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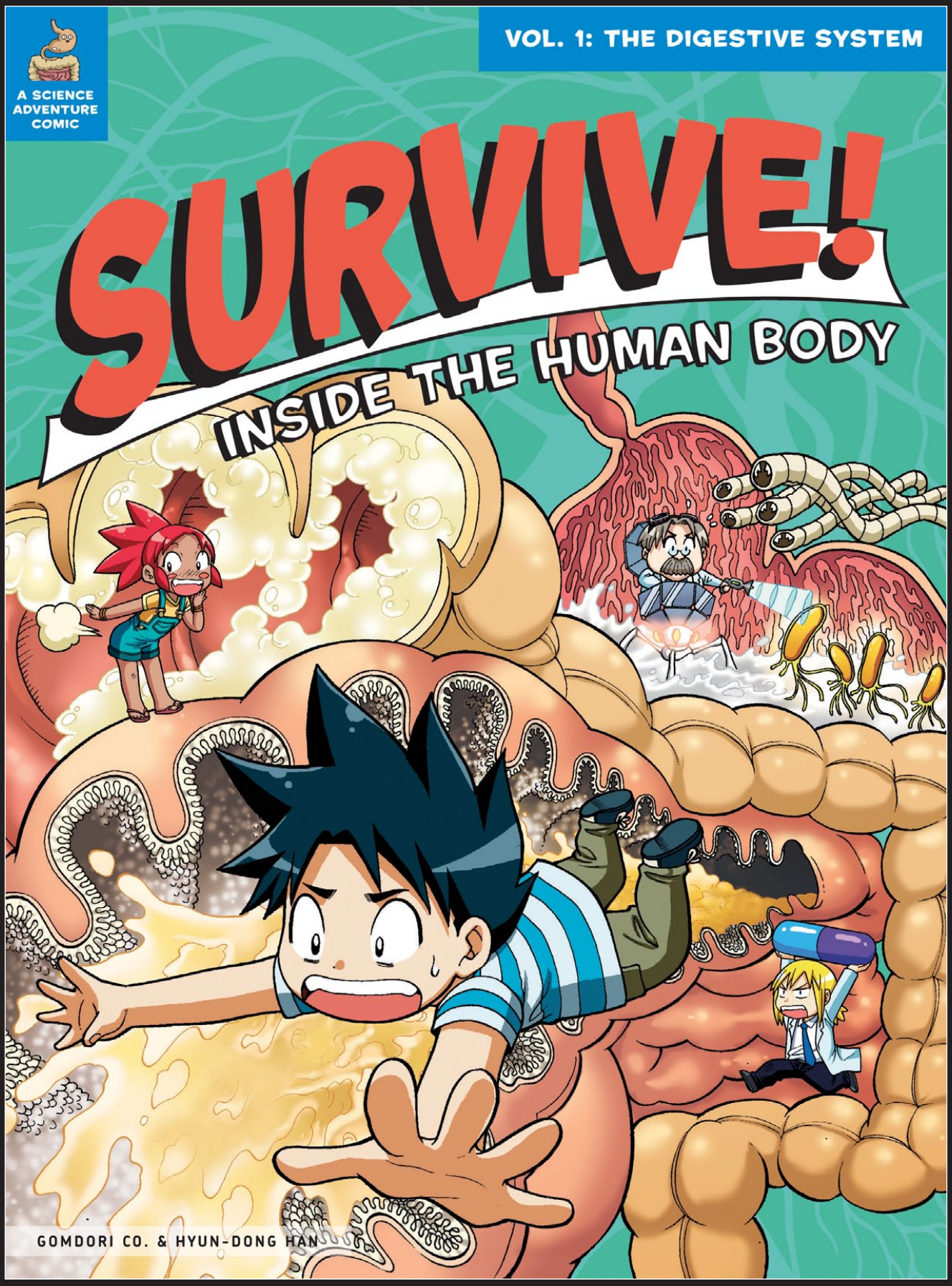
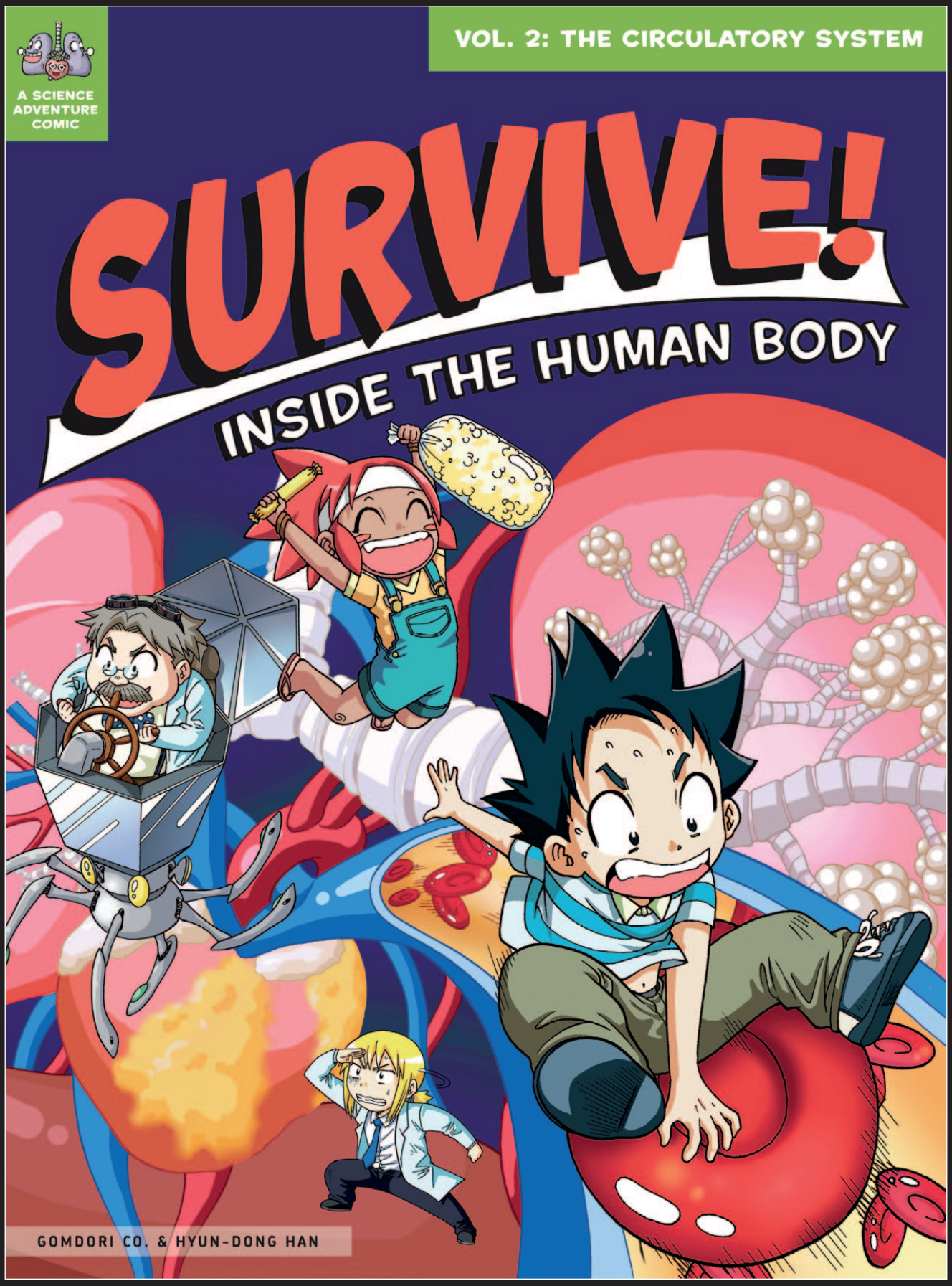

A SCIENCE ADVENTURE COMIC
VOL. 1: THE DIGESTIVE SYSTEM
SURVIVE!
INSIDE THE HUMAN BODY
GOMDORI CO. & HYUN-DONG HAN


DR. BRAIN! DR. BRAIN! GET AHOLD OF YOURSELF!
SLAP
SLAP
WHERE ARE WE?!
UNGH...
WHAT?!
ARE WE... INSIDE A MOUTH?
MOUTH?!
KRUUUUUUUK
THAT LOOKS LIKE THE COOKIE I WAS JUST EATING.
DOES THAT MEAN SOMEONE JUST SWALLOWED US...?
BUT WHO? KAY?
THUD
AGGGGGH!


KRUUUUUUUK
AHHHHHHH!
SLUUUUURP
SPLAT
GAH!
THUMP
HOW MANY TIMES DID I ASK YOU TO BUCKLE UP?!
BLAAAAM
ACCCCK! A MONSTER!


A SCIENCE ADVENTURE COMIC
VOL. 2: THE CIRCULATORY SYSTEM
SURVIVE!
INSIDE THE HUMAN BODY
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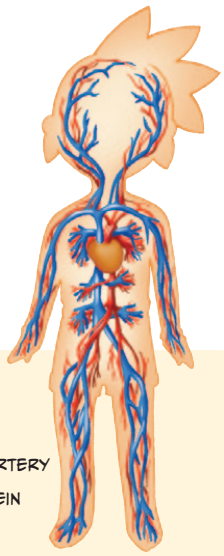
ARTERIES, CAPILLARIES, AND VEINS

Blood doesn't stay in one place. The heart constantly pumps blood throughout the entire body. Blood goes through arteries, capillaries, and veins before coming back to the heart. The tubes that make up this route are called *blood vessels*. If you connected all the blood vessels in your body, they would be more than 60,000 miles long. That's like walking across the United States 20 times!

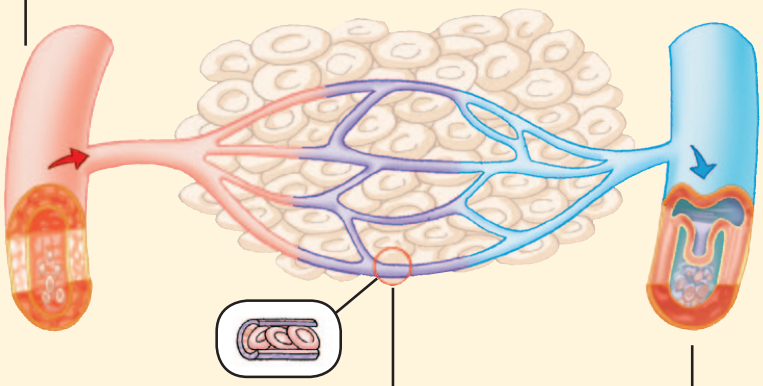


BLOOD VESSELS OF THE BODY

TYPES OF BLOOD VESSELS

ARTERY

These tubes send the oxygen-rich blood from the heart to every organ of the body. Arteries are thick enough to withstand the strong pressure from the heart. They also have a layer of stretchy muscle. Blood that flows through the arteries has a lot of oxygen and nutrients.

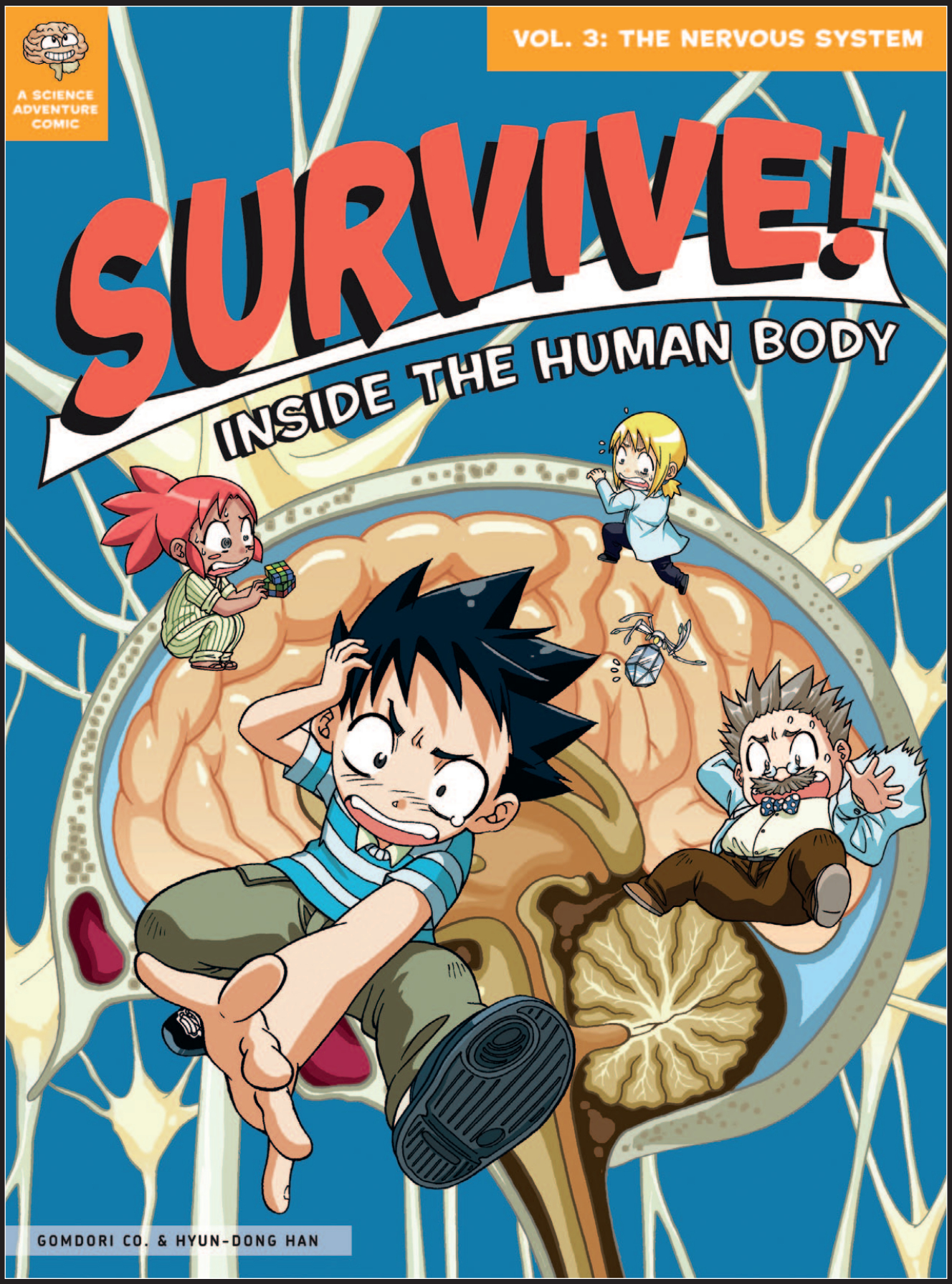


CAPILLARY

Capillaries are tiny blood vessels spread out like a net. They help blood from the arteries to reach every part of the body. Oxygen, carbon dioxide, nutrients, and waste travel through the capillaries' thin walls, which are only a single layer of cells thick.

