LEAP IN!

3 GOOFY ROBOTS
Page 18

ARCTIC ADVENTURE
Page 36
**Storm Code**

Use the code to solve the riddle.

<table>
<thead>
<tr>
<th>A</th>
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Why are thunderstorms good at gym class?

Because

**Mythical Monsters**

*Kasa-obake* is a fantastical Japanese creature. The name means “umbrella ghost.” It is a discarded umbrella that comes to life after 100 years. What object-turned-creature can you come up with?

**Window View**

Look outside your window. What do you see? Stars? Skyscrapers? A basketball hoop? Capture your view with a poem, drawing, or photograph. Repeat at least once a month, and see what changes throughout the year.

**Tongue Twister**

"Grow," cheers Gretchen.

**Find the Pictures**

Can you find each of these 11 pictures at another place in this magazine?

**Mystery Photo**

A=
B=
D=
E=
G=
H=
I=
L=
N=
O=
R=
S=
T=
U=

Answer on page 38.
Dear Reader

By Christine French Cully
Editor in Chief

W r i t e t o m e !

Christine @ Highlights.com

Do you like a good story?
Do you like to learn new things? Work on puzzles?
Play games? Try science experiments?
Do you enjoy drawing, writing, cooking, and making crafts?
Do you like to read or tell a good joke, twist your tongue saying a silly sentence, laugh out loud, and just plain have fun?

Highlights magazine helps you do all these things—month after month. Millions of kids read Highlights, and we’re glad you’re now one of them.

Check out your first issue and let me know what you think! I can’t wait to hear from you.

Your friend,

Christine

Write to me!
Christine@Highlights.com

This magazine of wholesome fun is dedicated to helping children grow in basic skills and knowledge, in creativeness, in ability to think and reason, in sensitivity to others, in high ideals and worthy ways of living—for children are the world’s most important people®.
Dear Highlights,

I love to read, but my friend keeps saying, "Oh, you're reading again!" What shall I do? —Lawrence, New York

We know what that's like, Lawrence! Try these ideas.

1. You can say "I just love to read!" Then suggest a book that your friend might enjoy.
2. Make time for your friend. He or she might want to spend time with you.
3. Reading is wonderful. But having a balance of activities is important, too!

Get Jazzed!
New Orleans celebrates its 300th birthday in 2018.

6. BrainPlay
What can you pick up with your feet?

7. Please Pass the . . .
Hint: It’s spicy!

8. How Six Sons Saved Anansi
A West African tale.

10. Goofus and Gallant®
Taking care of special things.

11. Gallant Challenge
Check out a garden that promotes world peace and honors Martin Luther King, Jr.

12. My Sci
A well-armed dino, invisible air, and barnacles.

14. Hidden Pictures® Puzzle
A dream ride for grizzlies.

15. Jokes
There’s a joke about time travel—and you loved it.

16. A Secret Code
Amy is worried Evelyn will think her family is unusual.

18. Crafts
Goofy robots, a unicorn barrette holder, and more.

20. Hula Dancing 101
Learn some hula basics.

22. The Ghost Room
Davin keeps hearing a scary noise.

25. Paws and Think
Off to the amusement park!
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Don’t miss the exciting tale “The Weird Gum.”

28 The Awesome Opossum
Getting to know an American marsupial.

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Caterpillar robots!

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Test your city smarts.

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See more work from creative kids like Gadge.

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Arctic explorers pushed their limits.

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What type of pasta do turtles eat?

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A woodpecker starts a trend.

40 Ask Arizona®
A muddy puppy named Rascal lives up to his name.

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Shayna wants to stop being grouchy.

43 Picture Puzzler
A puzzle for science fans.
START
Take your brain on a hike!

A UNICORN CAKE, OF COURSE!

What can you pick up with your FEET?

What is the most important thing to have at a party?

If you were a dog, what would you think if you saw someone sledding?

What foods can be piled up?

Which sounds around you go HIGH and LOW?

What does it mean to “look for the best in people”?

What do you wish you could do faster?

To-do list

☐ Name one thing you really want to accomplish today.

What could you make or do with a stack of paper plates?

What’s the most important thing to have throughout the year? What color would you say your personality is? Why?

Which sounds around you go HIGH and LOW?

What do you wish you could do faster?
Please Pass the . . .

By Sheri Doyle
Art by Keith Frawley

tongue-tingling,
tonsil-jingling,
cheek-burning,
thirst-yearning,
ear-stinging,
tear-bringing,
eye-popping,
jaw-dropping,
sweat-breaking,
breathtaking

SALSA!
Long ago, a spider called Anansi had six lively sons. They were named See All, Roadbuilder, Riverdrinker, Fishcutter, Spellcaster, and Cushion. As you can guess by their names, each son had a special talent.

One morning, Anansi told his sons to be good, waved good-bye, and left for town to buy a new cooking pot.

Anansi's sons climbed trees and ran races, but they never grew tired.

"Father was swallowed by a big fish. We need to rescue him!"

Hours later, See All cried, "Listen to me! Father fell into the river and was swallowed by a big fish. We need to go rescue him!"

"Watch me!" called Roadbuilder. He spun a strong spider-silk road.

Then he and his brothers traveled on it, up and down, over and under, until they reached the river.

