#### Dear Teachers,

Get ready for friendship, fun—and science!—with *Ada Twist, Scientist*, a new, animated series on Netflix. Join Ada and her friends Rosie and Iggy as they investigate the world around them, brainstorm, explore, and discover the ups and downs of science experiments.

Take your children on a science adventure with this free educational program from Netflix and the curriculum specialists at Young Minds Inspired. Teachers, parents, and caregivers will enjoy the easy-to-implement, handson activities that promote early learning skills such as teamwork, problem solving, and creative thinking. And children will have fun learning from Ada and her friends as they unravel mysteries about water, the five senses, and more! The program also includes fun, simple science experiment videos with accompanying lab sheets for use at school or at home.

Please let us know your thoughts on the program by visiting ymiclassroom.com/feedback-ridley-ada.

We look forward to hearing from you.

Sincerely,



Dr. Dominic Kinsley Editor in Chief Young Minds Inspired

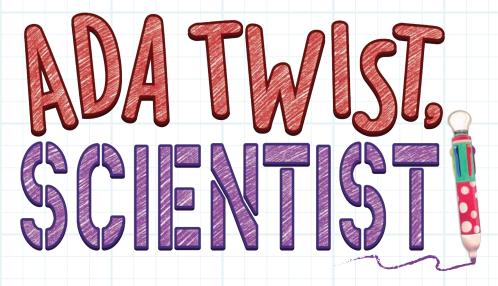


Questions? Contact YMI toll-free at 1-800-859-8005 or by email at feedback@ymiclassroom.com.

#### NETFLIX

ADA TWIST, SCIENTIST™/© Netflix. Used with permission.

## EXPLORE & LEARN WITH



#### ABOUT *ADA TWIST, SCIENTIST*

Meet eight-year-old Ada Twist, a pint-sized scientist with a giant-sized curiosity, who aspires to discover the truth about absolutely everything! With the help of her two best friends, Rosie Revere and Iggy Peck, Ada unravels mysteries for her friends and family. But solving a mystery is only the beginning, because science isn't

just about learning how and why and what... it's about putting that knowledge into action to make the world a better place. Learn more at netflix.com/title/80198673.

#### TARGET AUDIENCE

Daycare, PreK to Grade 1

#### PROGRAM COMPONENTS

Available at **ymiclassroom.com/ ridley-ada**:

- This 2-page teacher's guide
- 4 reproducible student activity sheets
- A family letter (in English and Spanish)
- 2 experiment videos with lab sheets
- A standards alignment chart

#### WHAT CHILDREN WILL LEARN

These activities will help reinforce:

- Teamwork
- Social and emotional learning skills
- Critical-thinking and problem-solving skills
- Early reading, science, and ELA skills
- The scientific process, brainstorming, failing, and trying again

#### HOW TO USE THE ACTIVITIES

This program can be used by teachers, parents, and caregivers. Make photocopies of the activity sheets to use in class or email them to families to use at home. For younger children, read the activity sheets

and complete them as a group. Copy and send home the family letter. Then use the science experiment videos to extend the learning and fun!

#### Activity 1

#### WHAT IS A SCIENTIST?

Ask the children to share what they want to be when they grow up. Point out the careers related to science. For example, if a child says they want to study dinosaurs, they might be a paleontologist. If a child says they want to be a chef, they might be a food chemist.

Tell the children that eight-year-old Ada Twist is curious — a great trait for a scientist! But what does a scientist do and where do they work? Scientists know that it's fun to wonder and learn. They study things they are curious about and problems that they want to solve. They ask questions, use tools to learn and explore, and then form conclusions based on evidence, or what they see or observe. Scientists can work anywhere because scientists can learn about anything!

Ask the children to share what makes them curious. What do they like to learn about? What kind of scientist would they like to be? What tools would they use to learn and explore?

Pass out the activity sheet and go over the directions. Review the names of the tools and ask children to share their answers. Once the children are done with their drawings, have them share their pictures with the class.

**Answers:** The notebook and pen, ruler, lab equipment, microscope, and wrench should be circled. The cat, stuffed animal, and ball should be crossed out.