VEIN

These tubes return blood to the heart after it exits the capillaries. They carry blood with carbon dioxide and waste. Far away from the heart, blood flow is weak, so many veins have valves to keep the blood moving toward the heart, not backward.


A SCIENCE ADVENTURE COMIC
VOL. 3: THE NERVOUS SYSTEM
SURVIVE!
INSIDE THE HUMAN BODY
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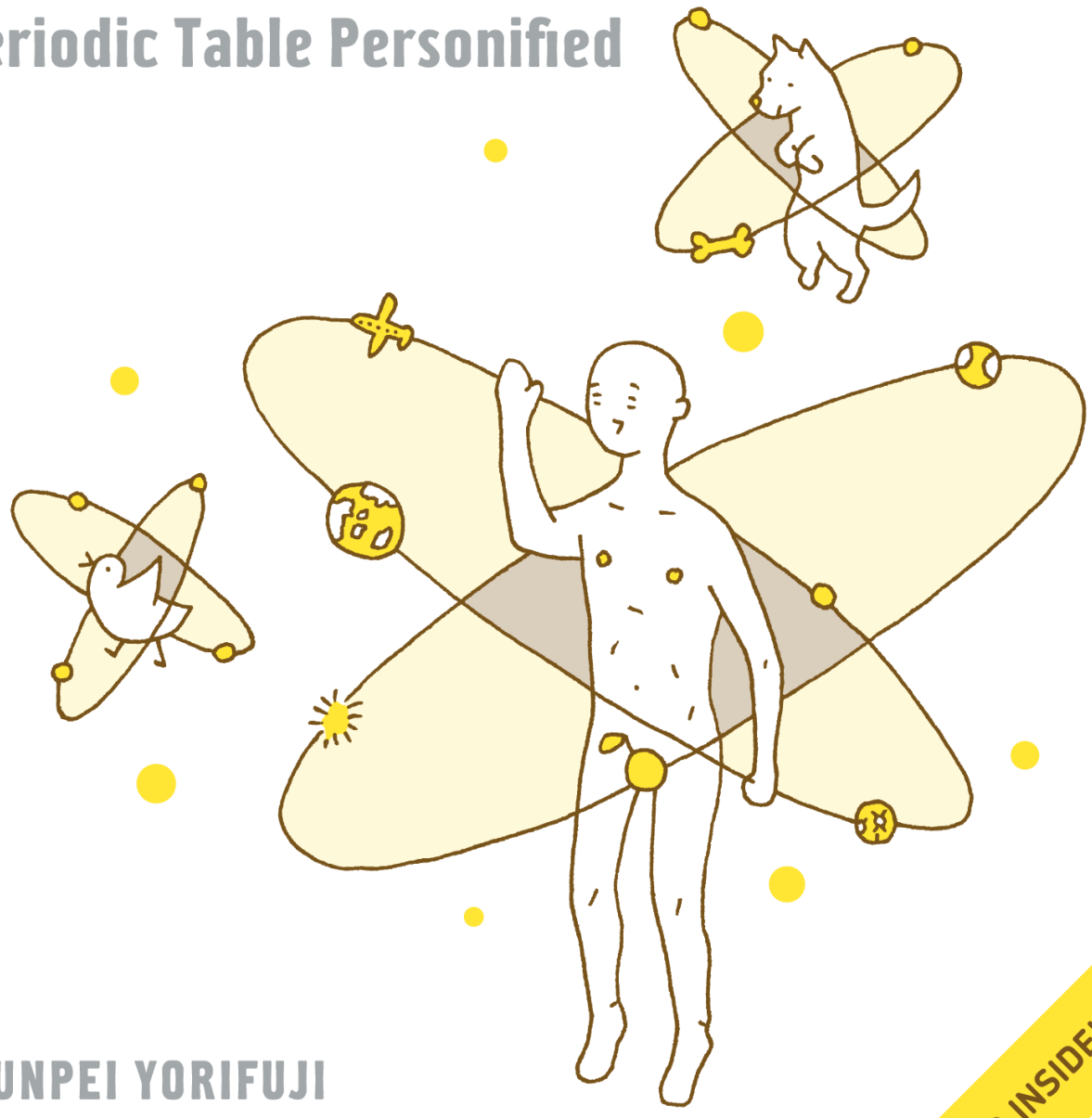
CEREBROSPINAL FLUID IS A LIQUID THAT SURROUNDS THE BRAIN AND SPINAL CORD.
CEREBROSPINAL FLUID
BRAIN
SPINAL CORD
YAAACK!
ITCHY
ARE YOU SAYING THERE'S WATER FLOWING AROUND INSIDE MY HEAD AND BACK?
ITCHY
ITCHY
YOUR BRAIN WOULDN'T BE SAFE WITHOUT THAT LIQUID!
WITHOUT IT, THE BRAIN WOULD GET HURT VERY EASILY. EVEN A SMALL SHOCK WOULD CAUSE THE BRAIN TO BUMP INTO THE HARD, BONY SKULL.
WHEN THERE IS NO CEREBROSPINAL FLUID
CLONK
SPLAT
THE BRAIN IS KEPT SAFE BECAUSE CEREBROSPINAL FLUID PREVENTS IT FROM COMING INTO DIRECT CONTACT WITH THE SKULL.
WHEN THERE IS CEREBROSPINAL FLUID
AHA!
I ALWAYS THOUGHT MY HEAD FELT HEAVY. SLOSHY, TOO.
BUT THERE'S ONLY ABOUT 100 MILLILITERS OF FLUID IN YOUR HEAD!
SHAKE
THAT'S ABOUT A QUARTER OF A CAN OF SODA.
THE BODY IS ALWAYS PRODUCING NEW CEREBROSPINAL FLUID, REPLACING IT THREE TO FOUR TIMES IN A SINGLE DAY.
WHY WOULD IT NEED TO BE REPLACED SO FREQUENTLY? I THOUGHT IT WAS JUST A CUSHION.

Wonderful Life with the Elements

The Periodic Table Personified

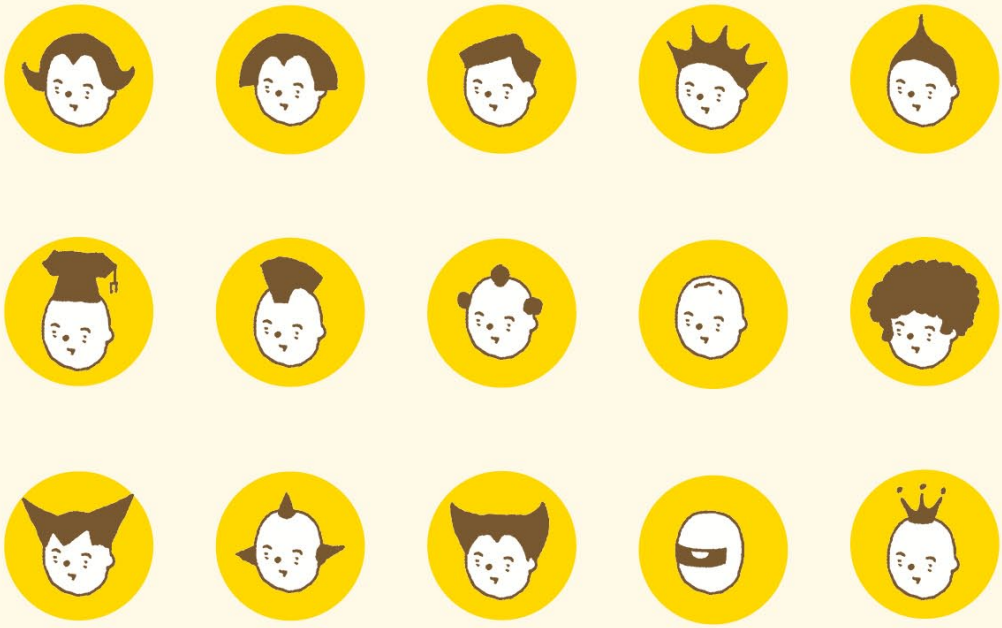


BUNPEI YORIFUJI

POSTER INSIDE!

元素のヘアースタイル

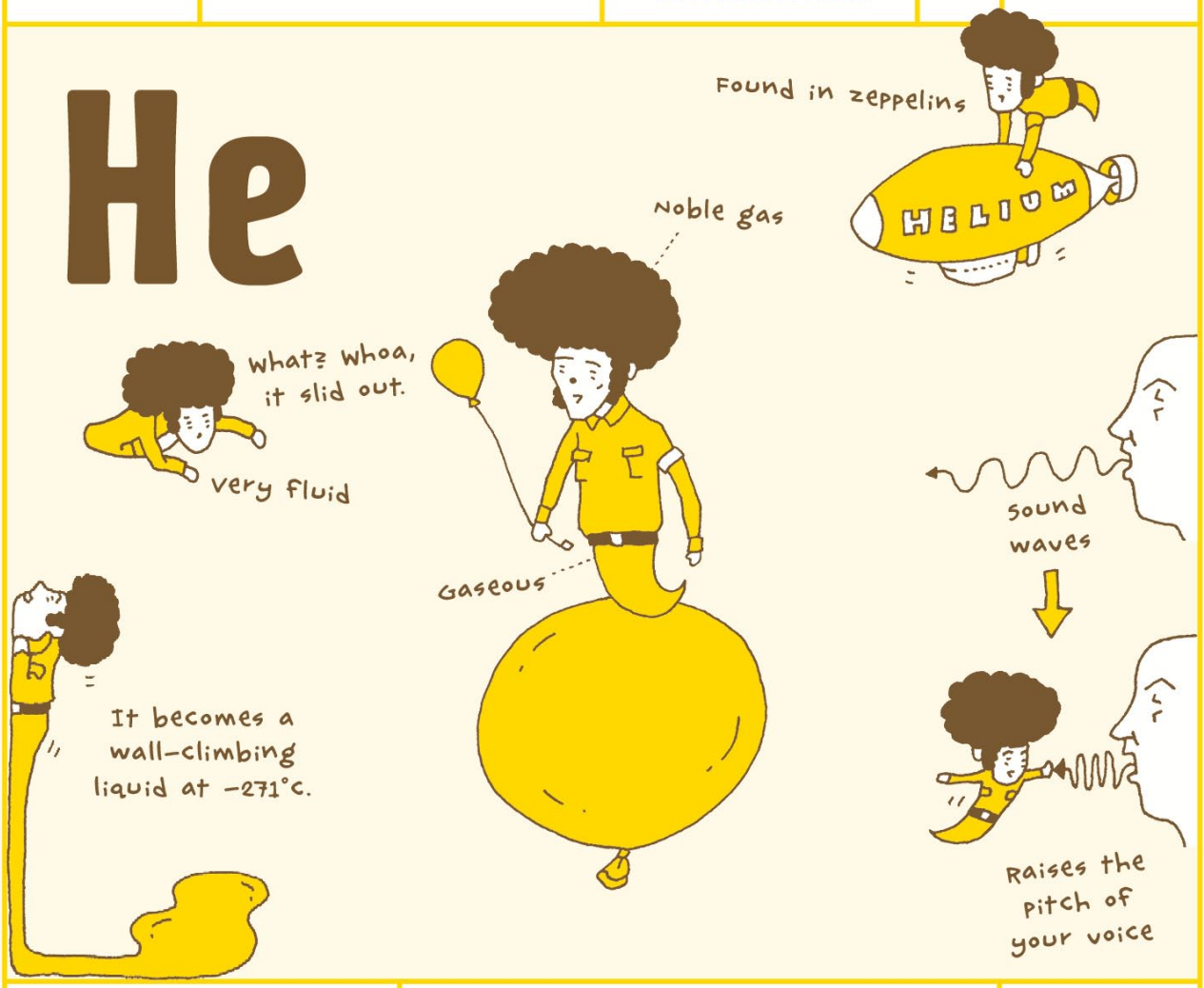
Hairstyles of the elements



I've split the properties of the elements into 14 categories. (Hydrogen is in a class by itself.) They're mostly organized according to the families in the periodic table, but since some elements belonging to the same family exhibit different properties and elements of different families can be similar, I decided to alter these categorizations slightly. I tried to model each group's hairstyle after its chemical properties.

2	ヘリウム Helium	4.003	1 18	気

He



THE LIGHTHEARTED GAS THAT RAISES OUR SPIRITS AND OUR VOICES

【hí:liəm】

DISCOVERY YEAR : 1868

Children know it from funny voices and balloons. This ancient element could be found along with hydrogen minutes after the Big Bang. And without these two, no other elements could have been formed. They are the only two elements that are lighter than air, so maybe they're kind of like the leaders, looking down on all the others? But helium, unlike hydrogen, is one cool cookie and doesn't explode easily at all.

MELTING POINT
-272.2 (PRESSURIZED) ℃

BOILING POINT
-268.934 ℃

DENSITY
0.0001785 (GAS FORM, 0°C) g/cm³

3	リチウム Lithium	6.941	2 1	鋰

Li

THE POWER SOURCE OF THE MOBILE AGE

【líθiəm】
DISCOVERY YEAR : 1817

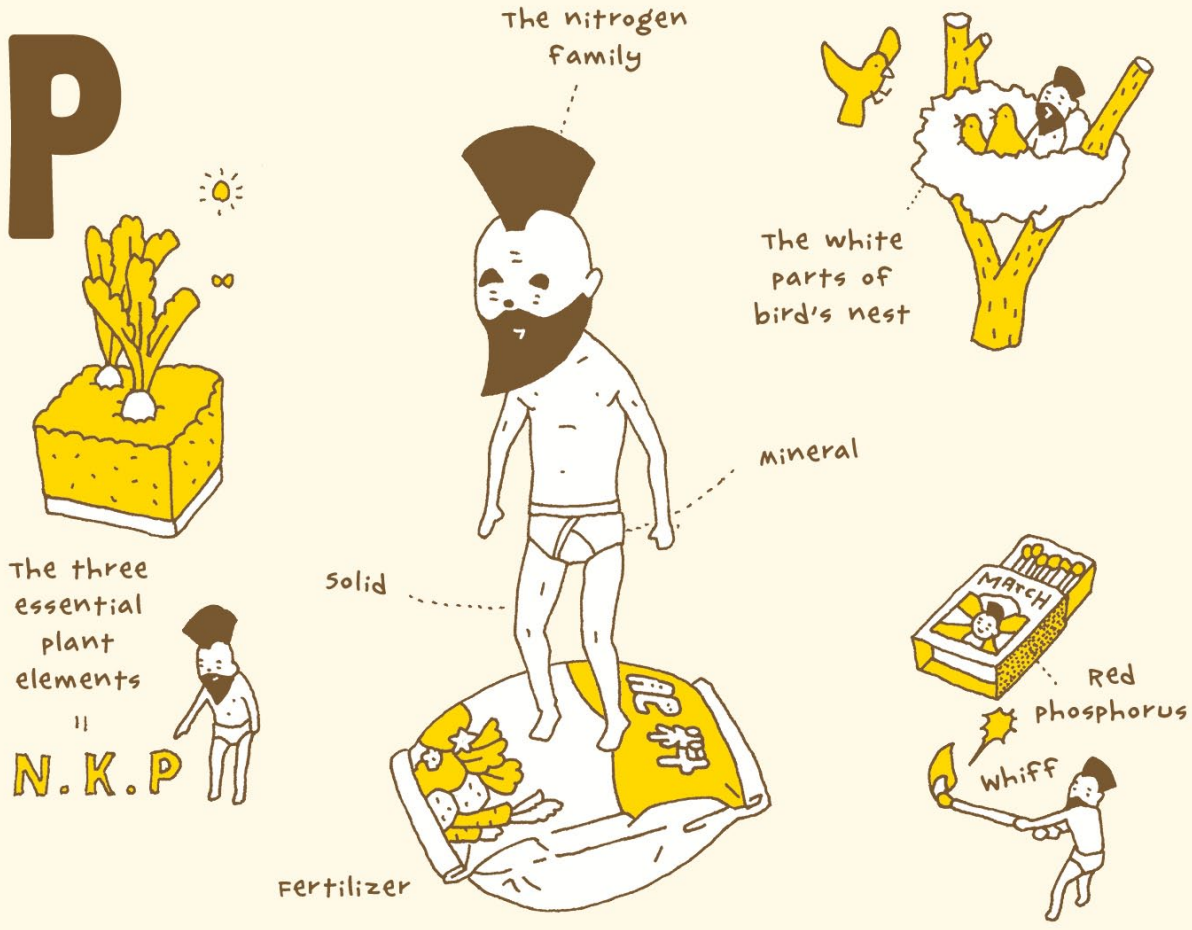
Lithium, the lightest metal, was also born at the time of the Big Bang, so hydrogen, helium, and lithium are actually triplets. But there was so little lithium at the time, it couldn't do much. Today, however, it is an essential component in both lithium ion batteries and mobile devices. It's light, powerful, and easy to recharge, and it doesn't really deteriorate. It can also be found in seawater, so we won't run out anytime soon.