But where was the big fish?

"Watch me!" cried Riverdrinker. He leaned over the river, opened his mouth, and swallowed all of the river’s water. The big fish lay on the dry river bottom.

Fishcutter cried, "Watch me!" And he opened the big fish.

Anansi scrambled out. As he reached out to hug his sons, Crow zoomed down, snatched Anansi in her beak, and disappeared into the sky.
Oh no! Their father was gone again! “Watch me!” cried Spellcaster. He turned around, rubbed his eight legs together, and jumped into the air. *Poof!* He cast a sleeping spell over Crow.

Crow opened her beak to yawn, and Anansi fell down, down . . .

“Watch me!” cried Cushion. He raced to where his father would hit the ground. Anansi landed on Cushion. “My wonderful sons!” said Anansi. “You saved my life, not once but twice. You all deserve a reward.”

On the long walk home, the sons chattered happily about how they had saved their father.

That evening, Anansi cooked dinner in his old pot. Then he walked around the yard, wondering what reward he could give each of his sons. Behind the top of an ebony tree, he spied a glowing white ball. It would make a beautiful reward, but there was only one.

When his sons admired the glowing white ball, Anansi said, “I wish there were six of them. Tell me again how each of you used your special talent to save my life.”

“I saw your trouble,” said See All.

“I led us to the river,” said Roadbuilder.

“I uncovered the fish,” said Riverdrinker.

“I opened the fish,” said Fishcutter.

“I made Crow yawn,” said Spellcaster.

“I softened your landing,” said Cushion.

Anansi looked up at the Sky God. “Can my sons share this glowing white ball as their reward?” he called.

*Whoosh!* They all watched in wonder as the Sky God scooped up the glowing white ball. He reached out and—*rap-tap-tap*—hung it high in the sky.

The Sky God had answered Anansi’s question. Yes, that glowing white ball could be shared. The beauty of the moon is everyone’s reward.
“I felt like Goofus when I left the ice cream out and it melted.”
Maddie, Age 7, Pennsylvania

“I felt like Gallant when I helped my mom make dinner when she was in a hurry.”
Emerson, Age 11, Virginia

“That’s a silly idea. Here’s what you should do,” says Goofus.

“This was my great-uncle’s. To keep it safe, I leave it here,” says Gallant.

“Would you like my opinion?” asks Gallant.

There’s some of Goofus and Gallant in us all. When the Gallant shines through, we show our best self.

Tell us when you’ve felt like Goofus or Gallant! Visit HighlightsKids.com or write to
Goofus and Gallant Moments
803 Church Street
Honesdale, PA 18431

Art by Leslie Harrington.
Inspirational messages of peace, written by children, are “planted” among the roses in the Martin Luther King, Jr. “I Have a Dream” World Peace Rose Garden. The garden, in Dr. King’s hometown of Atlanta, Georgia, honors this minister who gave his life working for peace, justice, and civil rights through nonviolence.

As a symbol of how Dr. King’s work continues to teach and inspire people, an annual contest invites children around the world to share their own poems and messages of peace. The contest’s winning entries are engraved on plaques and displayed in the garden for a year. Two poems from the 2017 contest are shown above.

GALLANT CHALLENGE!

Inspire Peace

What message would you share to encourage peace? We’d love to hear it! Send your message, including your name, age, and address, to

Peace Messages 803 Church Street Honesdale, PA 18431

In a future issue, we'll publish a few of the messages we receive.
**Glued to Home**

Life in the area between high and low tide has its challenges. Tides come and go, making temperatures change and food supplies rise and fall. As wind and waves pound the shore, creatures need to hang on tight. For the acorn barnacle, that means gluing itself in place.

A young barnacle larva settles on a hard surface, like a rock or even a whale, then cements itself in place—for life! It builds a shell “house” and waits for ocean waves to deliver food.

**As tides come in,** feathery “legs” or cirri (SEAR-eye) sweep plankton from the water to the mouth.

**When tides go out,** the barnacle pulls in its cirri and closes “doors” on its shell to hold in moisture.

**The barnacle creates hard protective plates that make up its cone-like shell.**

**Sun Block**

Lightly press stickers onto a sheet of dark construction paper. Set the paper in a sunny place for several hours, then gently remove the stickers.

Why is the paper that was under the stickers darker than the paper around them? Think of your best answer, then read our explanation on page 38.
Why is air invisible?

Faith Connor
Age 7 • Texas

Air looks invisible because it sends very little color to our eyes. Most objects seem to have color because they absorb some light wavelengths, or colors, and reflect others back to us. Objects appear to be the color they reflect to our eyes.

Air is a mixture of gases, mainly nitrogen and oxygen, with small molecules that are far apart. Wavelengths of light may pass by these molecules without hitting them.

When they do bump a molecule, it absorbs some color and scatters some, spreading it out in all directions. Too little reaches our eyes for us to notice unless there is a lot of it. For example, so much scattered blue light in the atmosphere makes the sky look blue.
Fishy Fun on the Flume

By Gary LaCoste

In this big picture, find the snake, traffic light, envelope, teacup, lollipop, glove, musical note, golf club, mushroom, bowl, heart, ruler, slice of pizza, toothbrush, carrot, sailboat, hockey stick, ice-cream cone, leaf, wedge of orange, and bell.

