

Use this 20 min presentation to introduce your peers to fun, profound science! Tip: use the slides as a structure--and talk about why you love Mystery Science. Here are two draft emails you can send to colleagues, before and after the talk, to make sure they can access your school's Mystery Science account.

### Send before the staff meeting

Hi fellow teachers,

I'll be sharing why I use Mystery Science at our upcoming staff meeting [\[insert date, time, location\]](#).

I'd love to help you get started with this easy, engaging resource! You can join our school's Mystery Science account by clicking on this link:

[\[insert your school's link—see instructions on the right\]](#)

Bring your laptop with you to the meeting: that way, I can help you get set up and be ready to go :)

Best,

### Send after the staff meeting

Hi there:

Thanks for letting me share my excitement about Mystery Science!

Now that you know what it's all about, make sure you activate your account; here's our school's link again:

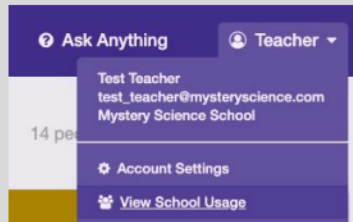
[\[insert your school's link—see instructions on the right\]](#)

Pick a Mystery to teach--and let me know if you have any questions, or just share how it went when you teach!

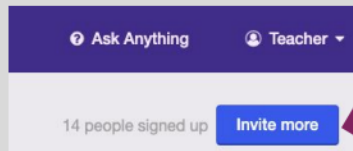
Best,

### How to find your school's unique link

1. Select School Usage in your account



2. Click on Invite Others on that screen



3. Copy the link with your school ID from the pop-up



# **MYSTERY** science

# Mystery Science

*Open and go lessons  
that inspire kids  
to love science*

1. What is Mystery Science?
2. Why is it great?
3. How does it work?
4. How do I get started?

# One program, three resources to fit your teaching approach and time!

## MINI-LESSONS



February 17, 2019

**Why do cats purr?**

**10-20 min**

Morning meetings  
Getting into science

## FULL LESSONS

Human Machine > Mystery 1 Student link

### Why do your biceps bulge?

★★★★★ 4.8 (1,000 reviews)

- 🕒 Exploration (25 min)
- 👤 Activity: Robot Finger (30 min)
- 🔗 Unit Connection (30 min)
- 🔧 Extras (3.5 hrs)

🔍 View activity supplies

✉ Email parents

▶ Start Mystery



Students discover the mechanism by which their muscles control their bones (i.e., how their bodies move). In the activity, students develop a robotic finger based on how their own fingers work.

**1 hour (+ more for extras)**

Core curriculum  
Teach key standards, with a virtual science co-teacher

## ANCHOR LAYER

Anchor Phenomenon: Sky Patterns & Modeling

✓ MARK TAUGHT

### Star Trails

- 📍 Anchoring Phenomenon (15 min)
- 🕒 Guided Student Inquiry (30 min)
- 👤 Activity: Star Trails Model (30 min)



**2+ hours/week**

Deeper exploration  
Adds anchor phenomena, anchor connections, and performance tasks  
4th & 5th grades; 3rd being added in 2019/20

## LESSONS

## MINI-LESSONS

♥ Member of [Mystery Science School](#)

Search by topic

## Seasonal Science



## Back to School

Welcome Back to School

Grades K-5



## Summer

Soak Up the Sun

Grades K-5

## Kindergarten Units

[Planning Guide & NGSS](#)

## Plant &amp; Animal Secrets

Plant &amp; Animal Needs

## Weather Watching

Weather &amp; Seasons

## Force Olympics

Forces, Machines, &amp; Engineering

## 1st Grade Units

[Planning Guide & NGSS](#)

## Plant &amp; Animal Superpowers

Plant &amp; Animal Structures and Survival

## Spinning Sky

Sun, Moon, &amp; Stars

## Lights &amp; Sounds

Properties of Light &amp; Sound

## Plant &amp; Animal Secrets



## Plant &amp; Animal Needs

This unit helps students develop the concept that animals and plants need things in order to survive, and their lives are all about meeting those needs... it's the secre... [More](#) ♥

