

## Materials Management and Safety

### Materials

In this unit, students use a model and then develop multiple models. The unit is written so that students work in groups of three. Group size should be modified to fit your classroom and students.

In the unit, each group of three students will play the Whale Life Game in Task 2. The game includes a Whale Life Game Board and three spinners. To play the game, students will need a Whale Life Game Board and two of the three spinners. The Whale Life Game Board and the three spinner cards should be printed on a color printer, if possible, but they can be printed on a black and white printer. The paper fasteners, paper clips, and chipboard are used to construct the spinners. Chipboard is used to construct most cereal and other prepared food boxes. Directions to construct the spinners are in the Preparation section of Task 2.

The story, *Whales and Ships: Sharing the Ocean*, and the optional story, *Up Close with a Marine Scientist*, should also be printed on a color printer if possible.

Materials, in Order of Use	How Many?
Computer or tablet with Internet access	1 for the teacher 1 per group of two students
Projector for digital media	1
Chart paper	
Whale Life Game Board	1 per group of three students
Calving Ground Spinner	1 per group of three students
250 Years Ago Feeding Ground Spinner	1 per six students
Modern-Day Feeding Ground Spinner	1 per six students
Paper fasteners	2 per group of three students
Paper clips	2 per group of three students
Chipboard	Enough to cut out two 13 cm diameter circles for each group of three students.
Glue stick	1 for the teacher
Scissors	1 for the teacher
Whale Data card set	1 set per group of three students
Sticky notes, two colors	
Objects to represent whales in a model (game pieces, paper clips, erasers, stuffed animals)	1 per student
<i>Whales and Ships: Sharing the Ocean</i>	1 per student
<i>Up Close with a Marine Scientist</i> (optional)	1 per student
Markers (optional)	
Colored pencils (optional)	



## Student Sheet Guidance

Distribution information for sheets students will need access to during the unit.

Sheet Name	Number of Copies
Whale Life Game	1 per group of three students
Whale Game Pieces	1 per group of three students
Whale Life Game Review	1 per student
Where Are the Whales?	1 per group of three students
Whale Migration	1 per group of three students
Whale Map	1 per group of three students
Whale Model Directions	1 per student
Los Angeles, San Francisco, and Mexico signs	1 per group of three students
Your Ideas About the Problem and Solution	1 per student
Researching the Problem and Solution	1 per student
Our Solution	1 per group of three students
Testing Solutions	1 per student
Revised Solution	1 per group of two students

## Safety

Students may be upset by looking at images of dead and injured whales. Tell students before showing the images that they are going to see images that might cause them to be sad. Students may be upset by thinking or talking about injured animals. Students can take a break from looking at the pictures or thinking about injured animals if either is too upsetting.

