

WONDERY
KIDS

THE AMAZING HUMAN BODY

WOW-TO
GUIDE



EXAMINE!

WOW
IN THE
WORLD

THAMES & KOSMOS



SAFETY INFORMATION



WARNING:
CHOKING HAZARD — Small parts.
Toy contains a small ball. Not for children
under 3 yrs.

Children under 8 yrs. can choke or
suffocate on uninflated or broken
balloons. Adult supervision required. Keep
uninflated balloons from children. Discard
broken balloons at once.

The dye tablet may cause stains that can't be
washed out of clothing. Keep all tablecloths,
curtains, and carpets away from the experiment
area. The child should wear old clothes when
working with the dye tablet.

**Have any questions? Missing any
parts? Want to share a story?** Our
tech support team will be glad to
help you!

Warning! Not suitable for children under 3 years.
Choking hazard — small parts may be swallowed
or inhaled.

Keep the packaging and instructions as they
contain important information.

WARNING! Children under eight years can
choke or suffocate on uninflated or broken
balloons. Adult supervision required. Keep
uninflated balloons away from children. Discard
broken balloons at once. Made of natural rubber
latex, which can cause allergies. Use a pump to
inflate the balloons.



Thames & Kosmos US

Email: support@thamesandkosmos.com

Web: thamesandkosmos.com

Phone: 1-800-587-2872



©2025 Thames & Kosmos, LLC, Providence, RI, USA
Thames & Kosmos® is a registered trademark of Thames & Kosmos, LLC. All
rights reserved.

© 2025 Wondery LLC and Tinkercast, LLC
This work, including all its parts, is copyright protected.

Distributed in North America by Thames & Kosmos, LLC, Providence, RI
02903

Phone: 800-587-2872; Web: thamesandkosmos.com

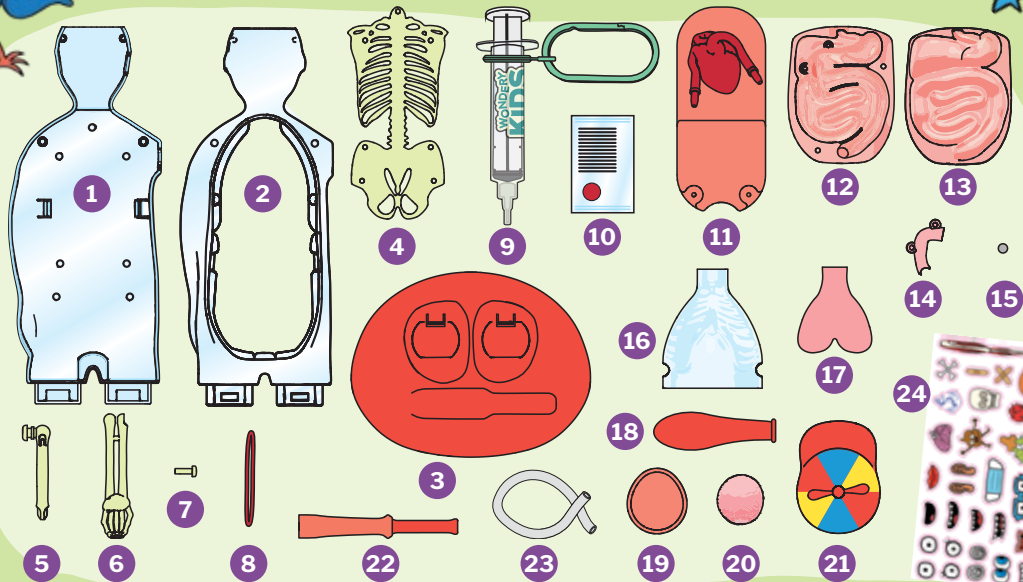
The right to technical alterations is reserved.

Printed in China/ Imprimé en Chine

The Wondery+ subscription offer is exclusively available to new, first-time
Wondery+ subscribers who signed up via the QR code in this guide. Such
new subscribers receive their first 3 months of Wondery+ at no cost, after
which your subscription will automatically renew at the then-current price.
The discount cannot be added retrospectively by you or our Customer
Service team. Discounts are not valid for gift card purchases. Offer good
while supplies last or until terminated by Wondery. Discounts cannot be
combined. Taxes may apply to the full value of discounted subscription. If
you violate any of these terms, the offer will be invalid. Wondery reserves the
right to modify or cancel the offer at any time. Offer is non-transferable and
may not be resold.

Android, Google Play and the Google Play logo are trademarks of Google
Inc. Apple and the Apple Logo are trademarks of Apple Inc., registered in the
USA and other countries. App Store is a service mark of Apple Inc.