## Lessons

## Activity Prep

## Assessments

## Mystery 1: Animal Needs: Food

✓ MARK TAUGHT

## Why do woodpeckers peck wood?

🗣️ Exploration (20 min)

👤 Activity: Eat Like an Animal (20 min)

🕒 Extras (4 hrs)



## Read-Along Mystery 2: Animal Homes

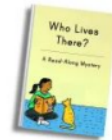
✓ MARK TAUGHT

## Where do animals live?

📖 Book: Who Lives There? (25 min)

👤 Recommended Activity: Nature Nuggets (20 min)

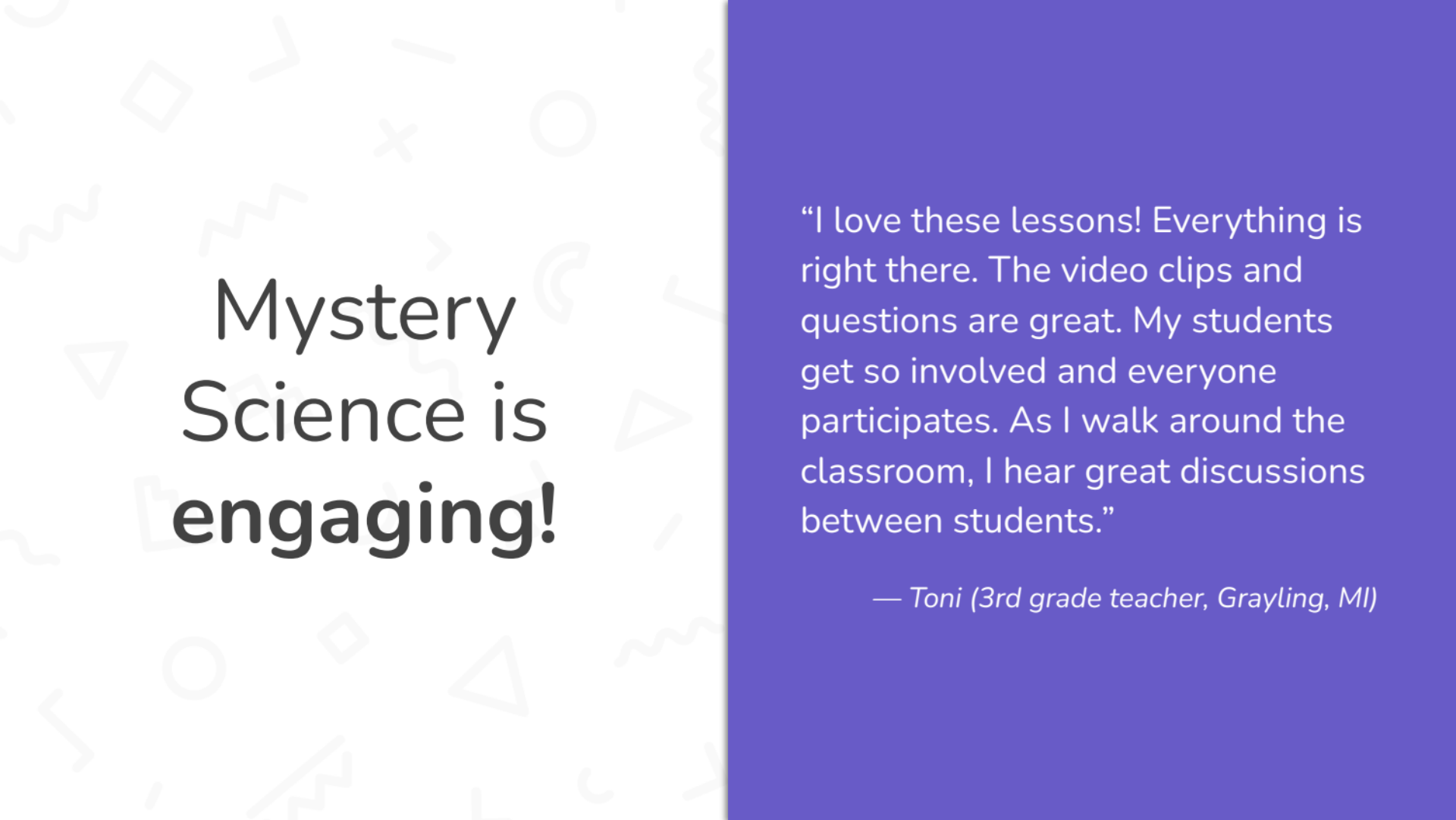
🕒 Extras (30 min)