#### Activity 2

#### WHAT ARE THE FIVE SENSES?

Before you begin this lesson, place a "mystery object" in a brown paper bag. It should be something the children can identify by one of these three senses: touch, scent, or sound. For example, an orange that has been peeled a bit so that the scent is strong, or a bell that feels smooth to the touch but is a mystery until the children hear it.

Ask the children to guess which tools scientists always use so they can learn wherever they are. After they guess, explain that the answer is something they always have with them too — the five senses. See if the children can name the five senses: sight, sound, taste, touch, and smell. Talk about how we use each sense. Ada and her friends are experts at using their senses to learn, and they can too!

Hold up the bag. Tell the children that they are going to take turns guessing what's in it based on what they learn from their five senses. Depending on the object, start with the senses that won't give the item away. For

example, if you are using an orange, shake the bag so they can "hear" the object. Then let them touch the orange through the bag so that the scent doesn't escape. Finally, let them smell the orange.

Pass out the activity sheet and go over the directions. While the children are working, consider having them take turns using their senses to guess a second mystery object.

**Answers:** eye to rainbow, nose to flower, ear to trumpet, mouth to ice cream cone, hand to pillow

#### Activity 3

#### DO ALL THINGS FLOAT?

Before you begin this lesson, gather a rock, toy duck, a rubber or plastic ball, and some coins, along with a clear plastic container. Place a towel under the container and fill it with water.

Tell the children that they are going to play a science game. You will hold up some items and they will guess if those items sink or float. Explain that this is a science game because scientists make guesses all the time. When they make a guess, it is called an "hypothesis." Scientists, however, don't make silly guesses. They look closely and think carefully before making a guess.

Pass out the activity sheet and go over the directions. Remind the children to look closely and think carefully before they guess if the item will float or sink and why. Hold up the first item. Have the children share their

reasons, and then test the item. Repeat these steps with the other items. Point out that it's OK if their guess is wrong because we learn when we fail. Ada and her friends are often wrong — but that's how they learn what not to do next time. Every failure or wrong guess is a step towards success, and like Ada says, scientists never give up!

Once done, test additional items. If appropriate for your group, have the children work in small groups with their own small bowl of water and items you select to test out in their own "science lab" activity.

#### Activity 4

#### WHAT DO PLANTS NEED TO GROW?

Before starting, gather a live potted plant as a visual aid for this lesson.

Ask the children to share what their favorite foods are. What do they like to eat? What do their pets like to eat? Then ask them what their *plants* like to eat. Hold up a live potted plant. Ask: What do plants need to grow?

Let the children share their ideas, then explain that plants need light, water, air, and nutrients. Humans usually get nutrients from food. Plants get nutrients from air or soil. Ask the children how they think plants get light and water (most often, from the sun and from rain if outdoors).

Have the children pretend to be plant seeds by curling up in a ball on the floor. Then tell them they are getting watered with some cool, gentle rain. Time to wake up! Sit up and stretch. The sun is shining now...tell the children to stand up and reach for that warmth, spreading their fingers to make leaves and collect even more sunlight. Ask: What kind of plant are you? Let the children share if they are a fruit, vegetable, or flower.

Pass out the activity sheet and go over the directions. Consider extending the learning by growing your own plants in class.

#### **EXPERIMENTS**

You can do your own experiments! Visit **ymiclassroom.com/ridley-ada** for video demonstrations, instructions, and accompanying lab sheets for experiments you can do with your budding scientists!

#### RESOURCES

Ada Twist, Scientist: netflix.com/title/80198673 YMI site: ymiclassroom.com/ridley-ada



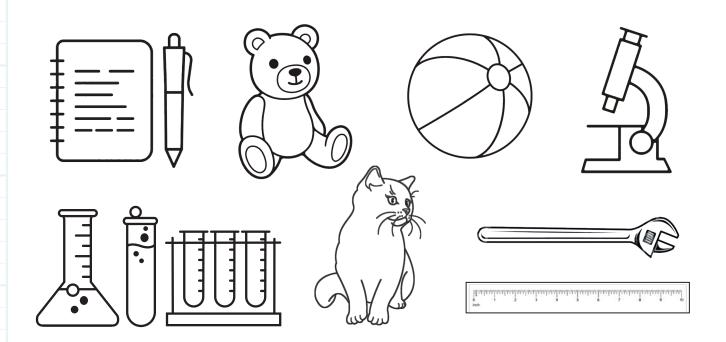




## WHAT IS A SCIENTIST?

ADA TWIST, SCIENTIST!