Want a challenge? Fold back page 15 to hide the picture clues.
**Picture Clues**

- snake
- envelope
- teacup
- glove
- mushroom
- golf club
- bowl
- toothbrush
- sailboat
- ice-cream cone
- leaf

**Jokes**

**“Knock, knock.”**

**“Who’s there?”**

**“Isabelle.”**

**“Isabelle who?”**

**“Isabelle necessary on a bicycle?”**

*Hayden, Ontario, Canada*

**Bob:** Want to hear a joke about time travel?

**Joe:** Sure.

**Bob:** Actually, never mind. You didn’t like it.

*Jonathan Wolinski, Massachusetts*

A book never written: *How to Write Fantasy Stories* by Emma Gination.

*Katherine Picklesimer, Kentucky*

**What’s up, bud?**

*Bella Rickman, Texas*

**Neil:** Did you hear that the clock was banned from the library?

**Adrian:** No, why?

**Neil:** Because it tocked too much.

*Samuel Azmaien, Georgia*

A sock walks up to a shoe that seems to be searching for something.

**Sock:** What are you doing?

**Shoe:** I’m looking for my sole mate.

*Maple Taylor, Colorado*

**Make us laugh!**

Send a joke or riddle, along with your name, age, and address, to

*Highlights*

803 Church Street
Honesdale, PA 18431

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**Surprise Guest**

Rain drops in uninvited. It might stay for days. But at least it’s quiet, plays outside, and washes up after itself.

—Christopher Jones

**BONUS**

Can you also find the flashlight, crescent moon, pencil, and banana?

Answers on HighlightsKids.com.
What would other kids say when they found out my parents can’t hear?

“Look at Amy’s picture!” Mom said, too loud.

“See you at Open House tonight, Amy,” Evelyn shouted from the school bus window. “Don’t forget to ask your mom if I can come over tomorrow!”

“OK!” I called back. I wished I could feel excited about my first Open House at my new school, but I was worried. What would other kids say when they found out my parents can’t hear?

And I wanted Evelyn to visit, but then she’d see how different my house was. My parents use a video phone so they can use sign language to communicate with callers. We also have a light on the wall that flashes when the phone or doorbell rings, and our TV is always set to show the captions. Would Evelyn think my house was weird?

That night, I helped my mom get my younger brother, Noah, ready to go to Open House. Noah is five and loves to talk with both his voice and his hands.

“Where are we going?” he asked, squirming as Mom brushed his hair.

“To my school, for Open House,” I answered while I looked for his shoes.

“Why do they call it Open House when we’re going to the school?” Noah asked.

“I don’t know,” I said.
“I’d been so worried about my family that I hadn’t thought about Evelyn’s family.”

“Was it difficult teaching Amy and Noah to talk?” Ms. Jennings asked.

“Not really,” Dad said in sign language, and I translated so Ms. Jennings understood. “They went to daycare with other hearing kids. And Noah always had his big sister to talk to.”

Some of my classmates were watching us and whispering. Then I noticed Evelyn and her mom standing by the door.

“I sit over there,” I told my family and quickly walked toward my desk.

“Hi, Amy,” Evelyn said suddenly.

I turned around. “Hi.”

“I didn’t know your parents are deaf,” she said.

“Yeah.” I couldn’t think of anything else to say.

“And you can talk to them with your hands? That’s so cool.”

“You think so?” I asked.

I exhaled with relief.

“I’d like you to meet my friend.”

Evelyn nodded. “It’s like a secret code. Would you teach me some words sometime?”

I smiled. “Of course.”

“A woman in my dad’s apartment building uses sign,” she said. “Maybe I can surprise her with a greeting next time I visit my dad.”

“Your dad doesn’t live with you?” I said.

She shook her head. “My parents are divorced.”

“Oh, I . . .” I’d been so worried about my family being like everyone else’s that I hadn’t thought about Evelyn’s family. “Hey, if you come over tomorrow, we can practice some sign language then.”

“I’ll help teach you,” Noah said. “I’m really good at it.”

Evelyn laughed. “I’m sure you are.”

I got my parents’ attention.

“Mom, Dad,” I said, signing, “I’d like you to meet my friend Evelyn and her mom.”

Mom smiled. “Good point,” she said out loud. Then she said in sign language, “We have to get going.”

Dad drove us to the brightly lit school, which looked different at night. It felt different, too, as we walked down the hallway to my classroom.

We stopped in front of the bulletin board in the hall.

“Look at Amy’s picture!” Mom said, too loud. She does that when she’s excited, because she can’t hear herself. Some older kids turned to stare at us and I wanted to hide.

I led my family into my classroom and looked around. Other kids and parents were there, but I didn’t see Evelyn.

Ms. Jennings walked over to us. I introduced my teacher to my family and explained that my parents are deaf.

“Oh,” she said. “Well, how do you say ‘Welcome!’ in sign language?”

“Like this.” I swept my open right hand in toward my body, palm up.

She repeated the motion.

“Thank you,” Mom said, smiling. “It’s nice to meet you.”

Ms. Jennings looked surprised. “You speak very well,” she said.

In sign language, I repeated what Ms. Jennings had said in case my parents hadn’t read her lips.