MELTING POINT
180.54
℃

BOILING POINT
1340
℃

DENSITY
0.534
(0℃)
g/cm³

15	リン Phosphorus	30.97	3 15	磷



IT ALL STARTED WITH PEE! THE LIVELY ELEMENT

【fásfərəs】

DISCOVERY YEAR: 1669

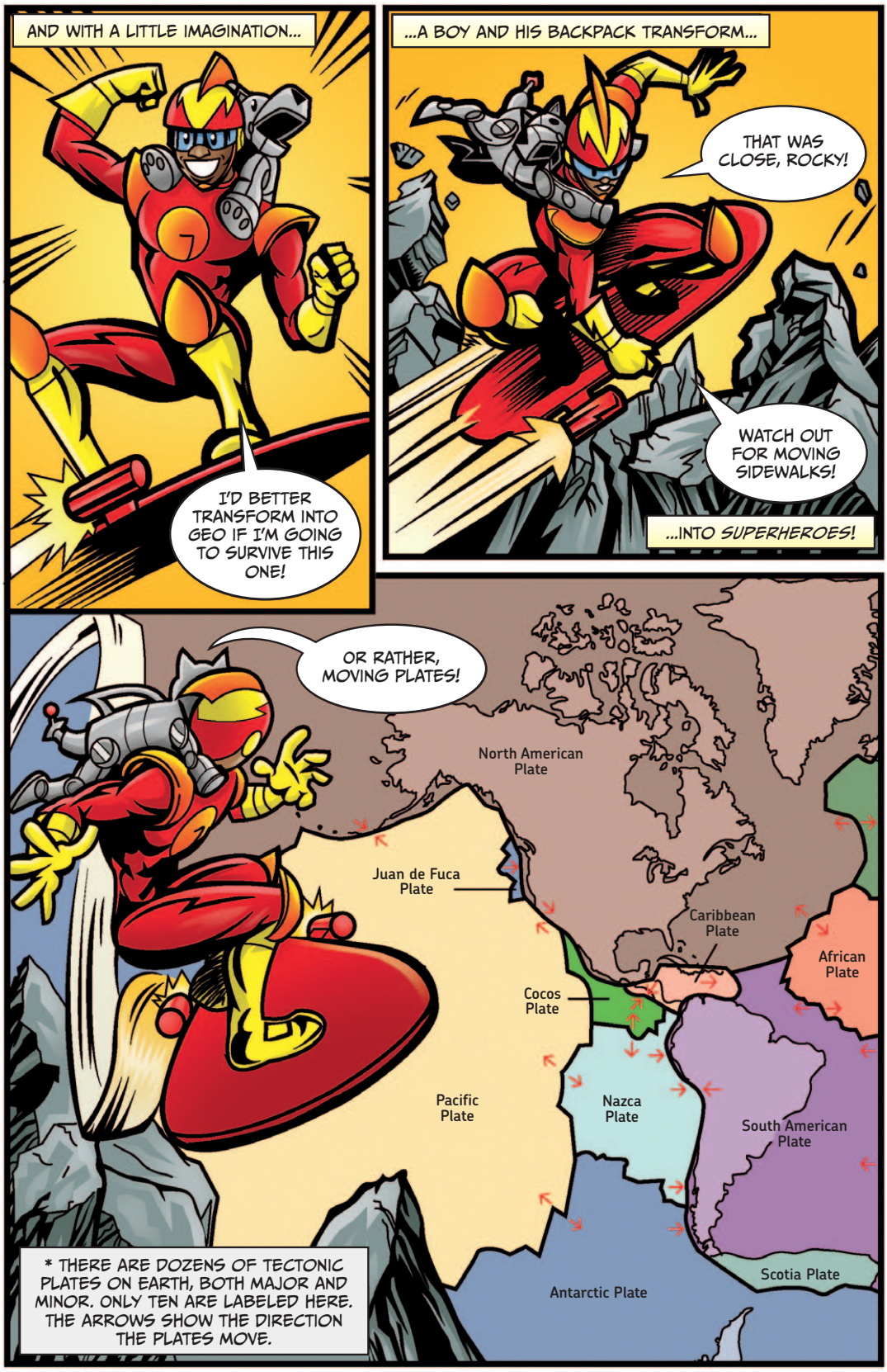
About when Isaac Newton was busy dodging falling apples, German alchemists were evaporating urine in their experiments, which led to the discovery of phosphorus. It can be found in several colors, among them white, red, and purple. Our DNA and cells crave it to function properly. It is also essential in agriculture as fertilizer. Red phosphorus is used in the striking surfaces of matches and flares and in cap gun caps.

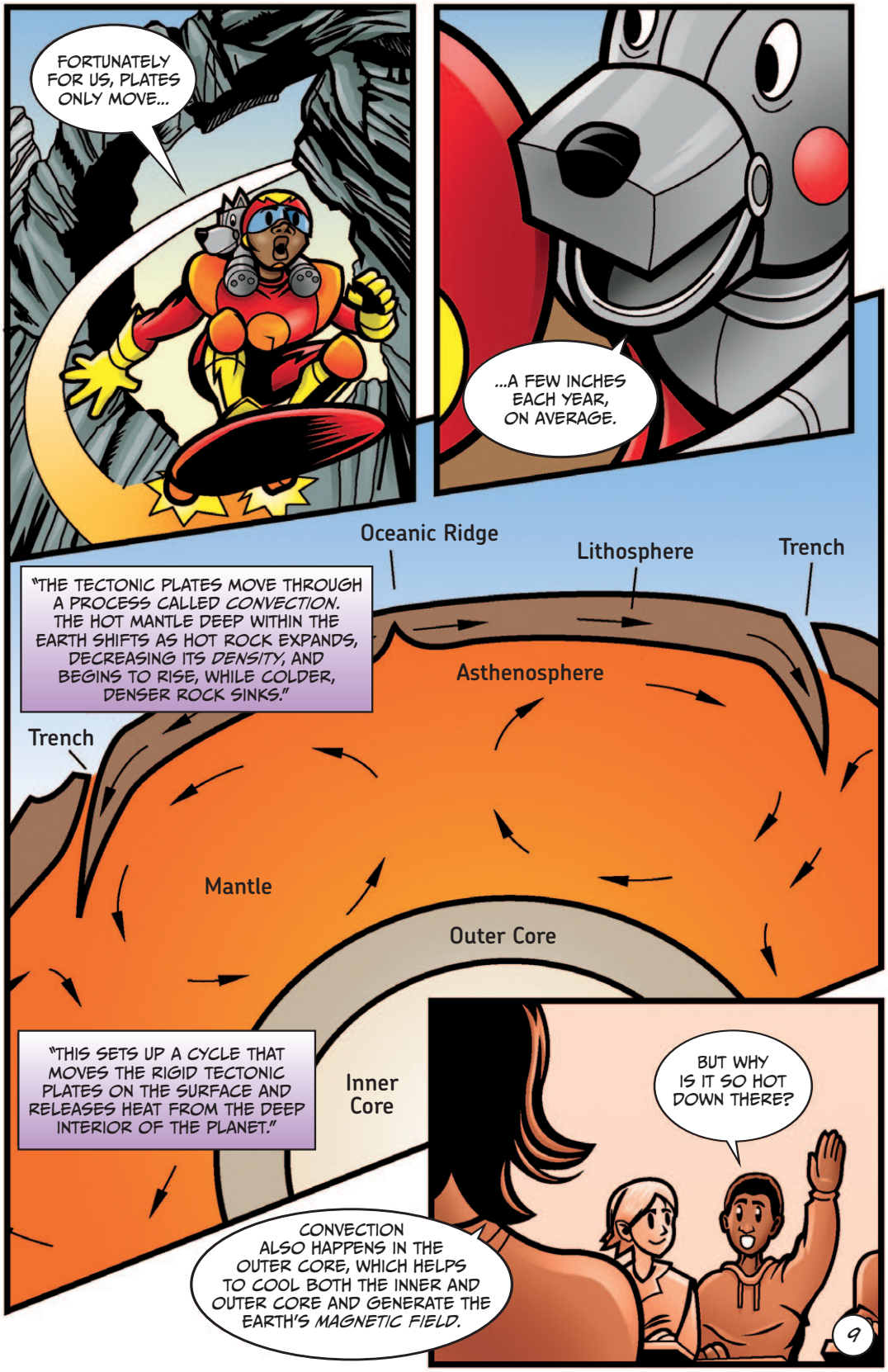
MELTING POINT
44.2
(WHITE PHOSPHORUS)
℃

BOILING POINT
279.9
(WHITE PHOSPHORUS)
℃

DENSITY
1.82
(WHITE PHOSPHORUS)
g/cm³


THE ADVENTURES OF GEO, VOL. 1
THE INCREDIBLE
PLATE TECTONICS
COMIC
KANANI K.M. LEE
& ADAM WALLENTA


AND WITH A LITTLE IMAGINATION...
I'D BETTER TRANSFORM INTO GEO IF I'M GOING TO SURVIVE THIS ONE!
...A BOY AND HIS BACKPACK TRANSFORM...
THAT WAS CLOSE, ROCKY!
WATCH OUT FOR MOVING SIDEWALKS!
...INTO SUPERHEROES!
OR RATHER, MOVING PLATES!
North American Plate
Juan de Fuca Plate
Caribbean Plate
African Plate
Cocos Plate
Pacific Plate
Nazca Plate
South American Plate
Scotia Plate
Antarctic Plate
* THERE ARE DOZENS OF TECTONIC PLATES ON EARTH, BOTH MAJOR AND MINOR. ONLY TEN ARE LABELED HERE. THE ARROWS SHOW THE DIRECTION THE PLATES MOVE.

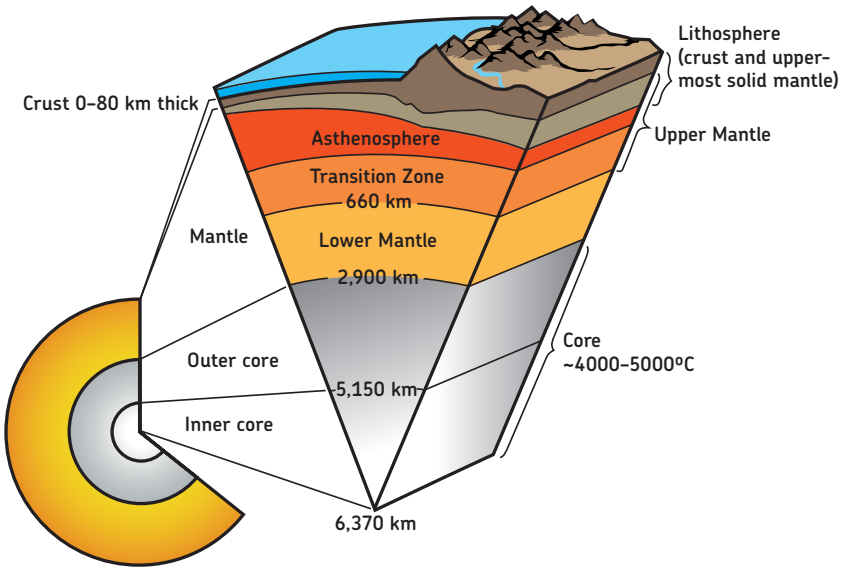

FORTUNATELY FOR US, PLATES ONLY MOVE...
...A FEW INCHES EACH YEAR, ON AVERAGE.
Oceanic Ridge
Lithosphere
Trench
"THE TECTONIC PLATES MOVE THROUGH A PROCESS CALLED CONVECTION. THE HOT MANTLE DEEP WITHIN THE EARTH SHIFTS AS HOT ROCK EXPANDS, DECREASING ITS DENSITY, AND BEGINS TO RISE, WHILE COLDER, DENSER ROCK SINKS."
Asthenosphere
Trench
Mantle
Outer Core
"THIS SETS UP A CYCLE THAT MOVES THE RIGID TECTONIC PLATES ON THE SURFACE AND RELEASES HEAT FROM THE DEEP INTERIOR OF THE PLANET."
Inner Core
BUT WHY IS IT SO HOT DOWN THERE?
CONVECTION ALSO HAPPENS IN THE OUTER CORE, WHICH HELPS TO COOL BOTH THE INNER AND OUTER CORE AND GENERATE THE EARTH'S MAGNETIC FIELD.
9

JOURNEY TO THE CENTER OF THE EARTH

The *crust* is the familiar, rocky outer shell of the planet Earth. Under the oceans, it is typically 5 to 10 km (3 to 6 miles) thick and made up mostly of dense rock, which is rich in magnesium and iron. Continental crust is thicker, typically 30 to 45 km (18 to 28 miles) thick, but is made up of less dense rock, rich in silicon and aluminum. But what's beneath this? Let's take a look.

Beneath the crust lies the *mantle*, a rocky layer that makes up most of Earth's volume (about 84 percent). The mantle can be divided further into the *upper mantle* and *lower mantle*.

Within the upper mantle, there are several layers with different degrees of rigidity. At the very top is a solid layer of rock, which—along with the crust—forms the *lithosphere*. Below that is the *asthenosphere*, which is hotter and less rigid than the lithosphere. This second layer flows very slowly, causing the tectonic plates above it to move. Between the asthenosphere and the lower mantle is the *transition zone*. It is here that high pressures and high temperatures cause several key phase transitions to occur that transform *olivine*, the most abundant mineral in the upper mantle, into *bridgmanite* (magnesium silicate perovskite)—the most abundant mineral on Earth—and *ferropericlase*.