Ada, Rosie, and Iggy are scientists! They use tools to learn and explore! Circle the tools they might use. Put an X over the items they would not use.



On the back of this sheet of paper, draw a picture of what you would like to learn about as a scientist!

Families: Today your child learned about the tools scientists use to explore the world around us. Continue the learning by tuning in to Ada Twist,

Scientist — a new animated show coming to Netflix on September 28

— and get to know eight-year-old Ada, a pint-sized scientist with a giant-sized curiosity, who aspires to discover the truth about absolutely everything!



# WHAT ARE THE FIVE SENSES?

Ada used her sense of smell to fix her brother's stinky shoes! Can you use your senses to learn?

Draw a line between each item and the sense you would use to learn about it.













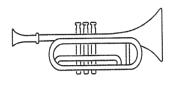
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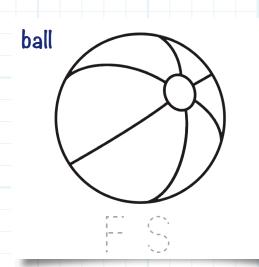
Families: Today your child learned about important tools scientists use—their five senses! Watch Ada Twist,
Scientist, a new animated show coming to Netflix on September
28, and see how Ada and her friends explore and learn with the help of their five senses—and a cool science lab!

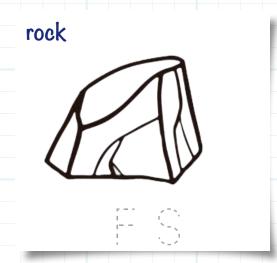
Trace the letter F for "float" and the letter S for "sink"!

## DO ALL THINGS FLOAT?

Let's be scientists – just like Ada! Our question is:
Which of these things do you think will float?
Which will sink? We can make a good guess!







### pennies





Families: Today your child learned how scientists make good guesses (or hypotheses) to learn more about our world. Continue the learning by tuning in to Ada Twist, Scientist — a new animated show coming to Netflix on September 28 — and get to know eight-year-old Ada, a pint-sized scientist with a giant-sized curiosity, who aspires to discover the truth about absolutely everything!

