

# GRADE FOUR WORKSHOPS

## ADVENTURES IN THE BONE ZONE\*

### SPECIAL INTEREST

Delve into the diet and digestion of an owl as you discover what an owl eats for breakfast! Join this ecological adventure and dissect an owl pellet, use magnifying glasses to sort and identify bones and assemble a rodent skeleton. Examine a variety of mammalian skulls to determine species and explore similarities and differences between herbivores and carnivores.

## BATTLES IN THE TROPICAL RAINFOREST

### LIFE SYSTEMS

Join our research team, travel around the world and explore tropical rainforest habitats! Make a rubber ball while discovering the benefits of using renewable rainforest resources. Learn about special adaptations of rainforest plants by constructing a tree from the roots up. Build a rainforest food web, learn the impact of species extinction and examine unusual rainforest specimens!

## DON'T TAKE ROCKS FOR GRANITE

### EARTH AND SPACE SYSTEMS

Become a junior geologist and dig into the concepts of mineral formation, the rock cycle and fossilization. Examine igneous, sedimentary and metamorphic rocks and identify a mystery mineral. Make some edible ore, dig for fish fossils and make your own fossil replica.

## GEARING UP: FUN WITH PULLEYS AND GEARS

### STRUCTURES AND MECHANISMS

Step into the physics lab and learn how pulleys and gears change the force required to do work! Identify gears used in our daily lives. Build a variety of pulley systems, design and construct a gear train and explore how pulleys and gears can change the direction of an applied force. Become a human pulley.

## LIGHT UP YOUR LIFE

### MATTER AND ENERGY

Join us on this optical adventure and discover how to see around corners and over walls! Light up some of your body parts in a hunt for translucent objects. Turn your classroom into a colourful disco and learn about the visible spectrum. Bounce and bend light to investigate reflection, refraction and fibre optics. Explore how light travels using a laser beam or comb. Design, construct and explore interesting optical devices.

*"Scientists in School is a superb program. The students acquire a zeal for science and learning through the fun activities and hands-on experiments. The scientists that deliver the workshops are knowledgeable and fantastic teachers. The students are always engaged and focused. They are learning while having fun!"*

*- Grade Four Teacher commenting on Gearing Up: Fun With Pulleys And Gears*

## MICROSCOPY: MORE THAN MEETS THE EYE\*

### SPECIAL INTEREST

Amaze yourself by visiting the world of the small and mighty! Use hand magnifiers, compound and stereoscopic microscopes to discover how hitch-hiker seeds travel, identify insects by a closer examination of their wings and meet some of the weird and wonderful creatures found in pond water.

## OCEAN HABITATS AND ADAPTATIONS

### LIFE SYSTEMS

Discover how living creatures have adapted to life in the ocean! Take a seaweed taste test; listen to whales and seals; and identify squid, octopus, mussel, clam and oyster adaptations. Investigate how pollution endangers ocean water and its creatures; explore food webs by building a kelp forest; and learn how the loss of sea otters can wipe out the whole web. Observe sharks, starfish, sand dollars, sea cucumbers, sea urchins, horseshoe crabs and more!

## SOUND IS MUSIC TO MY EARS

### MATTER AND ENERGY

Discover the science of sound as musical maestros! Explore sound waves and learn how sound can make your desk hum. Play the bucket bass to explore factors affecting pitch. Create a laughing chicken to investigate amplification. Learn how to protect your ears and find out how quiet you can be. Form your own classroom orchestra and serenade your school with your very own pan flute to take home.

\* Suitable for combined grades

## HOW TO BOOK A WORKSHOP

**Choose your topic:** We have something for everyone: topics which enrich the Science and Technology, Kindergarten or Math Curriculum; special interest topics; and workshops which are ideal for combined-grade classes. For your convenience, workshop descriptions are organized by grade.

**Request your workshop:** We accept workshop requests throughout the year. Book on-line at [www.scientistsinschool.ca](http://www.scientistsinschool.ca). You will receive a confirmation email acknowledging receipt of your request. Or fax/mail a completed booking form, found at the back of this catalogue.

**ALLERGY ADVISORY:** Our workshop kits contain a wide variety of diverse items and are handled by many students. While we regularly maintain our kits for cleanliness and safety, we cannot guarantee they are free from all allergens. Please advise us of any known allergies in your classroom or special restrictions in your school.

**Send in your deposit:** A \$25 deposit per workshop is required to process your request. Please send in your deposit cheque by mail attached to your booking form, or if booking on-line, attached to your email confirmation. An invoice for the balance of the workshop fee will be sent to your school following completion of your workshop. Please visit our website for booking terms and conditions.

**Reserve your date:** A presenter will contact you to schedule a specific date for your workshop

- at the beginning of September if your request was received during the summer months
- within 3-4 weeks of receipt of your request during the school year

Please do not hesitate to contact us at any time to check the status of your request. Thank You!

## SCIENTISTS IN SCHOOL

### West Central Ontario

31 Queen Street  
Morrison, Ontario N0B 2C0  
Tel: 519-763-3950  
Fax: 519-763-4905  
Email: [wco@scientistsinschool.ca](mailto:wco@scientistsinschool.ca)  
[www.scientistsinschool.ca](http://www.scientistsinschool.ca)

Investigating the visible spectrum in Light Up Your Life