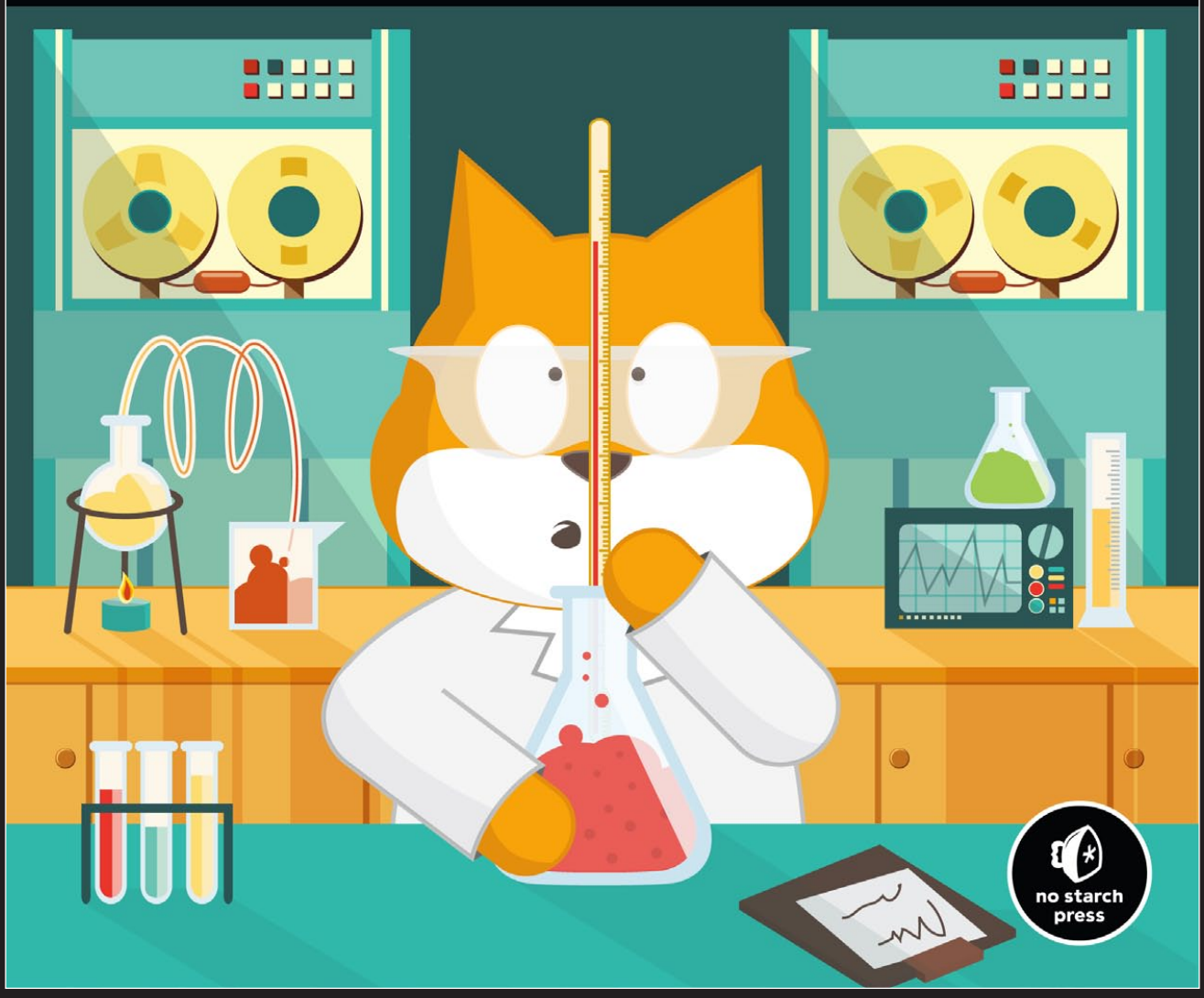


COVERS SCRATCH 2

LEARN TO PROGRAM WITH SCRATCH

A VISUAL INTRODUCTION TO PROGRAMMING WITH *GAMES*, *ART*, *SCIENCE*, AND *MATH*

MAJED MARJI



no starch press

Using Nested Procedures

As we noted earlier, a procedure should be designed to perform a single, well-defined task. To execute multiple tasks, it is perfectly legal—and in many cases desirable—to have one procedure call another as part of its execution path. Nesting procedures this way gives you great flexibility in structuring and organizing your programs.

RotatedSquares.sb2

To see this in action, let's start with the **Square** procedure we wrote in the previous section (see Figure 4-17). Now, we'll create a new procedure, called **Squares**, that draws four stretched squares, as illustrated in Figure 4-19. It does so by calling the **Square** procedure four times. Each call uses a different argument, and the output is four squares that share a corner.

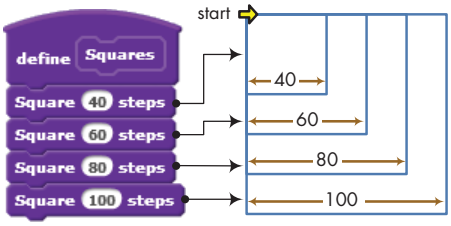


Figure 4-19: The **Squares** *procedure and its output*

We can now use **Squares** to create some interesting art. Figure 4-20 shows another procedure, called **RotatedSquares**, which calls the **Squares** procedure several times, turning the shapes by some angle after each call.

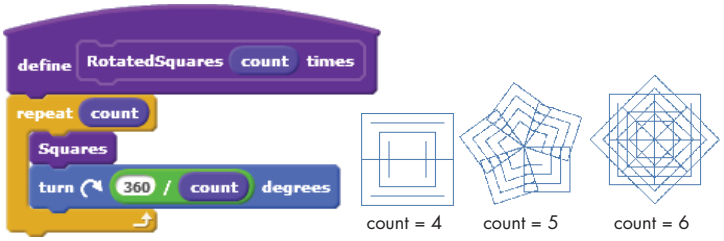


Figure 4-20: The **RotatedSquares** *procedure and some possible outputs*

In this procedure, the count parameter is used twice: once to determine the number of repetitions and again to calculate the turn angle after calling **Squares**. Setting count to 5, for example, will result in repeating the square pattern of Figure 4-20 five times with a 72° (that is, 360° / 5) right turn after each call. Experiment with different values to discover new patterns.

Checkers.sb2

Let's work out another example that demonstrates the power of nested procedures: We'll start with the **Square** procedure of Figure 4-16 and end up with a checkerboard.

Create a new procedure (called **Row**) that draws a single row of squares, as illustrated in Figure 4-21. Note that the number of squares

to draw is specified as a parameter. To keep things simple, we've fixed the size of the individual squares at 20 steps instead of defining the size as a second parameter to the **Row** procedure.

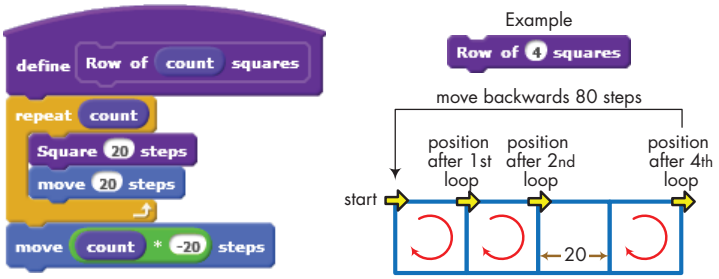


Figure 4-21: The **Row** *procedure*

Figure 4-21 also illustrates the result of calling **Row** with an argument of 4, which makes the procedure call **Square 20 steps** four times in a loop. The sprite's position is adjusted after drawing each square to set the initial position for the next square. After drawing the four squares, the last command returns the sprite to its initial position.

To draw another row of squares below the one shown in Figure 4-21, we just need to move the sprite down 20 steps and then call the **Row** procedure again. We can repeat this to draw as many rows as we want. Our **Checkers** procedure, shown in Figure 4-22, does just that.

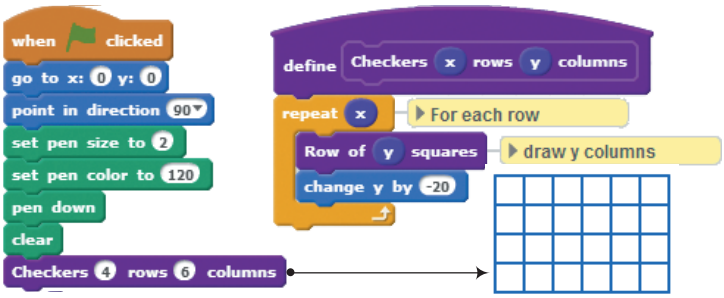


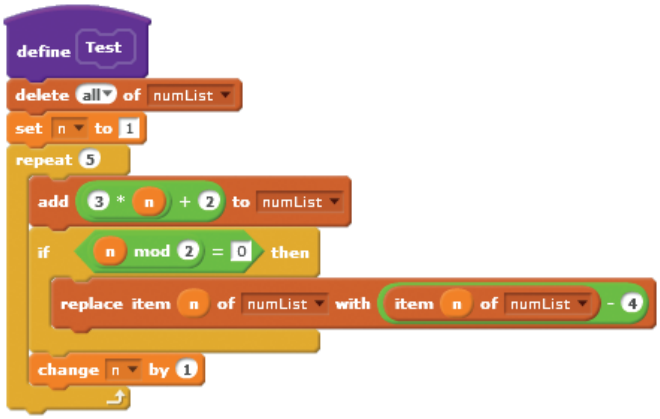
Figure 4-22: The **Checkers** *procedure and its output*

This procedure takes two parameters: the number of rows and the number of columns for the desired checkerboard. After drawing each row, the procedure moves the sprite down 20 steps to prepare to draw the next row of squares.

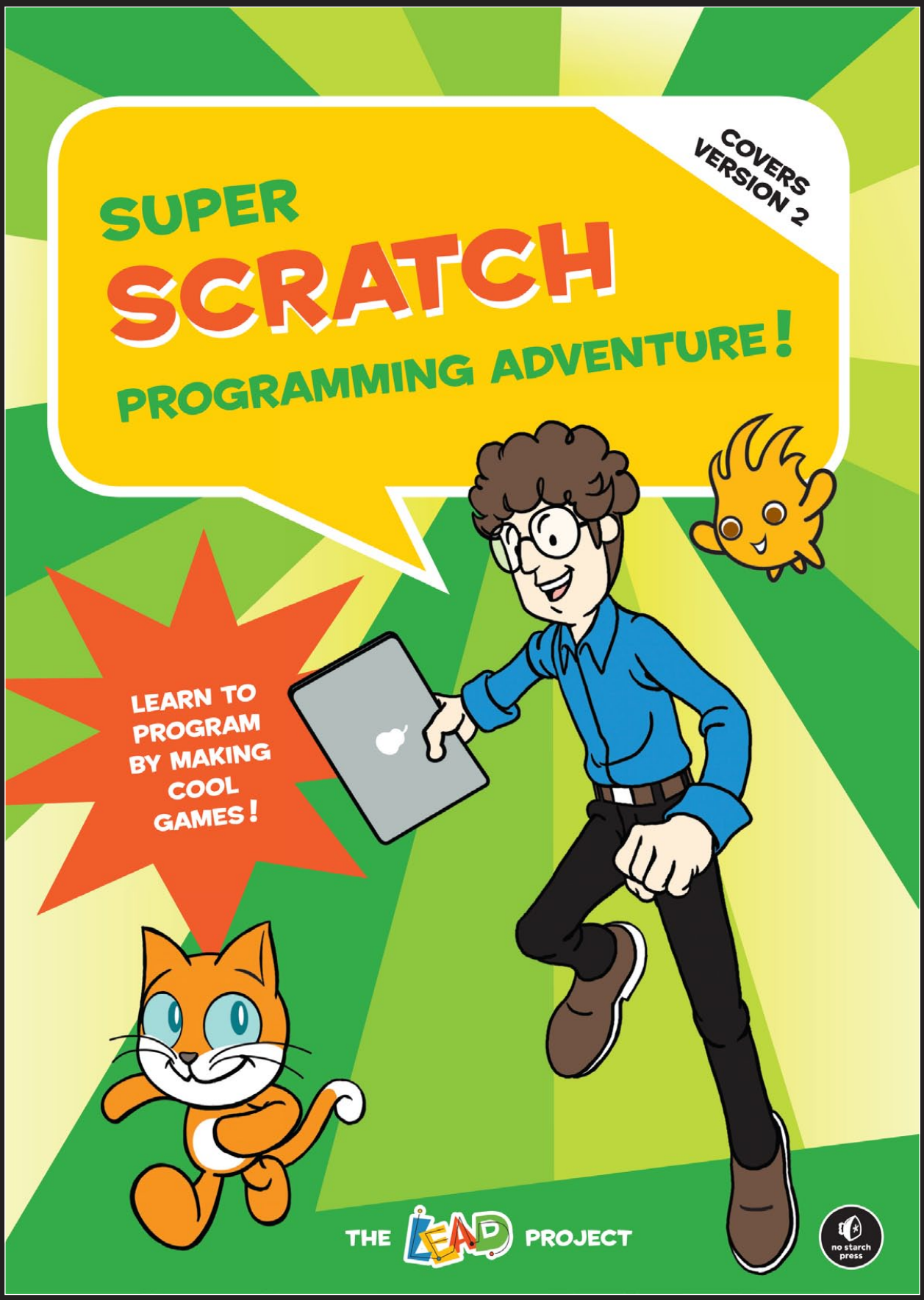
The examples presented in this section show how procedures can help you divide a program into smaller, more manageable pieces. Once you've written and tested your procedures, you can use them as building blocks for more complex procedures without worrying much about the low-level implementation details. You can then focus on the important task of putting together the whole application using these procedures as building blocks.