Mom nodded. “I lost my hearing as a child, after I’d learned to talk. Amy’s father was born deaf. He can talk, too, but he’s shy about his voice.”

Dad smiled in agreement.
Spaceship Bookmarks
By April Theis

1. Draw the outline of a rocket ship with flames or a spaceship with a light beam on thin cardboard. Cut it out.
2. Cover the ship with foil. Decorate the flame or light beam with cardstock.
3. Add details with cardstock, markers, and wiggle eyes. Write a message on the cardstock.
Travel Tic-Tac-Toe
A Game for 2 Players
By Catherine Carmody

1. Use double-sided tape to attach a ribbon hanger to an empty floss box. Cover the box with felt. Make the felt piece covering the back long enough to include the flap over the top. Add Velcro to the flap.
2. For the game board, glue thin pieces of ribbon on the back. Add felt decorations to the front.
3. For game pieces, cut five squares and five circles from felt. Store them inside the box.

Unicorn Barrette Holder
By Susan Fulcher

1. Cut out a unicorn head from thin cardboard. Cover it with cardstock. Decorate it with markers and glitter glue.

CRAFT CHALLENGE!
Make a creature out of paint, craft sticks, and a paper cup.
Hula is a Native Hawaiian dance that is hundreds of years old. The dance has a variety of purposes. It can be a form of entertainment or worship or a way to pass down stories. Explore the different parts of hula dancing!

**Musical Instruments**

For generations, Hawaiians have been sharing stories about their history, people, and natural world through music. They sing lyrical, chanted poems as they dance the hula and play musical instruments to tell these stories. Using shells, seeds, trees, and plants, native Hawaiian people created all their own musical instruments. Many Hawaiians still make these instruments by hand today.

**Hula Basics**

1. Find a flat, smooth surface. Take off your socks and shoes.
2. Stand with your feet about four inches apart. Bend your knees. Place your hands on your hips.
3. Beginning with your right foot, step to the right and bring your left foot alongside. Step to the right again. Tap your left foot alongside. Repeat to the left.
4. Once you can do step 3, add arm motions. When you step right, bend your left arm and raise it to your chest with your elbow straight out. Extend your right arm straight out to the side. Do the opposite when you step left.

**Hand Gestures**

The hand gestures used in hula dancing help tell a story.

- **RAIN** Lift both arms up over your head. Slowly bring them down in front of you while wiggling your fingers.
- **FLOWER** Place your palms up with fingertips pinched together.
- **SWIRLING WIND** Put your left hand forward and circle your right hand over your head twice.
- **RISING SUN OR MOON** Start with your hands together at waist level. Move each arm outward and upward over your head. Form the sun or moon with your fingertips.
‘Uli‘ulī Rattles

‘Uli‘ulī rattles are made from small gourds filled with shells, seeds, or pebbles. One end of each gourd has a wooden handle, and the other end is decorated with feathers. During the dance, the rattles are shaken or hit against the palm, thigh, or ground. ‘Uli‘ulī rattles can be used in one hand while the other hand is used for gesturing. Or they can be held in both hands and shaken in rhythmic patterns.

1. Put some dried beans into two clean water bottles.
2. For feathers, cut out two red circles and two smaller yellow circles from cardstock.
3. Trace around a bottle cap to make a circle in the center of each cardstock circle. Cut out the center circles. Make cuts for fringe, as shown.
4. Place the feathers over the bottle openings. Screw on the caps.

Pū‘ili Sticks

Pū‘ili sticks are dried pieces of bamboo that are split into strips at one end. Hula dancers hold the uncut sides and bang the sticks together or against their bodies to make a rattling sound. The sticks can also be tapped on the ground or against a partner’s pū‘ili sticks.

1. On two long cardboard tubes, cut slits at one end. For a handle, wrap decorative tape around the uncut end.
2. Use the pū‘ili sticks to create different rhythm patterns.
Davin was going to spend a weekend at his aunt and uncle’s house.

It’s kind of spooky!
Uncle Ted told ghost stories after dinner.

Old houses always made weird noises... but this sound was different. **Click... click... click.**

What's that sound?!

Davin tried going back to sleep, but he kept hearing the scary noise.

Click... click... click.

Davin looked everywhere. I guess it could be a mouse. But I've never heard a mouse sound like that.

You OK, buddy? It's probably just the radiator. Or a mouse.

Thanks, Aunt Emma.

You can stay in the guest room, Davin. Let us know if you need anything.

Nothing!
Click... click... click.

This isn’t a guest room—it’s a ghost room!

I don’t believe in ghosts. It’s just a noise.

I need to put that extra pillow over my head so I can’t hear it.

What???

Are you OK in here?

Oh, that old alarm clock! My sister was here last week. She must’ve stuck it under the pillow to muffle the sound.

Maybe we can take out the battery?
Why do people enjoy going to amusement parks? Why do parks offer a variety of rides?

Name something about each ride that people might like. For example, which offers the best view?

What jobs are people doing here? What jobs were needed to create the park?

If you could design a ride, what would it be like?

I like anything with a breeze!
Amaze a friend with this number trick.