FULL LENGTH, STANDARDS-ALIGNED LESSONS FOR K-5

# Mystery Science is **easy!**

- A virtual science expert co-teacher by your side
- Pre-planned lessons, with cool visuals, “wows” are guaranteed :)
- Built-in guided discussions
- Minimal prep with easy-to-gather supplies
- Step-by-step directions for all hands-on activities
- No professional development required



# Mystery Science is **engaging!**

“I love these lessons! Everything is right there. The video clips and questions are great. My students get so involved and everyone participates. As I walk around the classroom, I hear great discussions between students.”

— Toni (3rd grade teacher, Grayling, MI)



# Mystery Science is **aligned to standards!**

- Designed for the Next Generation Science Standards (NGSS)
- Aligned to many state-specific standards
  - Arizona
  - Florida
  - Georgia
  - North Carolina
  - Ohio
  - Tennessee
  - Texas
  - More coming soon!



## Grade 4

Mystery Science recommends teaching the mysteries within each unit in the order they are presented. The units themselves can be taught in any order. The core Mystery (exploration & activity) are designed to take an hour per week, with 2 hours of Optional Extras per Mystery.

|               | Human Machine<br>(4-8 weeks)                                                    | Birth of Rocks<br>(4-8 weeks)                                             | Waves of Sound<br>(3-6 weeks)                                          | Energizing Everything<br>(8-16 weeks)                                                                             |
|---------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Week 1</b> | Mystery 1: Why do your biceps bulge? (4-LS1-1)                                  | Mystery 1: Could a volcano pop up where you live? (4-ESS1-1 and 4-ESS2-2) | Mystery 1: How far can a whisper travel? (4-PS4-1 and 4-PS4-3)         | Mystery 1: How is your body similar to a car? (4-PS3-1 and 4-PS3-4)<br><i>*Revised April 2019</i>                 |
| <b>Week 2</b> | Mystery 2: What do people who are blind see? (4-LS1-1, 4-LS1-2 and 4-PS4-2)     | Mystery 2: Why do some volcanoes explode? (4-ESS1-1)                      | Mystery 2: What would happen if you screamed in outer space? (4-PS4-1) | Mystery 2: What makes roller coasters go so fast? (4-PS3-1 and 4-PS3-3)<br><i>*Revised Summer 2019</i>            |
| <b>Week 3</b> | Mystery 3: How can some animals see in the dark? (4-LS1-1, 4-LS1-2 and 4-PS4-2) | Mystery 3: Will a mountain last forever? (4-ESS1-1 and 4-ESS2-1)          | Mystery 3: Why are some sounds high and some sounds low? (4-PS4-1)     | Mystery 3: Why is the first hill of a roller coaster always the highest? (4-PS3-3)<br><i>*Revised Summer 2019</i> |
| <b>Week 4</b> | Mystery 4: How does your brain control your body? (4-LS1-1 and 4-LS1-2)         | Mystery 4: How could you survive a landslide? (4-ESS2-1 and 4-ESS3-2)     |                                                                        | Mystery 4: Could you knock down a building using only dominoes? (4-PS3-4 and 3-5-ETS1-1)                          |
| <b>Week 5</b> |                                                                                 |                                                                           |                                                                        | Mystery 5: Can you build a chain reaction machine? (4-PS3-4, 3-5-ETS1-1, 3-5-ETS1-2 and 3-5-ETS1-3)               |
| <b>Week 6</b> |                                                                                 |                                                                           |                                                                        | Mystery 6: What if there were no electricity? (4-PS3-2 and 4-PS3-4)                                               |
| <b>Week 7</b> |                                                                                 |                                                                           |                                                                        | Mystery 7: How long did it take to travel across the country before cars and planes? (4-PS3-2 and 4-PS3-4)        |
| <b>Week 8</b> |                                                                                 |                                                                           |                                                                        | Mystery 8: Where does energy come from? (4-ESS3-1)                                                                |