Problems

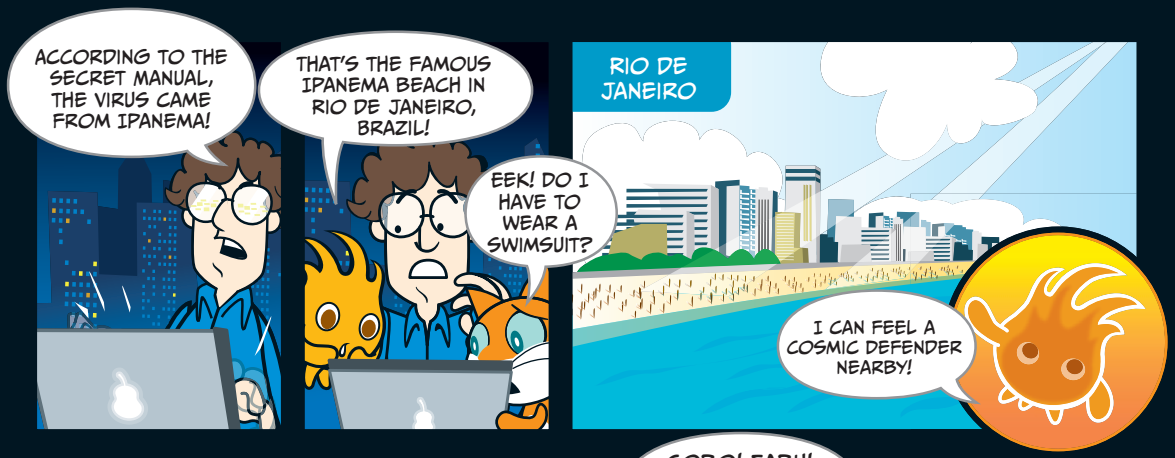
1. Create a list that contains the first 10 prime numbers. Write a script to display these numbers using the **say** block.
2. Create three lists to store personal records. The first list stores names, the second list stores birth dates, and the third list stores phone numbers. Write a program that asks the user the name of the person whose contact information is needed. If the person's name exists in the first list, the program will say the person's birth date and phone number.
3. Create two lists for storing the items sold in a grocery store and their corresponding prices. Write a program that asks the user to enter an item's name and then displays that item's price, if it is found in the list.
4. What is stored in numList after executing the script shown on the next page? Re-create the procedure and run it to check your answer.

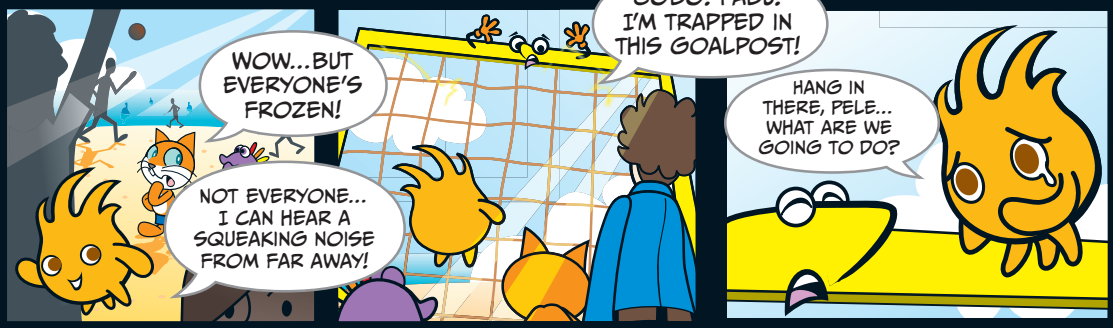


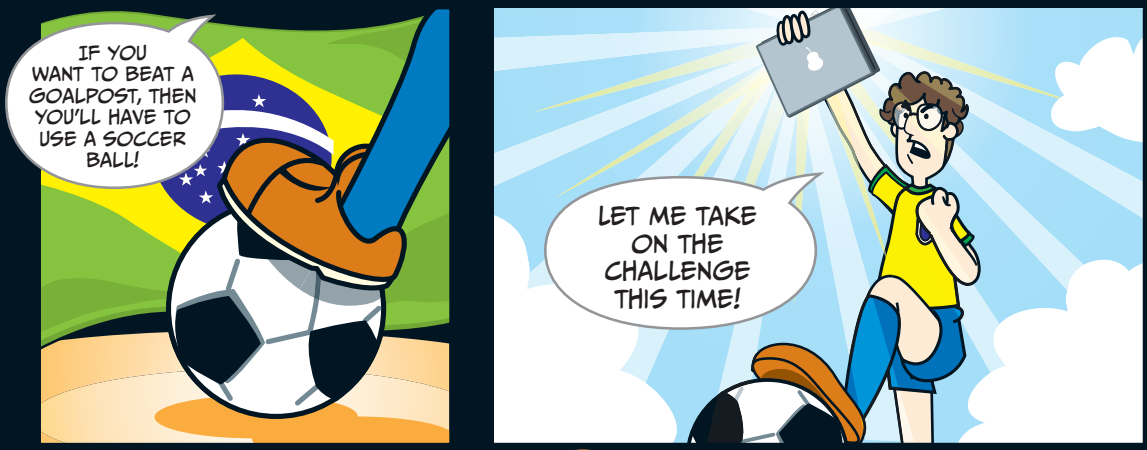
5. Write a program to double each of the elements stored in a numerical list.
6. Write a program that prompts the user to enter students' names and scores and store these inputs in two lists. Stop collecting data when the user enters –1 for a student's name.
7. Write a program that prompts the user to enter the highest and lowest temperatures for the 12 months of a year. Store the input values in two lists.
8. Write a program that prompts the user to enter 10 integers. Store each entered number into a list only if it is not a duplicate of a previously entered number.
9. Write a program that processes a list of 20 scores on a test with 100 items and finds the number of students who scored between 85 and 90.


COVERS VERSION 2
SUPER SCRATCH PROGRAMMING ADVENTURE!
LEARN TO PROGRAM BY MAKING COOL GAMES!
THE LEAD PROJECT
no starch press

STAGE 5


ACCORDING TO THE SECRET MANUAL, THE VIRUS CAME FROM IPANEMA!
THAT'S THE FAMOUS IPANEMA BEACH IN RIO DE JANEIRO, BRAZIL!
EEK! DO I HAVE TO WEAR A SWIMSUIT?
RIO DE JANEIRO
I CAN FEEL A COSMIC DEFENDER NEARBY!


WOW...BUT EVERYONE'S FROZEN!
NOT EVERYONE... I CAN HEAR A SQUEAKING NOISE FROM FAR AWAY!
GOBO! FABU! I'M TRAPPED IN THIS GOALPOST!
HANG IN THERE, PELE... WHAT ARE WE GOING TO DO?


IF YOU WANT TO BEAT A GOALPOST, THEN YOU'LL HAVE TO USE A SOCCER BALL!
LET ME TAKE ON THE CHALLENGE THIS TIME!

RIO SHOOT-OUT

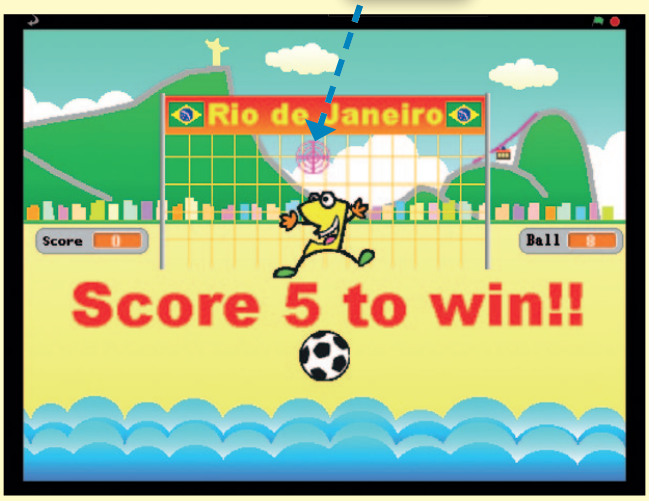
STAGE 5

Chapter Focus

Learn how to program a soccer game with a targeting system, several related rules, interactive sound effects, and a vivid, animated backdrop!

The Game

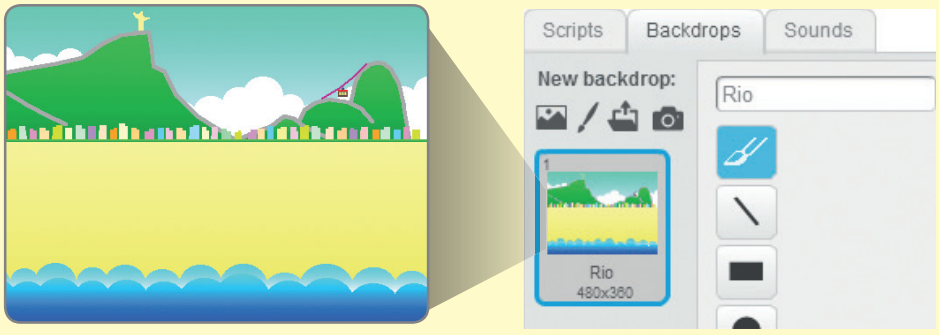
Shoot penalty kicks and avoid the moving goalie. You'll win the game if you manage to score five out of eight tries!



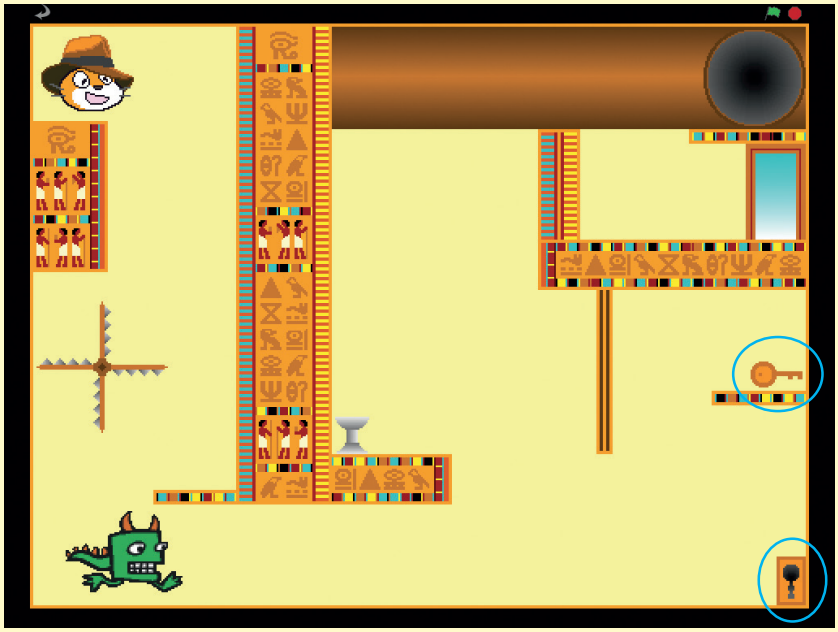
Here's a look at the final game. We'll need to create a targeting system that will move over the goal. When you press the spacebar, you'll kick the ball where the bull's-eye is. But watch out—the goalkeeper will dive every time you kick the ball!

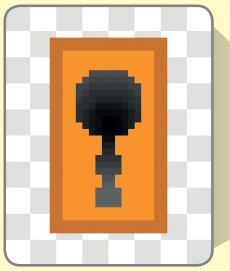
To start, you can upload the file ***05 - Rio Shootout.sb2*** (File ▸ Upload from your computer), which has all our sprites but no programming blocks yet.

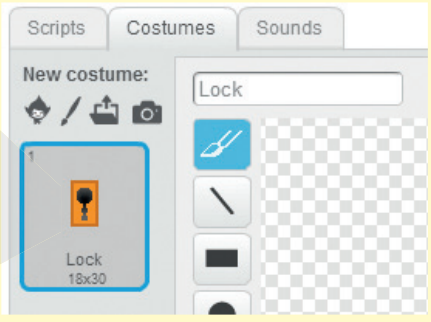
You can draw your very own backdrop if you like!



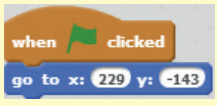
At this point, take a look at the **Lock** and **Key** sprites, which are circled in blue below. Scratchy will need to pick up the Key first, in order to open the Lock. Let's create some programs for them next.







First, click the **Lock** in the Sprite List to give it a simple program—this just sets its location in the maze. The program that actually opens the gate is in the Key sprite.



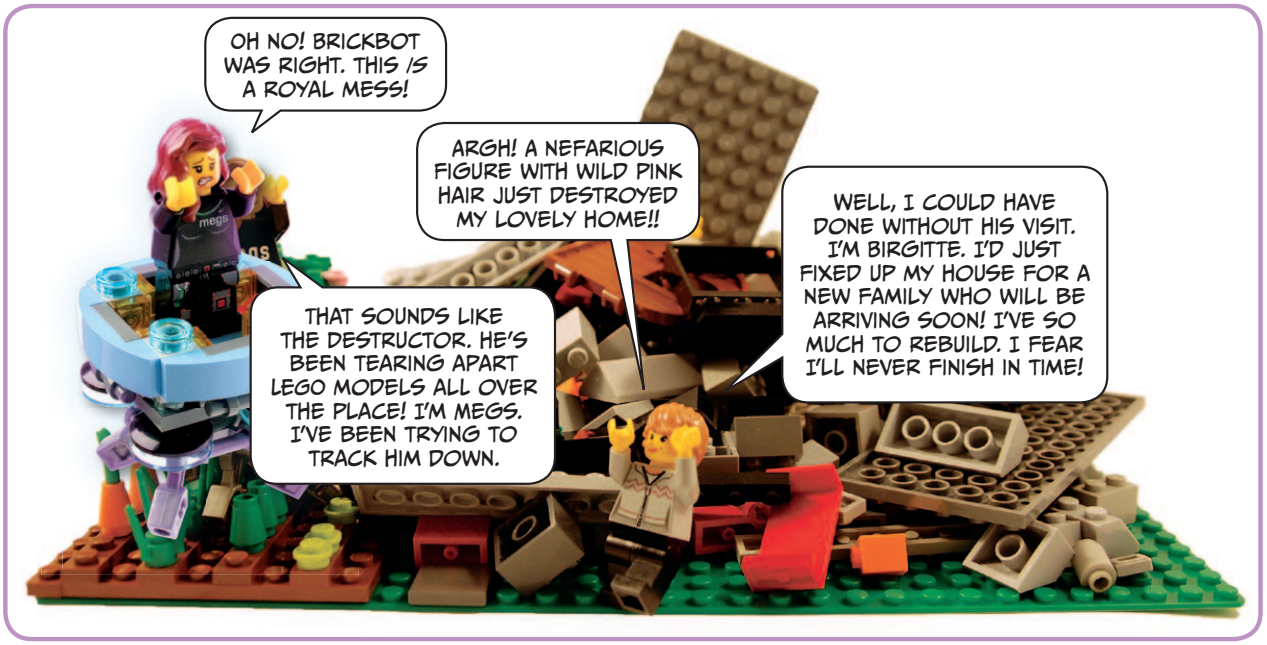
THE LEGO® ADVENTURE BOOK

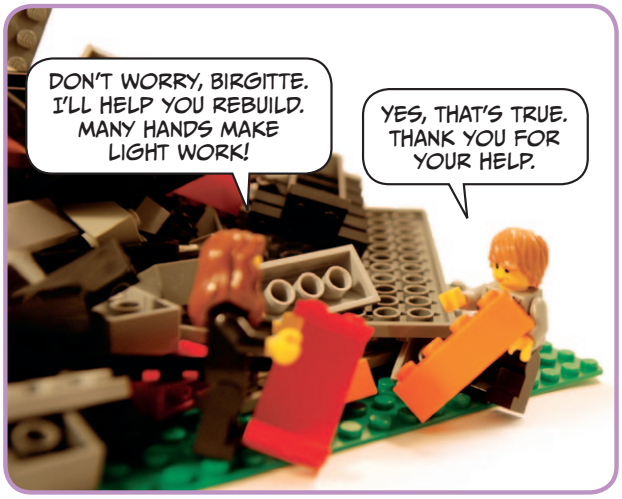
SPACESHIPS, PIRATES, DRAGONS & MORE!