1. Ask a friend to pick any number without telling you what it is. (Example: 23)
2. Tell her to double the number. \((23 \times 2 = 46)\)
3. Have her add 10. \((46 + 10 = 56)\)
4. Tell her to divide the new number in half. \((56 \div 2 = 28)\)
5. Have her tell you the new number.
6. Tell her to think of her original number again. Pretend to concentrate really hard.
7. In your head, subtract 5 from the number your friend gave you in step 5. This will give you her original starting number! \((28 - 5 = 23)\)
Ice-Cream Sundae: Gone!

It was a hot, sunny day. I put my ice cream down, and it disappeared. The sun ate it!

Rosabella Miller
Age 8 • Pennsylvania

The Weird Gum

One day, a kid named Jimmy went into a store to buy some gum. Every day he'd buy fruit gum. He hated mint gum. When Jimmy entered the store, he saw something new—rainbow gum. It was $1.75.

“That sounds tasty,” said Jimmy. So he bought the gum.

When Jimmy got home, he was about to chew a piece when he saw a note. It said: “When you chew too much in one sitting, a colorful thingy-ma-bobber will be put on you.”

“OK, I’ll listen,” said Jimmy. So he ate one stick of gum. Mmm, that was good! thought Jimmy. So he ate another, then another. He ate the whole pack in one sitting.

That afternoon, he felt really dizzy and weird. The next morning, he looked at himself in the mirror. “AAAGH! Look what I’ve done! I look tie-dyed!” cried Jimmy.

Reagan Boyd
Age 10 • Saskatchewan, Canada

A Balloon That Lived in a House All Alone

Once upon a time, there was a house that was red, yellow, and green, and the chimney was brown. There was a balloon that lived in the house, and he was sad. He had no friends. He had one clock, one shoe rack, one water bottle, and he even had one cake. He had one of everything. But once, when he was sleeping, something woke him up. There was a knock on the door. It was another balloon. He noticed it was a girl balloon. They got married, and they lived happily ever after.

Thomas Baldwin
Age 6 • Virginia

Nina and Myla Love to Dance

Once upon a time, in an ocean, there was a mermaid named Myla, and she wanted to learn how to dance. All the other mermaids knew how, and they bragged because Myla didn’t know how.

One day, a new mermaid named Nina moved into Myla’s neighborhood. When Myla went to school, Nina was in her class. Nina knew how to dance and didn’t brag at all. Myla asked Nina to teach her. Nina said yes. So Myla and Nina were best friends, and they loved to dance.

Gwendolyn Wolf
Age 7 • Illinois

Send us your stories!

We’d love to read them. All stories must have fewer than 200 words and include your name, age, and address. Send them to

Highlights
Your Own Stories
803 Church Street
Honesdale, PA 18431
The opossum stays awake at night and sleeps throughout the day. She wears a soft and furry coat that’s different shades of gray. Her pointed snout and face are white, with rather shortish hair. And if she’s looking for food to eat, her nose will sniff the air.

By LeeAnn Blankenship

Australian Relatives
An opossum may look like a rodent, but it’s really a marsupial. Other marsupials include kangaroos, koalas, wallabies, and wombats.
Her ratlike tail can grasp at things, just like another hand. It helps a lot when climbing trees and balancing on land. She even carries grass with it to line a den she’s found, a secret nest where she can sleep, protected underground.

She has her young in such a nest when springtime comes to call, then holds her babies in her pouch because they’re born so small. The size of bees, they have no fur. They cannot see at first. Within her pouch, they grow each day—protected, safe, and nursed.

When danger strikes, she doesn’t run, but falls as if she’s dead. She drools and opens up her mouth. Her eyeballs stare ahead. She even makes a rotten stink that drives her foes away and doesn’t move a muscle till she’s sure that she’s OK.

She’s gentle, shy, and slow. Yet, still, if scared, she’ll scare you back. She’ll bare her teeth. She’ll hiss and snarl as though she might attack. Don’t worry, though—it’s just a bluff. She’s hoping you will flee. So turn around and walk away and simply let her be.
**Soft Robots Squirm and Roll**

They move like caterpillars.

By Andy Boyles, Contributing Science Editor

Will we ever have a caterpillar-like toy that climbs up stairs instead of going down, like a reverse Slinky? Maybe someday!

But first, we'll need similar bots to do important jobs. After an earthquake, they could wriggle through rubble to find survivors. In a spaceship, they could squirm into nooks and crannies to make repairs.

Inventors Barry Trimmer, Ph.D., and his co-workers at Tufts University study how caterpillars move, then build robots that crawl like a tomato hornworm or inch along like a spanworm. GoQBot, shown above, imitates the slow and fast moves of a leaf-roller caterpillar. It can crawl along, then snap into a Q shape and roll away.

“GoQBot has been developed into a family of ‘softworm’ robots that come in all shapes and sizes,” Dr. Trimmer says. They can climb, burrow, and roll where other robots can’t go.

To spring into action, GoQBot uses a spring! Inside the robot are metal wires that can switch back and forth between straight and curved. When short segments of the wires bend and stretch, the bot bends, wiggles, and crawls. When the entire lengths of the wires snap into coils, they curl the bot into a Q shape.