**Have extra time?** "Optional Extras" are extensions to each Mystery. We recommend you use them during your unit or to extend the length of each unit. They include an informational text reading that builds on the Mystery's topic, assessments, and suggestions for supplemental activities.

| More Science each week                                                           | Longer Science units                                                   | Cross Curricular Integration                                                                           |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Use items from the Optional Extras to extend each Mystery if you have more time. | Add a week after each Mystery to teach items from the Optional Extras. | If you want to extend the Mystery but don't have extra time, use Optional Extras during literacy time. |

<https://mysteryscience.com/docs/ngss>

**MYSTERY**  
SCIENCE

Let's take  
a look at  
how a  
Mystery  
unfolds

**MYSTERY**science

Ask AnythingTeacher

[Work of Water](#) > Mystery 1

[Student link](#)

## If you floated down a river, where would you end up?

★★★★★ 4.8 (13464 reviews)

🗨 Exploration (20 min)

🏔 Activity: Paper Mountains (30 min)

🏆 Extras (5.3 hrs)

[🔗 View activity supplies](#)

[✉ Email parents](#)

[▶ Start Mystery](#)

Slow Internet or video playback problems? [Download Mystery](#)



In this Mystery, students develop a model of the earth's surface and use it to discover an important principle about how rivers work.

# Easy prep

*Collect some simple materials you have on hand or can get easily and print a few pre-made worksheets.*

## Paper Mountains



In this activity, students make mountain models out of paper. Then students take turns using a spray bottle to make rain fall on their models to observe patterns of how water and rivers flow.

→ [Preview activity](#)

Number of students: 30

Blank Paper (8.5 x 11") Details ▾

Markers Details ▾

Dot Stickers Details ▾

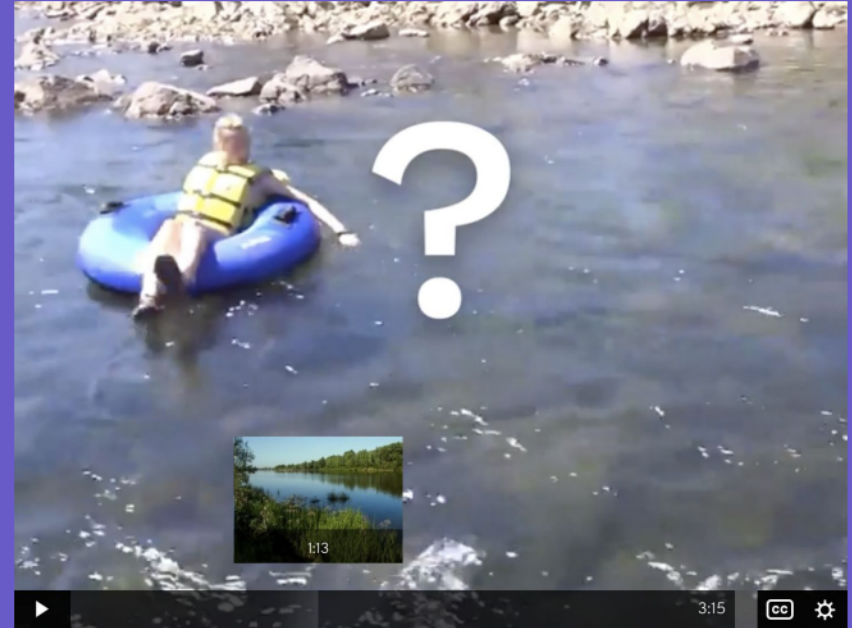
Spray Bottles 8 bottles

Table Covering (Trash Bag) Details ▾

["This is \\_\\_\\_\\_'s land"](#) printout Print 15 copies

# Video introduction:

*A short video sets up  
the Mystery—the  
question that guides  
the exploration—and  
offers clues to help  
students solve it.*