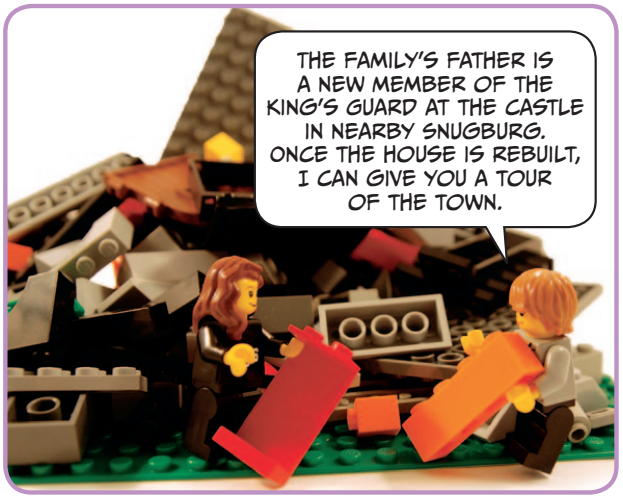
100 MODELS + NEARLY 40 BRICK-BY-BRICK BREAKDOWNS

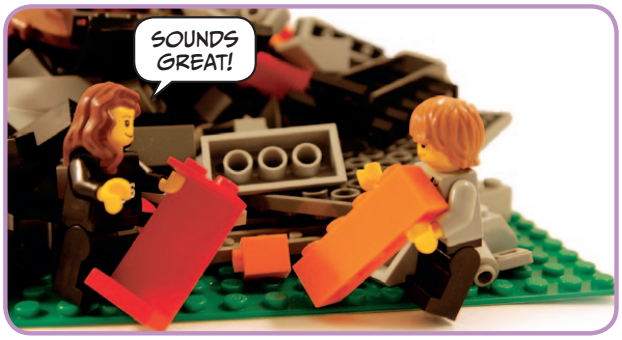
MEGAN H. ROTHROCK

no starch press


OH NO! BRICKBOT WAS RIGHT. THIS IS A ROYAL MESS!
ARGH! A NEFARIOUS FIGURE WITH WILD PINK HAIR JUST DESTROYED MY LOVELY HOME!!
WELL, I COULD HAVE DONE WITHOUT HIS VISIT. I'M BIRGITTE. I'D JUST FIXED UP MY HOUSE FOR A NEW FAMILY WHO WILL BE ARRIVING SOON! I'VE SO MUCH TO REBUILD. I FEAR I'LL NEVER FINISH IN TIME!
THAT SOUNDS LIKE THE DESTRUCTOR. HE'S BEEN TEARING APART LEGO MODELS ALL OVER THE PLACE! I'M MEGS. I'VE BEEN TRYING TO TRACK HIM DOWN.


DON'T WORRY, BIRGITTE. I'LL HELP YOU REBUILD. MANY HANDS MAKE LIGHT WORK!
YES, THAT'S TRUE. THANK YOU FOR YOUR HELP.


THE FAMILY'S FATHER IS A NEW MEMBER OF THE KING'S GUARD AT THE CASTLE IN NEARBY SNUGBURG. ONCE THE HOUSE IS REBUILT, I CAN GIVE YOU A TOUR OF THE TOWN.


SOUNDS GREAT!


AT LEAST MY CARROTS ARE STILL HERE.

The Tudors

Birgitte Jonsgard

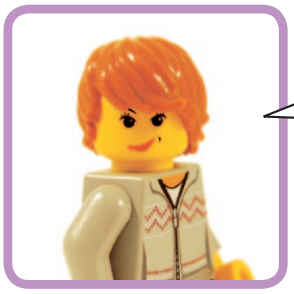
Nickname: birgburg

Profession: Science Teacher

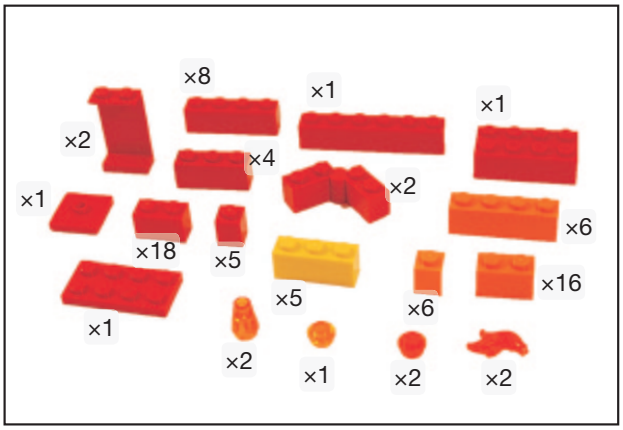
Nationality: Norwegian

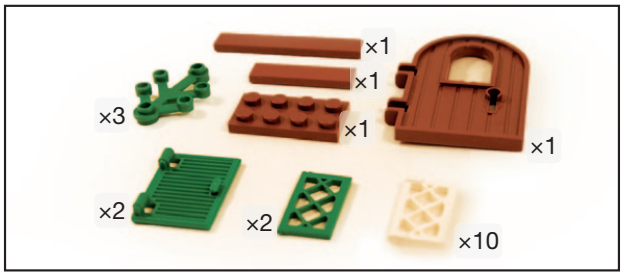
Website: *www.flickr.com/people/birgburg/*

Gingerbread House



THIS IS A TUDOR-STYLE HOUSE, WHICH MEANS YOU CAN SEE THE STRUCTURAL POSTS AND BEAMS. BE SURE TO TAKE YOUR TIME BUILDING THE ROOF AND KEEP AN EYE OUT FOR HIDDEN FEATURES.





THE LEGO® BUILD-IT BOOK

MORE AMAZING VEHICLES

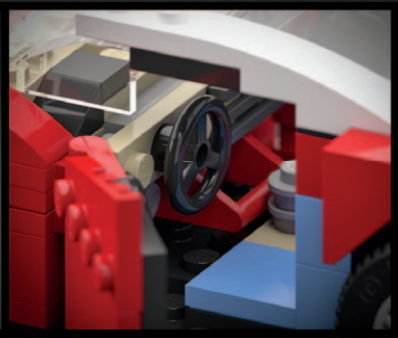
BUILD 10 LEGO MODELS!

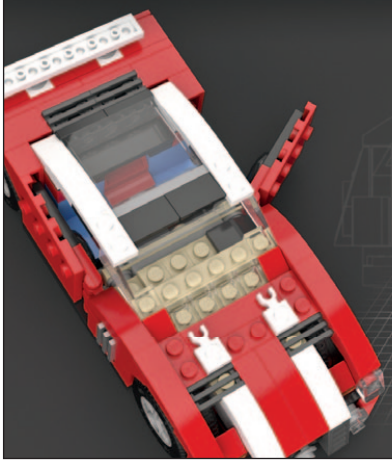
Nathanaël Kuipers
Mattia Zamboni

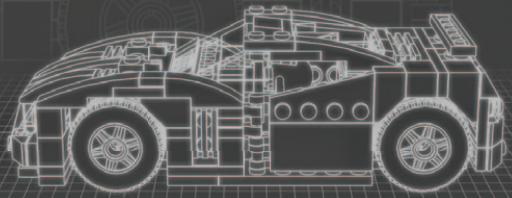
no starch press

02 GRAN TURISMO

Complexity
Functions
Pieces







GRAN TURISMO

Design notes: low chassis, aerodynamic shape, sophisticated lines, racing stripes, spoiler

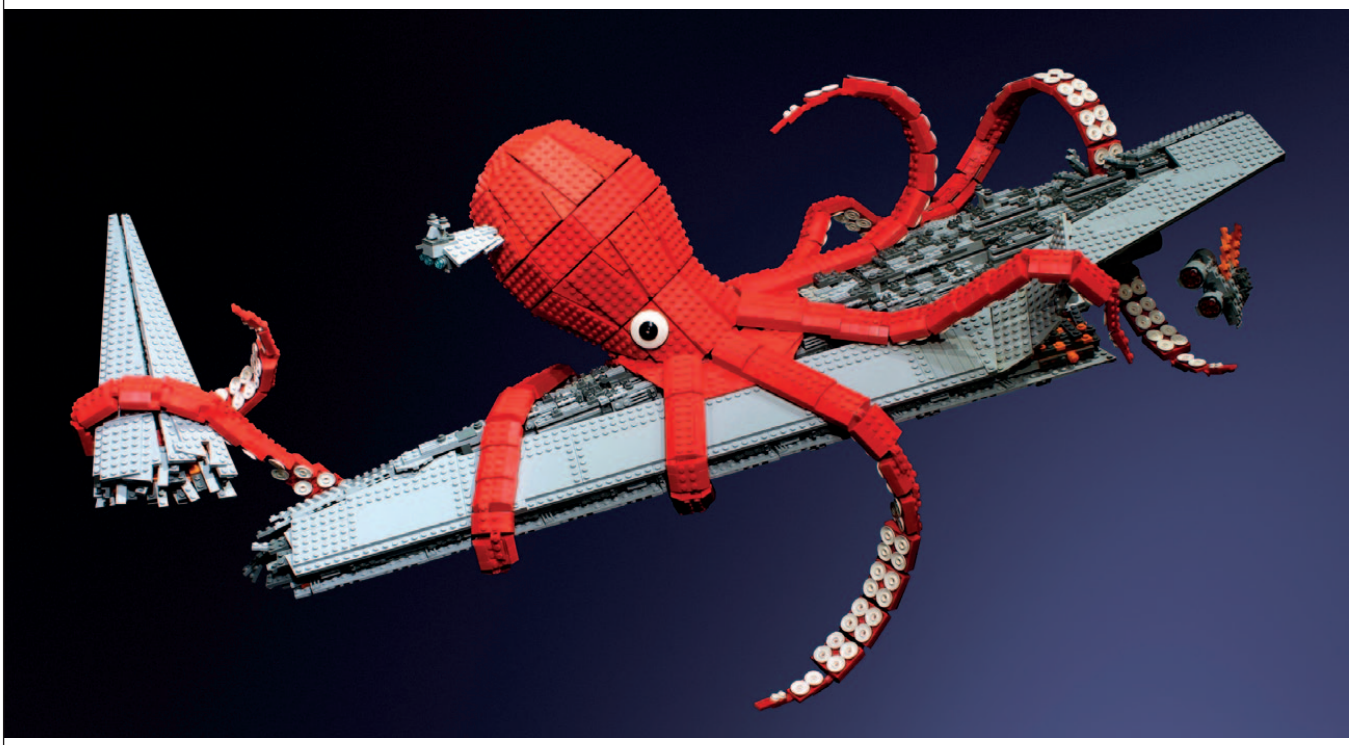
Technical specifications:

Dimensions (l × w × h):	20 × 9 × 7 studs
Wheelbase:	12 studs
Axle width front/rear:	8/8 studs

Features: opening doors

BEAUTIFUL LEGO® 2
DARK

MIKE DOYLE



Iain Heath
Release the KR-KN! 2013

Sami Mustonen

(opposite) Bricksauria | Stegosaurus [digital render] 2014 (766 pieces)
(above) Bricksauria | Tyrannosaurus rex [digital render] 2013 (721 pieces)

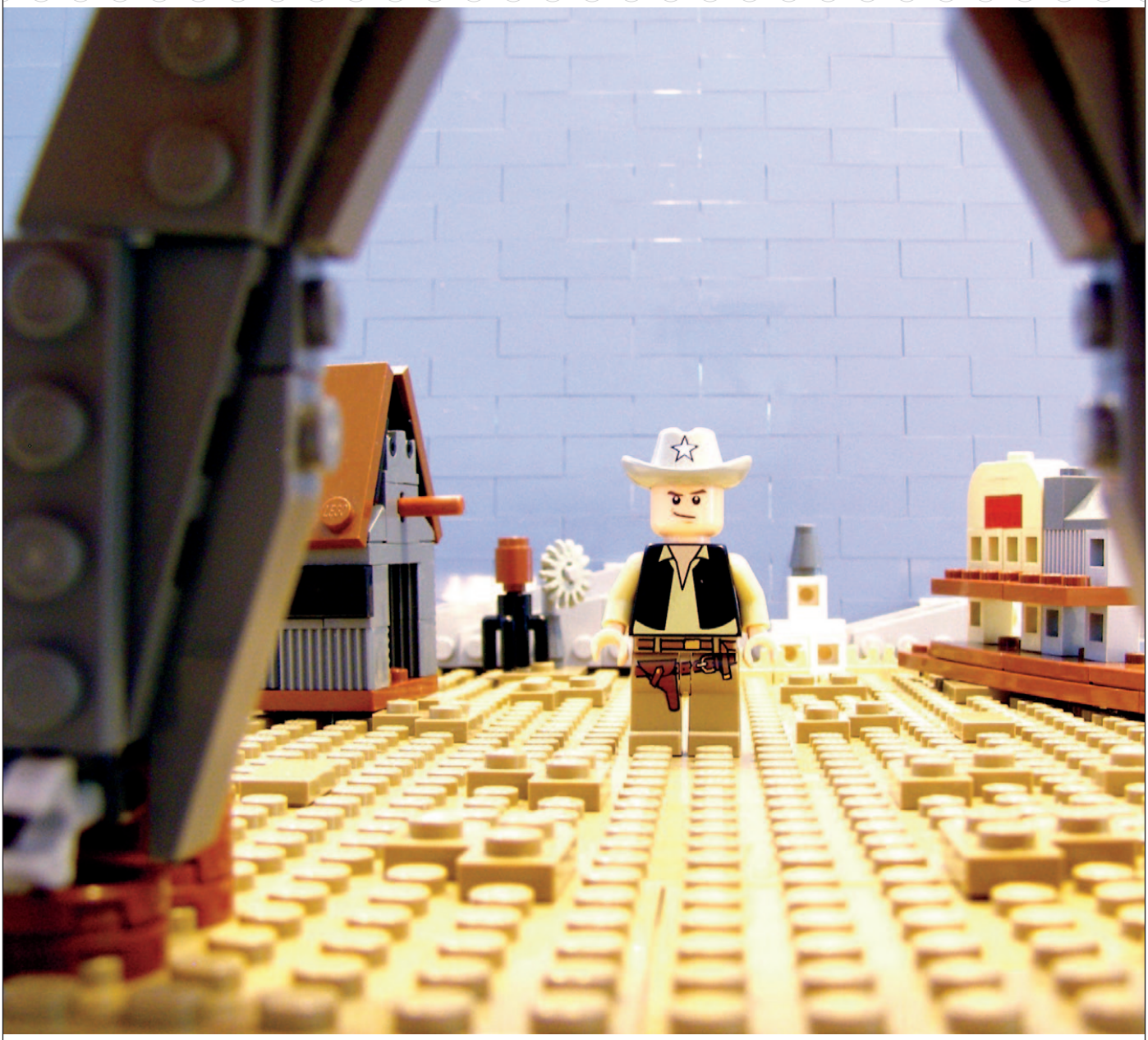
The Art of LEGO® Design

Creative Ways to Build Amazing Models

Jordan Schwartz

no starch press

Perspective



Forced perspective is another composition technique that you can try. This technique works only when the model is shown in a photograph, unless you build some structure to block its inner workings from the viewer.