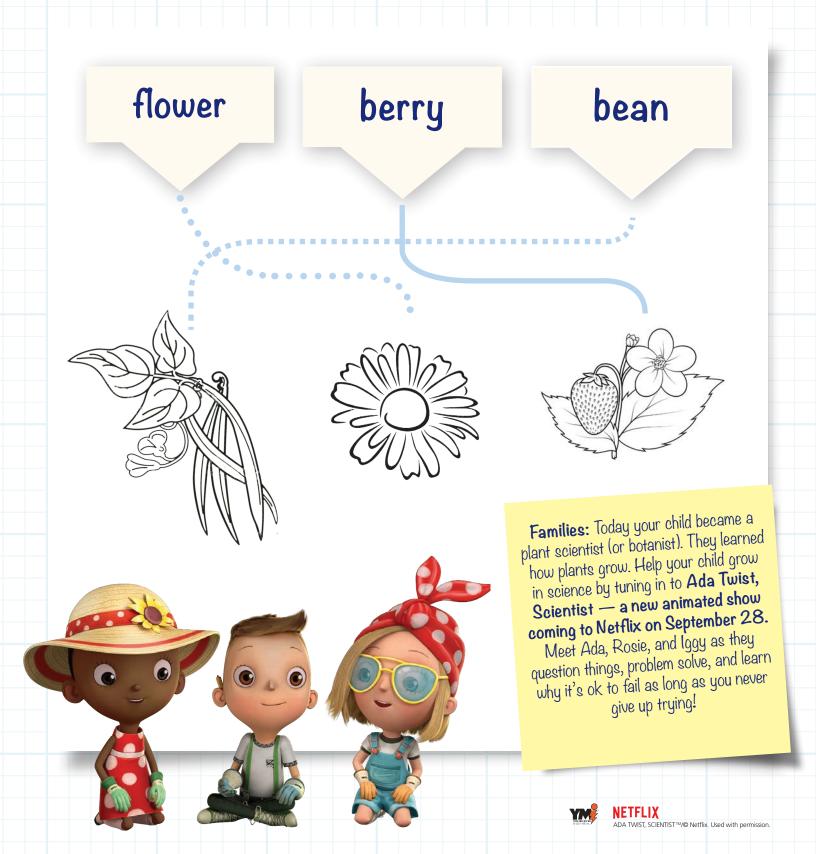




## WHAT DO PLANTS NEED TO GROW?

ADATWIST. SCIENTIST!

Can you help Ada, Rosie, and Iggy fix Iggy's mom's garden? She needs to match each plant name to the correct plant! Trace the garden path to match each plant to its sign.



#### **Dear Parents and Caregivers,**

At school, your child is learning how science is like solving mysteries and then using your discoveries to make the world a better place. Leading the way on this exciting adventure is eight-year-old Ada Twist, a pint-sized scientist with a giant-sized curiosity, who aspires to discover the truth about absolutely everything!

Take a page from Ada's book of questions and create your own science adventures at home.

- **Ask questions!** Keep a notebook handy for things that your child wonders about, such as, "How do balloons stay in the air?" Then research the answers as a family!
- **Brainstorm!** Create a section in your notebook for brainstorming. Got an idea for a fort? How can you build it? Write down and sketch some ideas.
- **Get inspired!** Visit a local science museum.
- **Tinker!** Look around your house for things you can use to build new inventions. Perhaps it's something that may solve a problem. You might find just the right item in your recycling bin.
- **Experiment!** Water the same three plants with different amounts of water or put one in a box with just a pinhole of light. Which grows the best?
- **Observe!** Get an up-close look at the world outside your front door with a magnifying glass. Or break out the binoculars. Can you find a bird's nest? What does the moon look like?

For more science learning resources, including simple science experiment videos you can try at home, visit **ymiclassroom.com/ridley-ada**.



Get ready for friendship, fun — and science! Tune in to Ada Twist, Scientist — a new animated show coming to Netflix on September 28.

Join Ada, Rosie, and Iggy as they ask questions about the world around them, brainstorm, explore, and discover the ups and downs of science experiments.

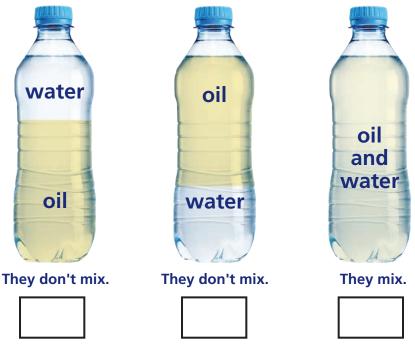


# LAW LAMP LAB SHEET

ADA TWIST. SCIENTIST!

**Question:** Can water float? Do other liquids float? **Hypothesis:** Some liquids float and some don't.

**Part 1: Let's experiment!** What do you think will happen when we mix cooking oil and water? Put an X under the bottle that shows what you think will happen.



Part 2: Let's watch! What happened? Circle it.

Part 3: Now, let's add color and a fizzy tablet.

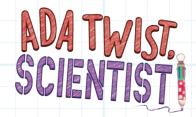
Watch the bubbles go.

Draw and color what you see.





# BALLOON BLOW-UP LAB SHEET



Question: Is there a way to blow up a balloon without blowing air into it?

**Hypothesis:** We can make carbon dioxide gas (like what we breathe out)

and use it to blow up a balloon!

## Part 1: Let's experiment!

Circle what you think will happen to the balloon.





**Part 2: Let's watch!** What happened? Draw a picture of the balloon onto the bottle.