# Discussion prompts:

*The video pauses after each clue with a question for your class to discuss.*

**DISCUSS:** Here's a map showing real rivers in North America. Do the starting points of the rivers have anything in common? What about where they end?



# Step-by-step activity:

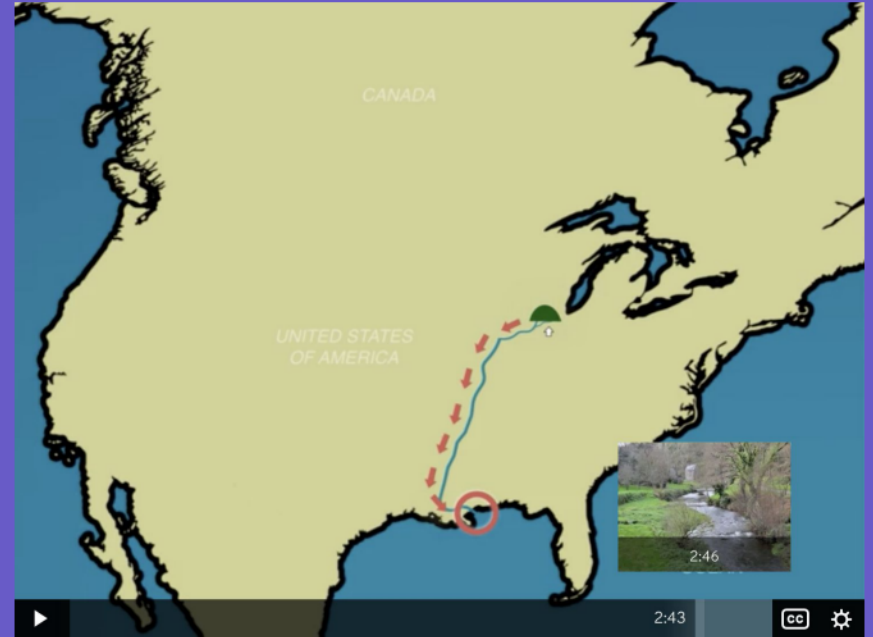
*Step-by-step  
instructions guide  
students through a  
hands-on activity that  
helps them discover  
the answer to the  
Mystery.*

Step 12 of 16 **Crumpler:** Use the marker to trace over each line & make it darker. Use a lot of ink!



# Video summary:

*A short video ends the lesson, helping students integrate their insights and retain what they learned.*



Editable  
assessments:

*Lesson and  
end-of-unit  
assessments are easy  
to edit to your needs  
and print out.*

## Work of Water



### Erosion & Earth's Surface

This unit helps students develop the idea that water is a powerful force that reshapes the earth's surface. Students see that water isn't just something we drink. It c... [More](#)

[Lessons](#)[Activity Prep](#)[Assessments](#)

This **summative assessment** is a combination of short response and fill-in-the-blank questions intended to be administered at the end of this unit. It should take about 25 minutes for a student to complete.

[View unit assessment](#)[View unit answer key](#)

For your reference, these are all the assessments included at the end of each Mystery from this unit:

Mystery 1: Mapping, Earth's Surface, & Landforms

[View Mystery 1 assessment](#)[View answer key](#)

# Choose a Mystery and get started today!

*Pick any unit in your grade. We recommend starting with the first Mystery—but you can also search by topic :)*

*Questions? Contact [support@mysteryscience.com](mailto:support@mysteryscience.com), or call 650-550-0670, and a real person will answer!*