The wires are made of a shape-memory metal, which “remembers” its original bends after it has been straightened. Then it bends when it’s heated and straightens when it cools. In these robots, the wire-bending heat comes from electrical currents. When a researcher flips a switch, the robot flips, too.
Franco, Teesha, Pete, and Charlotte love to play sports together. They each have a different favorite sport. Use the clues to figure out which of the following sports is each kid’s favorite: tennis, soccer, football, and hockey.

CLUES:
• One kid’s name starts with the same letter as his or her favorite sport.
• The kid who likes tennis is Charlotte’s brother.
• Teesha does not like hockey.

By Teresa A. DiNicola

Check … and Double Check

Compare these two pictures. Can you find at least 18 differences?

Answers on page 38.
Quizopolis

Hop aboard for the city tour! Cruise from START to FINISH by answering each question correctly.

**Big-City Words**
An important city area may be described as this—from the Greek words for “mother” and “city.”

Momdom Metropolitan

**Going Up Up Up**
A tall building with many stories is known as a “stairway to the stars.” “high-rise.”

**Commonly Called**
A commuter is someone who travels into and out of a city often. a community-owned scooter.

**Ride On**
Most streetcars, trams, and trolleys run on what kind of power?

Electricity! A pole on the roof draws it from an overhead wire to the motor. Pedal power! Each seat has a stationary bike that helps run the car.
**That’s Sup-“urb”**
An urban area is a densely developed region, often with many people. *Urban* comes from the Latin word for “herb garden.” “city.”

**Exit to Exhibits**
Where would you be more likely to see gemstones, ancient tools, and dinosaur fossils?
- See ’em in a museum of natural history.
- Find ’em at a football field.

**Stars on the Street**
Another name for a musician or other entertainer who works for donations is an avenue actor. a busker.

**Tuck It Away**
A pocket park is a terrarium-to-go, made by sticking moss in your pocket. a small public outdoor space, often between buildings in a city.
Rainbow Sun
Peyton Williams
Age 8 • Oklahoma

My Mom
My mom is a doctor, my savior. She helps me, you, everyone. That’s my mom! Physically she may be small, but in my heart, she’s very tall!
Jenya Narang
Age 9 • New Jersey

The Sun
The sun is a star. The sun is so hot. The sun is so big. The sun lets us live.
Reza Nagree
Age 7 • Texas

Oranges
Round and juicy oranges. Sweet, picked from trees. They’re good to eat.
Sophia Ochoa
Age 6 • Florida

Flying
The bird took flight, getting smaller and smaller in the high sky, going far above the ground until it was a speck in the clouds, forever flying.
Julia Sikorski Roehsner
Age 11 • Minnesota

Hannah Travis
Age 9 • New Mexico

Katie Larmore
Age 10 • Washington

Ariella York
Age 8 • Maine

Jenya Narang
Age 9 • New Jersey
Many Things
Many things are complicated.
Many things are generated.
If you turn off the TV,
You will see things many cannot see.
Unicorns and dragons,
here and there.
Imagination everywhere.
Many things are on your mind.
These things will make you helpful
and kind.

Scarlett Dempsey
Age 9 • Oregon

Rhys Rodriguez
Age 9 • Georgia

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What Is Loud?
Loud is racing motorcycles,
Drivers rev their engines.

Loud is a ringing smoke alarm,
People scream and rush out the door!

Loud is an erupting volcano,
Lava and rock shooting out the top.

Loud is exploding fireworks,
They fly into the air making many colors!

Jonathan Wheeler
Age 10 • Pennsylvania

Best Friends
Best friends have a magic,
ot the kind you see.
If you want to see it,
love is the key.
Mia Hendrickson
Age 9 • Wisconsin

Me and My Hamster, Penny
Grace Buechler
Age 9 • Washington

Share Your Creative Work
We'd love to see it!
Art must be on unlined paper.
Poems must have fewer than
75 words. All submissions
must be created by you.
Include your name, age,
and address. Mail to

We cannot return your
work, so you might want to
keep a copy.

Highlights
Your Own Pages
803 Church Street
Honesdale, PA 18431

Ronan Carboni
Age 7 • Connecticut

Sydney Ryan
Age 10 • Colorado

Ronan Carboni
Age 7 • Connecticut

Sydney Ryan
Age 10 • Colorado
On April 6, 1909, six men claimed their place as the first explorers to reach the North Pole. Their leader was Navy commander Robert E. Peary. He photographed the other men as they held up flags. One of them was Matthew Henson, the only African American explorer of the Arctic at the time. He held a patched American flag. The other four were Inuit hunters named Ootah, Ooqueah, Seeglo, and Egingwah.

Later, Henson wrote about that moment. He turned to Ootah and said, “We have found what we hunt.”

Ootah saw only ice. “There is nothing here,” he said.

The journey did not make sense to the Inuit. Arctic ice always shifts and cracks as it floats on the ocean. The hunters knew the ice could be deadly.

Many explorers had tried to reach the pole. Peary surpassed the others through clever planning. He also gave credit to Henson, who had joined him on three other Arctic expeditions.

**Henson’s Talents**

Peary had always planned for Henson to join him because of Henson’s many talents. The team needed the skills and knowledge of the Inuit, and Henson was fluent in their language. Also, Arctic travel meant walking and running with dogs pulling heavily loaded sledges. “He has shared all the physical hardships of my Arctic work,” Peary said. “He . . . is probably a better dog-driver than any other man living except some of the best of the [Inuit] hunters themselves.”

