: title, compass, legend, symbols, scale, grid system, etc.;
- use a gridline system to locate items on a map;
- use a map to calculate the distance between two points.

## **Lesson Summary**

#### Part 1. Introduction (5 - 15 minutes)

Introduce cartography and the different types of maps.

#### Part 2. Parts of a Map (30 - 60 minutes)

Explain the five main parts of a map: the title, compass rose, key, scale, and grid.

#### Part 3. How Does OCEARCH Use Maps? (5 - 10 minutes

Explain how OCEARCH uses maps and how "pings" on the global shark tracker create migratory patterns of sharks.

#### Activity 1. Mapping Sharks (30 – 60 minutes)

This activity will help students understand how to create a map using the journey of a shark from the OCEARCH website. They will organize data collected from the OCEARCH Global Shark Tracker and create a map of where the shark traveled. Students will incorporate all aspects of a map. If desired, students can do additional research and add weather, elevation, the migration patterns of other animals etc.

### **Materials**

- Computer with internet access
- Unlined paper
- Colored pencils or markers
- Rulers