Normally, forced perspective scenes have tremendous depth. A part of a model that seems laughably puny will often take up several feet of space. The standard format for such models is to build the background at microscale, the middle ground at a slightly larger scale, and the foreground at a normal scale (usually minifigure scale). Few really convincing examples of these models exist, but when the perspective is spot-on, the effect can be very deceiving. Tyler Clites's pair of gunslingers, for example, uses forced perspective—the viewer peers between a gunman's legs at his target. The three sections of the model each use a different scale to create a sense of depth. The foreground contains the first gunman's legs, built at large scale. The middle ground has the second gunman at perfect minifigure scale. The background features some microscale buildings off in the distance, including a church and windmill.

This Town Ain't Big Enough for the Two of Us **by Tyler Clites is built at three different scales. The builder edited the original photo to make sure the viewer would see the scene as intended.**

Articulation

It's extremely difficult to build figures with *articulation*, or the ability to be posed. In fact, I recommend avoiding excessive articulation in figures if only for one major reason: It decreases stability. This isn't such a problem in small figures, but for models that stand around six inches and taller, stability can become a serious issue.

You should add articulation points only where necessary. Such points include the shoulders, the neck (to allow the head to swivel), and perhaps the elbows. If you're going to add leg joints to a free-standing model, make sure you build strong ones. The legs have to hold up the rest of the model, so if you're careless, the model could break.

If you plan on having the figure in an action pose, don't worry—there are ways around the instability that joints add. For example, if you want to build a figure of a warrior charging into battle, you'll need to add joints to his hips, knees, and ankles. To make his legs stronger, just build him onto a base. If you connect a figure to a base, its legs won't have to support the rest of its body. The base itself becomes a part of the figure, like giant feet.

This fully articulated devil laments the loss of his golden fiddle, which lies at his feet.

THE LEGO® MINDSTORMS® EV3 DISCOVERY BOOK

a beginner's guide to building and programming robots

laurens **valk**

no starch press

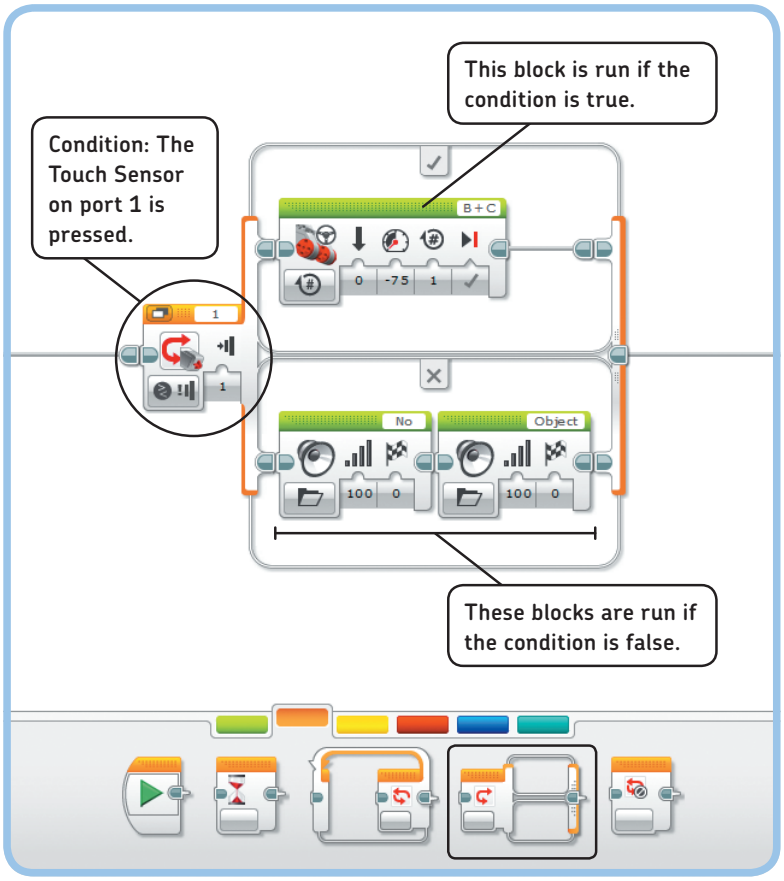


Figure 6-12: The Switch block checks whether the condition is true or false and runs the appropriate blocks. You specify the condition using the mode and settings on the Switch block.

configuring a switch block

You define the condition by configuring the mode and settings of the Switch block. Once the program arrives at the Switch block, the robot checks whether the condition is true. Then, it decides which set of programming blocks in the switch to run.

There's a mode for each sensor; in this case, you'll choose the one for the Touch Sensor, namely **Touch Sensor – Compare – State** (the only available option). Once you've chosen this mode, you can specify in the state setting whether the Touch Sensor must be pressed (1) or released (0) for the condition to be true. As before, set Port to **1** to specify how the Touch Sensor is connected to your EV3.

sensors and the switch block in action

The *TouchSwitch* program you'll now create makes the robot drive forward for three seconds. Then, if the Touch Sensor is pressed, the robot reverses for a short while. If the sensor is not pressed, the robot instead says "No Object." Finally, regardless of the Switch block's decision, the robot plays a tone. Now create the program, as shown in Figure 6-13.

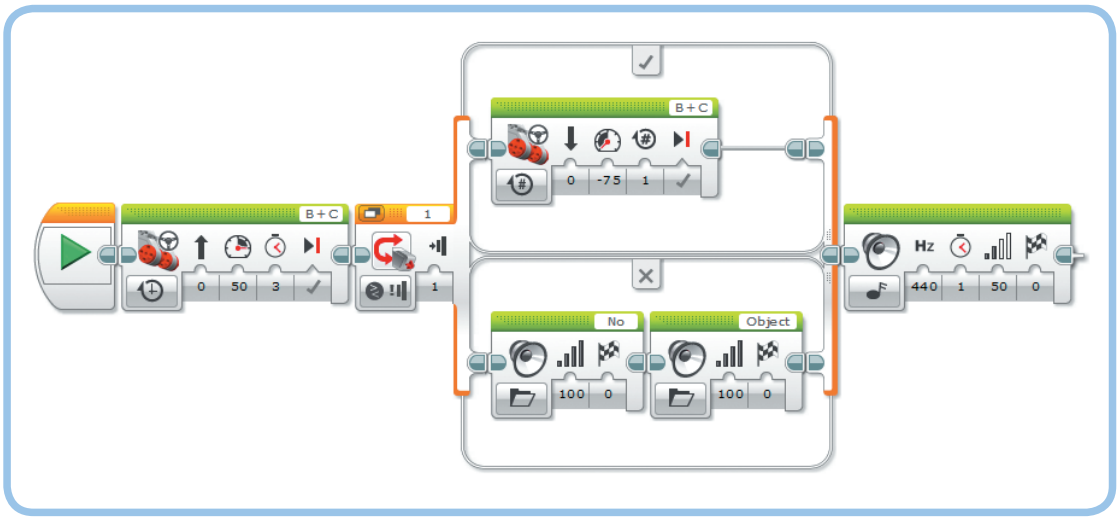


Figure 6-13: The TouchSwitch *program has the robot decide what to do based on a sensor reading.*

Try running this program a few times, and determine when you need to press the Touch Sensor to make the robot go backward. Your experiments should show that the robot takes a measurement when the Switch block runs and that it uses this single measurement to determine whether the condition is true. In this program, the sensor measurement is taken just after the robot finishes going forward. When either the reverse action or the "no object" action is complete, the tone plays.

adding blocks to a switch block

There's no limit to the number of blocks you can place inside a Switch block. If one part of a switch has multiple blocks, they're simply run one by one. You can also leave one of the two parts of a Switch block empty, as shown in Figure 6-14.

Run this modified program to see what happens. If the condition is true (the bumper is pressed), the robot should say "Object" and move backward, and the program should continue by playing the tone. If the condition is false (the sensor is not pressed), the program will find no blocks in the lower part of the switch and instantly move on to the Sound block after the switch.

DISCOVERY #27: STAY OR MOVE?

Difficulty: **Time:**

Make the robot stand still for three seconds. Then, if the Touch Sensor is released, the robot should turn around and drive forward for five wheel rotations. But if the sensor is pressed, the robot should do nothing, and the program should end immediately.

DISCOVERY #28: DIFFICULT DECISIONS!

Difficulty: **Time:**

Let's practice with the Switch block! Create a program to implement the decision tree shown in Figure 6-15. How do you configure the Switch block, and why do you have to put a Wait block at the end of the program?

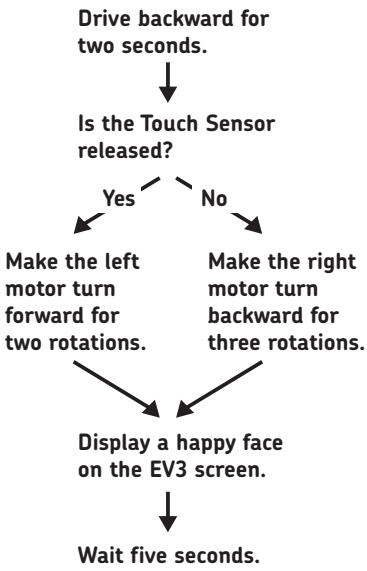


Figure 6-15: The program flow for Discovery #28

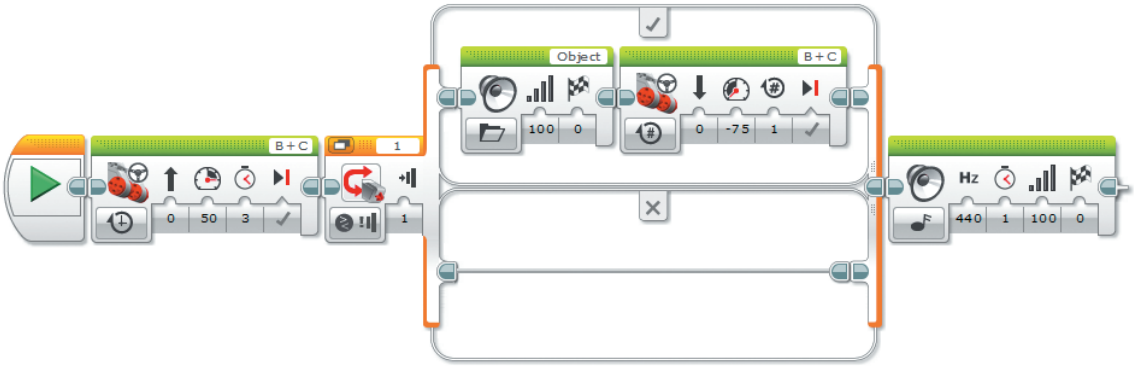
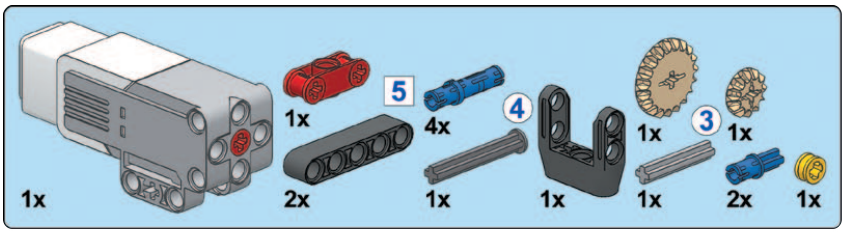
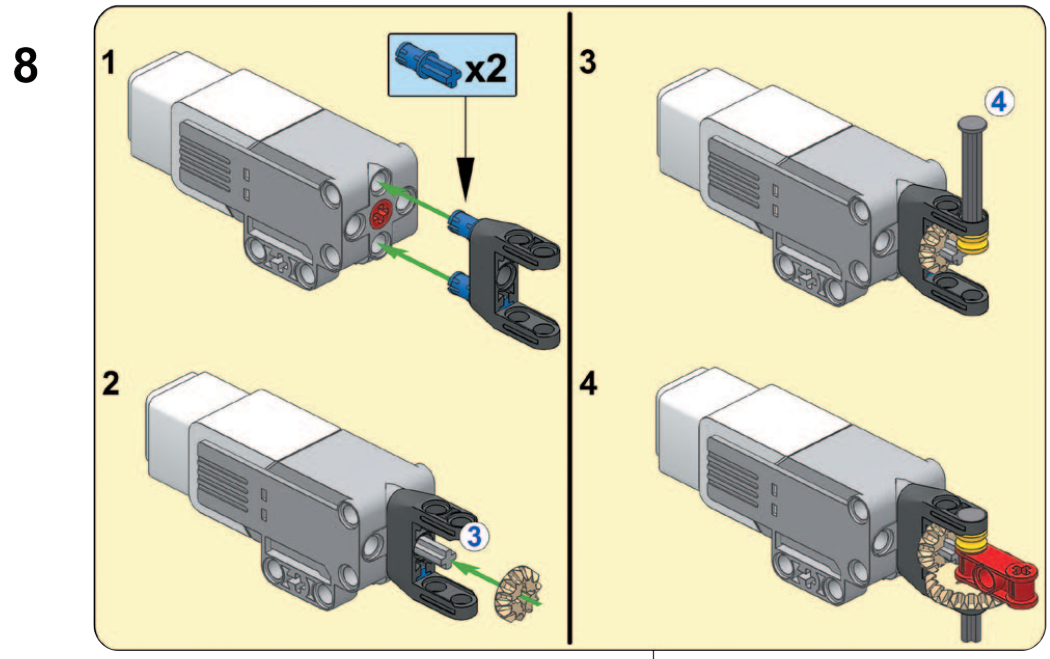
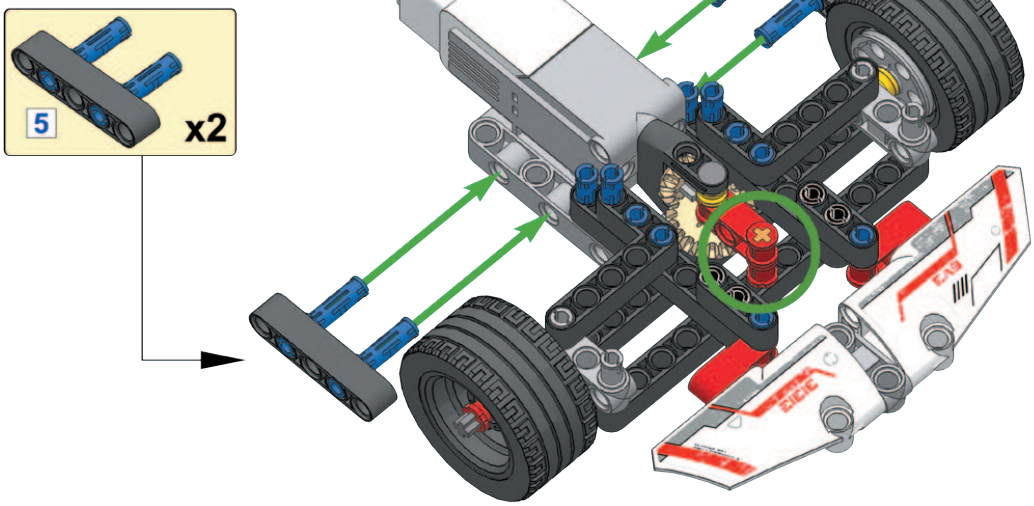


