

Waves Topic Teacher Masters: Table of Contents

Introductory Letter to Families

Welcome to the Waves Unit1

Family Links

Waves in the Bathtub (Lesson 1).....2

Surfers in Waves (Lesson 4).....3

2013 Edition

Copyright © 2013 Chicago Science Group.

All Rights Reserved

Printed in the United States of America. Except as permitted under the United States Copyright Act, no part of this publication may be reproduced or distributed in any form or by any means or stored in a database or retrieval system without the prior written permission of the publisher.

SCIENCE COMPANION®, EXPLORAGEAR®, the CROSSHATCH Design™ and the WHEEL Design® are trademarks of Chicago Science Group and Chicago Educational Publishing Company, LLC.

ISBN 10: x-xxxxx-xxx-x ISBN 13: 978-x-xxxxx-xxx-x

1 2 3 4 5 6 7 8 9 10- BK1, 0913, xxxxx

www.sciencecompanion.com Chicago Educational Publishing Company, LLC.

Dear Families,

Our class is beginning the Science Companion® Waves Unit. The Waves Unit guides students through a hands-on exploration of the science of waves in water and sound waves in the air, and encourages them to build on their natural sense of wonder and curiosity about their world. As they observe, describe, and experiment, children hone their science process skills and begin to discover the various ways waves can be produced as well as their effects on objects.

During the Waves Unit, the students will:

- Create wave patterns in water and learn that waves form in a regular pattern.
- Learn that waves require a source and a medium. For example, the source of water waves is a motion somewhere. The medium for waves in the ocean is water.
- Produce waves on a rope and a slinky™ to discover the properties of waves and that waves transfer energy from place to place.
- Build models of waves using chenille wire.
- Look closely at deep and shallow water waves to recognize floating objects are moved differently by waves in deep water and shallow water.
- Explore how sound waves travel and can cause objects to move.

You and your child can explore this topic together at home by:

- Reading wave-related science books together that your child checks out from the class Science Center or the local library.
- Visiting the web site at www.ScienceCompanion.com to find a list of recommended web sites about waves and their properties.
- Working together on the **Family Link** activities that will be sent home. Your child may also want to repeat and vary some of the activities we do in class, as well as explain what they discovered and learned.

The Waves unit will encourage students to develop a new understanding of waves and their behavior. We hope the children will bring their discoveries and enthusiasm home, inviting you to learn alongside them—asking questions, discussing their work, and sharing their adventures in science.

Sincerely,

Name: _____ Date: _____

Family Link with Science—Home Activity

Waves in the Bathtub

Directions:

Explore some ways to produce waves in the bathtub.

1. Draw or describe a motion you used to create them.

2. Draw or describe what they looked like.

This activity is optional.