Travel was hard. Biting winds blew, and temperatures dropped to minus 60 degrees Fahrenheit. “Freezing of . . . the whole front part of the face is an ordinary occurrence,” Henson wrote. “The skin keeps peeling off and freezing again until . . . the face is like raw beef.”

The men knew they could lose fingers or toes to frostbite. In fact, Peary walked with a “slide-like stride” because he had lost nine toes on an earlier trip. If anyone’s foot began to freeze, another man held the bare foot against his stomach to thaw it out. “It was like putting a piece of ice there,” Henson wrote. “But there was no other way to save the foot.”

Three times a day, the group melted snow to make hot tea.
DID THEY REACH THE POLE?

Since Peary’s famous 1909 trip, experts have disagreed on whether the team really reached the North Pole. Some say the final dash was impossible to do in such a short time. Others disagree.

In any case, no one can deny that the team was made up of brave explorers who took on a grueling and dangerous adventure.

They also ate biscuits and pemmican, a mix of dried meat and animal fat with a dash of sugar and raisins. The dense, high-calorie food kept them alive but often left them hungry.

**Never Giving Up**

Peary had already made four expeditions into the Arctic. Each time, he learned how to plan better for the next trip. He had other teams go ahead to break trails and leave supplies along the way. On April 2, from the end of the last trail, the team dashed for the North Pole.

The explorers drove 18 to 20 hours a day. “Forced marches all the time,” Henson said later. “But it was the only way to make it.” Peary, Henson, and the four hunters had only 50 to 55 days to complete the last leg of the journey before spring would arrive and begin to melt the ice. They had to go 133 nautical miles (more than 150 land miles) to the pole, make observations to show they had reached their goal, and then travel 413 nautical miles (about 475 land miles) back to another camp and more supplies.

The explorers were lucky. They came across no open water to hold them up. They spent only 30 hours at the pole before they began the return run. They couldn’t stay longer. Spring was coming. Exhausted, Peary rode a sledge instead of driving one. Henson set such a fast pace that Peary warned him not to work the men and dogs to death. “I know, Commander,” Henson replied. “But we got to make it.”

They did make it. They reached safety in 16 days and secured their place in history. Arn

Matthew Henson, at about the time of the 1909 expedition.

Robert E. Peary, ready for an Arctic adventure.

Robert Peary’s photograph of Matthew Henson (center) and the four Inuit hunters who were on his North Pole expedition.
Sea Sillies

What are you doing in there?
Taking a selfie.

“I just bought a sea saw!”

Answers

page 2

Fun This Month
Storm Code
Because LIGHTNING BOLTS AND THUNDER ROLLS.
Mystery Photo—Ear of corn.

page 12

My Sci
Sun Block—The stickers blocked sunlight from getting through to the paper. Where there were no stickers, rays from the Sun were able to shine on the paper. Some of those rays—ultraviolet (UV) rays—broke down some of the dye in the paper, causing it to fade. UV rays can also cause damage to the cells in our skin. Wearing a good sunscreen or protective clothing can reduce the amount of UV rays reaching our skin cells.

page 26

Wally’s Wordy Signs
1. STOP.
2. OPEN.
3. SLOW.

page 31

Sporty Stumper
Franco likes football, Teesha likes soccer, Pete likes tennis, and Charlotte likes hockey.
Bonus!

page 43

Picture Puzzler

RIDDLES

1. What kind of shoes are a musician’s favorite?
   Larkin Bock, Texas

2. How do trees get in to their computers?
   Chloe, Indiana

3. What does a dog use to go hunting?
   Logan Brown, Washington

4. How do camels hide from predators?
   Coraline Rogers, Tennessee

5. Why did the truck go to the doctor?
   Sarah Van Zante, Iowa

6. What type of pasta do turtles eat?
   Claire, Colorado

7. Why do fish live in salt water?
   Bailey, Arkansas

8. What is a boomerang that doesn’t come back?
   Boaz, Georgia

9. What did the dirty plate say to the clean plate?
   River Humphreys, Hawaii

Covers: Leap In! by Neil Numberman; What’s Wrong?® by David Arumi

A sound woke Tommy.

Pa must be building something!

But Pa wasn’t in his workshop.

Who’s making all the noise? It’s that woodpecker.

Morning music was fun!
My aunt asked me to feed her cat while she’s away. I’d love to, but I’m worried I won’t know everything I’m supposed to. Should I say yes or no?
—Unsure on the North Shore

“No, Rascal!”
By Lissa Rovetch • Art by Amanda Morley

Dear Unsure,

I think you should say yes to helping take care of your aunt’s cat, as long as you do the one thing I didn’t do when I helped out with my neighbor’s dog!

Mrs. Gonzales and her adorable dog, Rascal, live at the end of my street. My friend Ollie and I have played with Rascal since he was a puppy, so when Mrs. Gonzales asked if we’d like to take him to the park once in a while, we said, “When can we start?”

“How about this weekend?” she suggested. “This beast still needs lots of exercise, and now that I’m getting older, he doesn’t get to run around nearly as much as he’d like. How about Saturday at 3:00?”