Figure 6-14: A modified version of the TouchSwitch *program. The switch does not have any blocks to run if the condition is false, so the program immediately plays a tone after moving forward if the sensor is not pressed.*

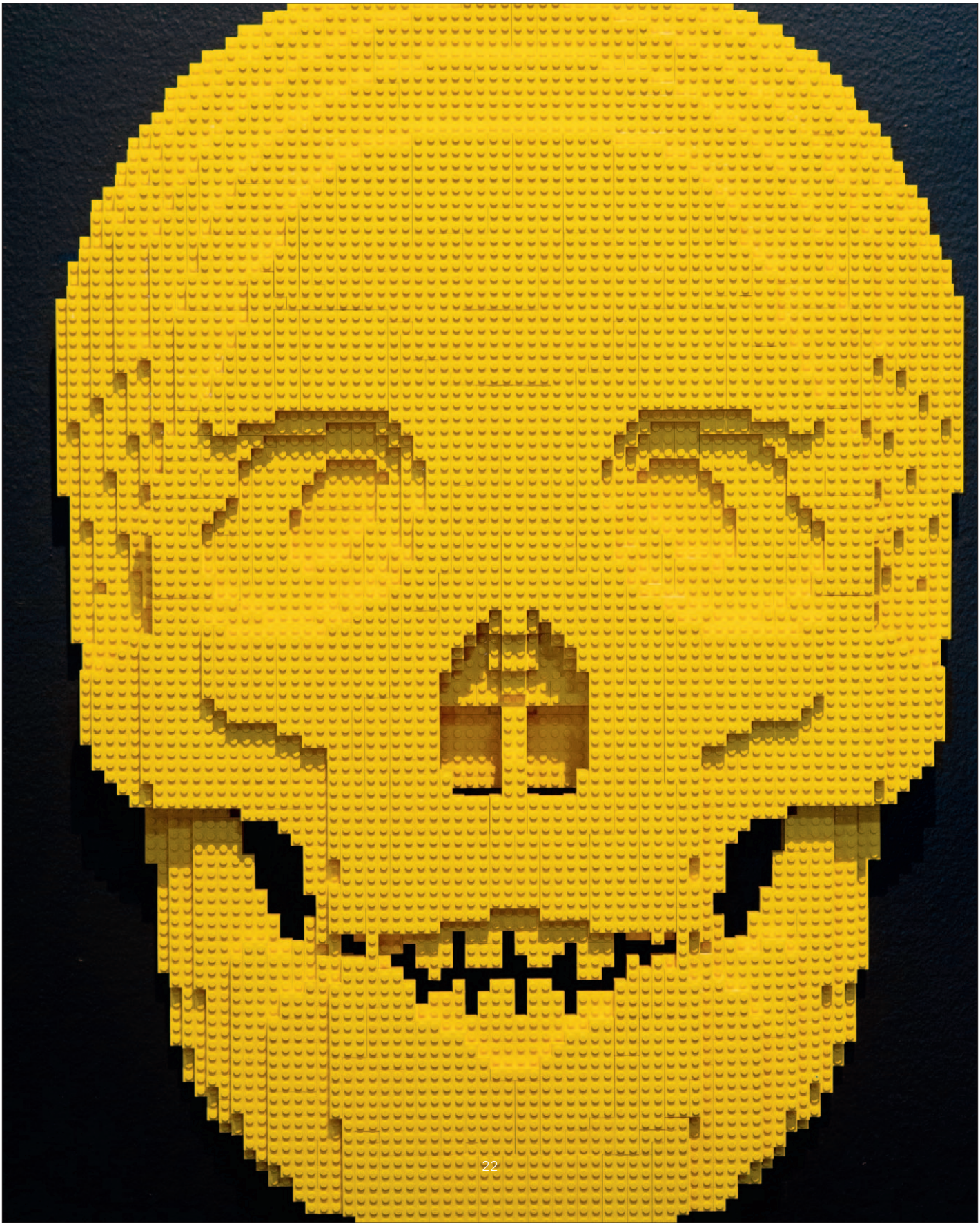

1x
1x
2x
5
4x
1x
4
1x
1x
1x
3
1x
2x
1x


8
1
x2
3
4
2
3
4


5
x2

THE ART OF THE BRICK
A LIFE IN LEGO®

NATHAN SAWAYA

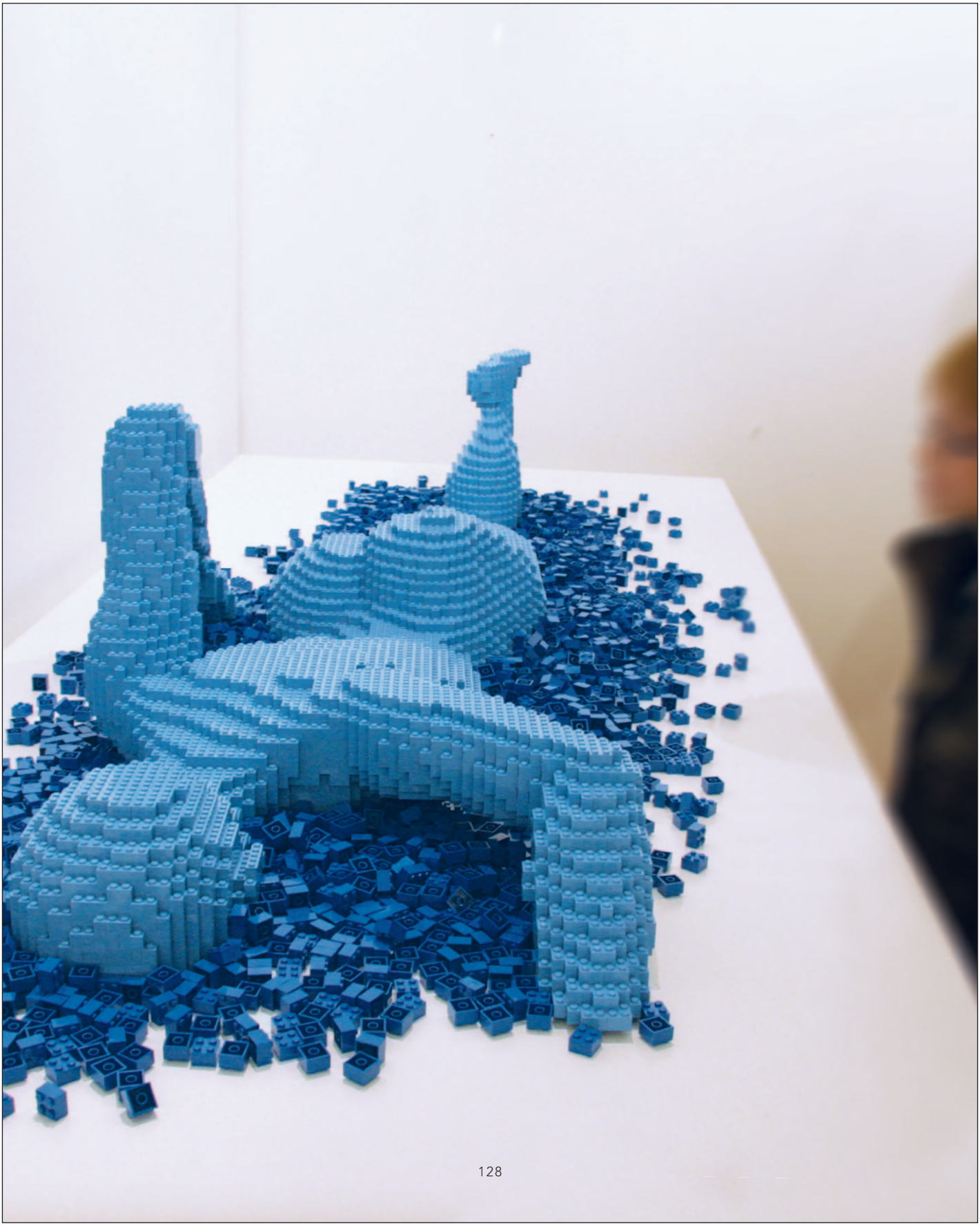


FIRST IMPRESSIONS SKULLS

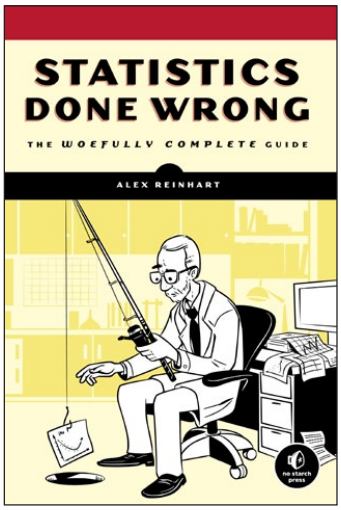
Life's true face is the skull.
—Nikos Kazantzakis

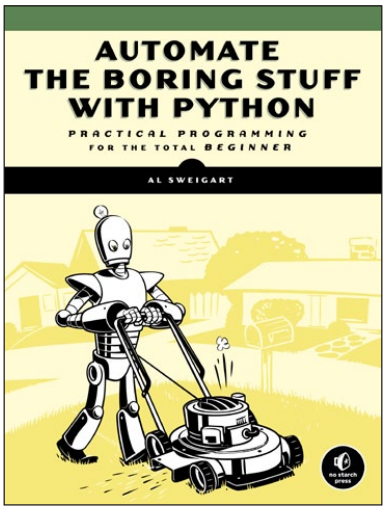
The first official contact I had with the LEGO Group was a cease and desist email. The company didn't like what I was doing and wanted me to stop doing it. The email I received seemed like a form letter, with only a vague sense of what I was actually attempting: creating original art, using LEGO bricks as a medium. I think they were more worried about my use of the term "LEGO" properly than my actual artwork.

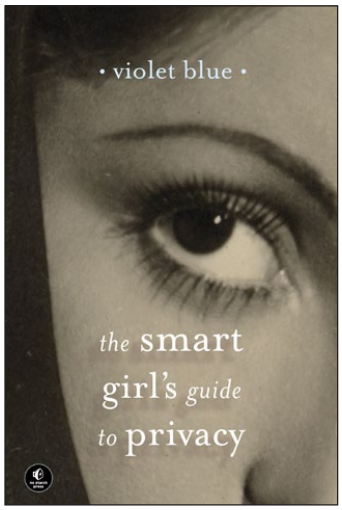
In any case, ceasing really wasn't part of my plan. It was fortunate that I happened to be an attorney at the time, and I was able to recognize the message for what it was.

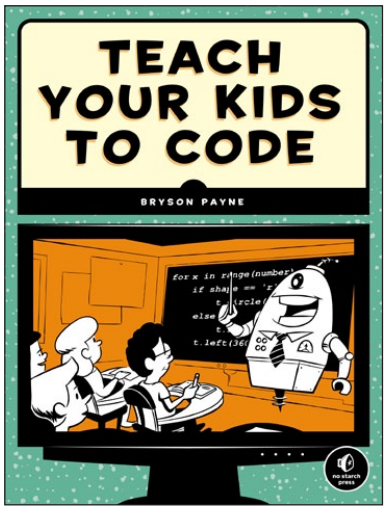


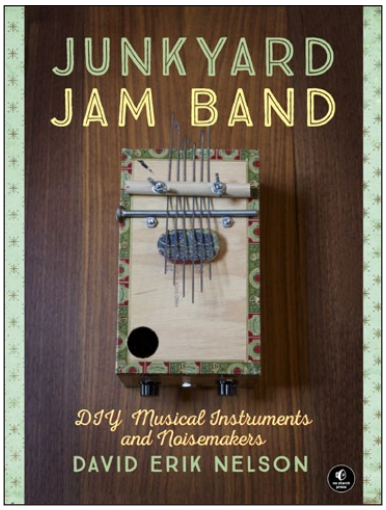
FORTHCOMING

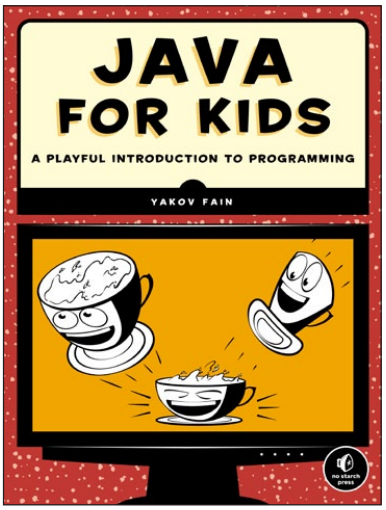


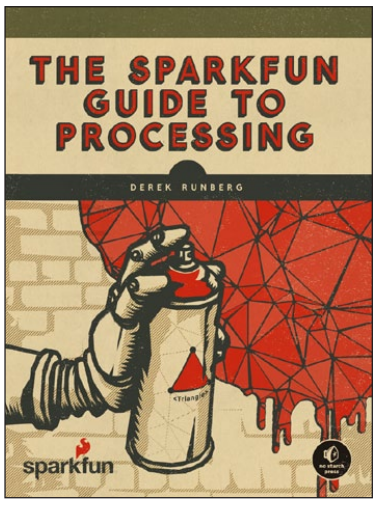


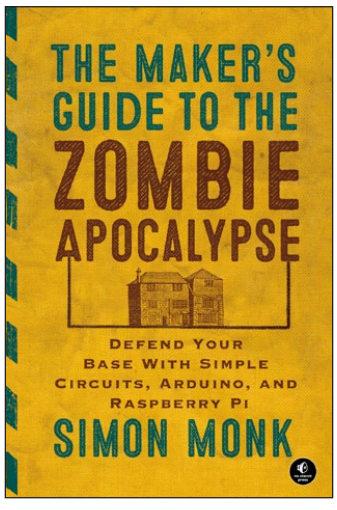


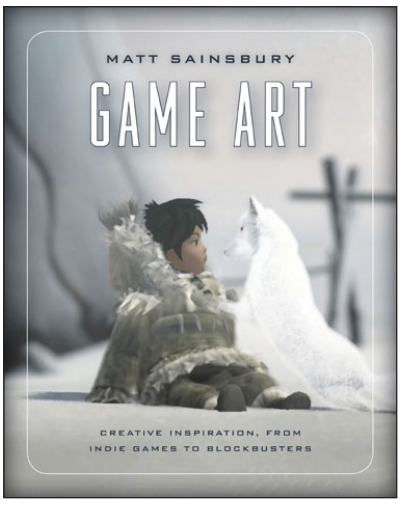












no starch press