When Saturday rolled around, Ollie and I were there to pick up Rascal at 3:00 on the dot.

“We have an adorable dog called Rascal! Rascal will be so happy to play in the park with you!” Mrs. Gonzales said. “If I’m still out grocery shopping when you return, just let yourselves in with this spare key. I’ll be home a little while later.”

Not long after we arrived at the park, Rascal found a giant puddle and decided to leap into it and roll around until every square inch of his furry body was dripping with mud.

“Ugh! Silly puppy,” I said. “You’re the muddiest dog in the universe!”

“I guess we should take him back home so he can get washed up,” said Ollie.

But when we got to Mrs. Gonzales’s house, she didn’t answer the doorbell.

“She must still be out grocery shopping,” I said.

“How about we use the garden hose to clean him?” Ollie suggested.

“Good idea!” I said, putting Mrs. Gonzales’s key into the lock. “I’ll go inside and get a towel to dry him off.”

But the second I opened the door, Rascal raced inside and started zooming all over the living room!

“Stop!” I commanded. “Rascal! Stop.”

But instead of stopping, he jumped up on the couch.

“No, Rascal!” Ollie shouted. “Sit!”

But Rascal didn’t sit. He flopped down and rolled all over the couch.

“This dog is not very good at following commands,” said Ollie.
Either that,” I said, “or we’re not very good at giving commands.”

It turned out that both of those things were right. Luckily for us, when Mrs. Gonzales came in with her groceries and saw her muddy puppy and muddy carpet and muddy couch, she started to laugh.

“We’re so sorry!” Ollie and I said.

“He jumped in the puddle, and he raced inside, and he rolled all over the couch, and he wouldn’t pay any attention to our commands,” I explained.

“Oh, my goodness!” Mrs. Gonzales said. “Why do you think I named him Rascal? If there’s trouble, this guy is guaranteed to find it. Please don’t feel bad. I should have made sure you knew which commands he responds to before leaving you alone with him.”

It turned out we should have told Rascal to “stay” before we opened the door. And instead of telling him to “sit” when he jumped on the couch, we should have said “off!”

It took a while, but we all worked together to get the mud off everyone and everything. And now when we take Rascal for walks, Ollie and I use all the right commands and stay very, very far away from puddles.

So, dear Unsure, when I said I thought you should take care of your aunt’s cat as long as you do the one thing I didn’t do, here’s what I meant:

Make sure to ask your aunt lots of questions (great big questions and teensy little ones), so you know as much as you possibly can about that particular pet. Also, make sure you have your aunt’s phone number so you can call her if you need to. Also, if something comes up and you can’t reach your aunt, ask for help from your parents or another adult you trust. I realize that’s a lot of “alsos,” but when it comes to taking care of animals, you need to be extra careful and safe.

Oh, and just two more alsos—please give that kitty a kiss on the nose for me, and stay as far away from puddles as you can!

Ciao for now,

Arizona
**Dear Highlights**

I look up to my sisters. They’re both intelligent. **I feel that I’ll never be as good as them.**

A Highlights Reader (by e-mail)

It’s wonderful that you admire your sisters, but try not to compare yourself to them. Instead of striving to be like your sisters, just strive to be the best you possible. You will find that you will be much happier when you try to be true to yourself, rather than when you try to be like someone else.

Keep in mind that you and your sisters each have your own strengths and weaknesses, and you are all smart in different ways. You are just as special as they are. Focus on developing your own interests, and don’t be afraid to try new things. You might also let your parents know how you feel. They may have some reassuring words for you.

How can I stop being grouchy when I feel frustrated?

Shayna (by e-mail)

Sometimes, simply walking away from a frustrating situation can help you feel less grouchy. Getting some fresh air and exercise, listening to music, reading a book, or playing a game can help you improve your mood and put things in perspective. If you can’t walk away, close your eyes and take slow, deep breaths. You may think more clearly and react with less grouchiness after taking a break.

It may also be helpful to remind yourself that some things aren’t worth getting upset about. Will this frustrating situation matter tomorrow? If not, then perhaps you can decide not to get upset. If you can’t help feeling frustrated and grouchy, ask your parents for their suggestions. They may be able to help out with the things that are frustrating you.

Some of my friends are in a fight. I like them all equally, but they say I have to choose sides. Help!

Alisa, Tennessee

If you haven’t already, you might calmly explain to your friends that you like all of them, and you are not going to choose a side. You can play with each person or group separately, and you can reassure them that you will make equal time for all of them. If they don’t like this arrangement, then you may want to focus on other friendships until these friends work things out.

Another idea is to offer to help your friends resolve their fight, without taking sides. Sometimes when friends fight, they wish they could make up and get past it, but it’s hard to be the first one to apologize. You might say that you miss times when all of you played together, and you would like to help them be friends again.

Write to us!

Please include your name, age, and full address. Mail to **Dear Highlights**

803 Church Street
Honesdale, PA 18431

Or e-mail us at Letters@Highlights.com.
Find 7 calculators, 6 magnets, 5 planets, 4 microscopes, 3 pairs of lab goggles, 2 books, and 1 telescope.

BONUS! Find two matching robots.
What's Wrong?®
Which things in this picture are silly? It's up to you!