KIT CONTENTS



Part No.	Description	Quantity
1	Back body shell	1
2	Front body shell	1
3	Base	1
4	Back skeleton	1
5	Upper arm	1
6	Forearm	1
7	Arm pin	1
8	Rubber band	1
9	Syringe with clip	1
10	Red dye tablet	1
11	Circulatory system	1
12	Digestive track back	1
13	Digestive track front	1

Part No.	Description	Quantity
14	Intestine tube	1
15	Small ball	1
16	Lungs container	1
17	Lungs balloon	1
18	Diaphragm balloon	1
19	Brain tray	1
20	Squishy brain	1
21	Hat with propeller	1
22	Fart whistle	1
23	Flexible tube	1
24	Sticker sheet	1

YOU WILL ALSO NEED: SCISSORS, WATER, SMALL CUP

INTRODUCTION

WELCOME TO THE WOW-TO GUIDE FOR YOUR AMAZING HUMAN BODY KIT!



MINDY THOMAS
(WOW IN THE WORLD HOST)

THIS GUIDE WILL SHOW YOU HOW TO PUT YOUR BODY MODEL TOGETHER AND HOW TO ACTIVATE ALL OF ITS WORKING PARTS ...



GUY RAZ
(WOW IN THE WORLD HOST)

... FROM MUSCLES THAT FLEX TO A BUTT THAT FARTS!



AND DON'T FORGET TO USE THE QR CODE BELOW TO LISTEN TO SOME BRAIN-TINGLING SCIENCE FACTS FROM US.



SO LET'S GET STARTED ON OUR HUMAN BODY ADVENTURE!



Wow in the World is the #1 kids' science podcast, hosted by Guy Raz and Mindy Thomas!



- 1 Grown-ups! Scan this QR code to start your **audio journey**.
- 2 Listen to **Track 1**, a *Wow in the World* Bonus Episode!
- 3 Unlock exclusive **Wow Facts** from Guy & Mindy when you see this symbol in the guide!

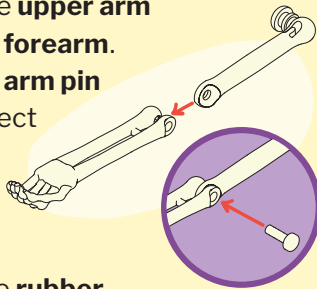


Listen **ad-free** to many premium podcasts & family-friendly shows with a **WONDERY+** subscription! New subscribers can enjoy 3 months free using the QR code above!

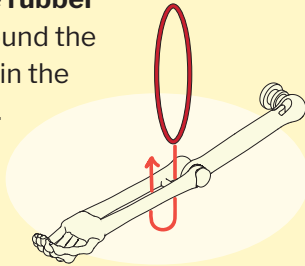
(Terms and conditions apply. See back of front cover for more details.)

MUSCLES AND BONES

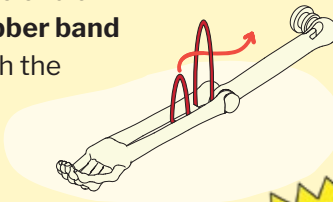
- 1** Slide the **upper arm** into the **forearm**. Use the **arm pin** to connect them.



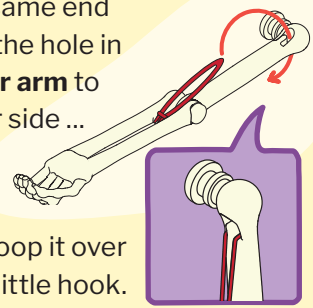
- 2** Loop the **rubber band** around the little tab in the **forearm**.



- 3** Pull one end of the **rubber band** through the other.

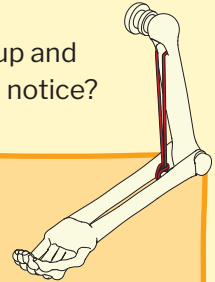


- 4** Pull the same end through the hole in the **upper arm** to the other side ...



... and loop it over the little hook.

- 5** Bend the **forearm** up and down. What do you notice?



Flexing Your Muscles

When you extend the forearm down, the rubber band stretches. When you let go, the rubber band contracts and pulls the forearm back up. The rubber band represents the **muscles** in the upper arm. Both rubber bands and muscles have elasticity, meaning they can stretch and contract.

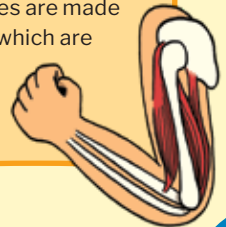
A muscle is a soft tissue that contracts and relaxes to produce movement. Some muscles are connected to **bones**. Muscles are made of thousands of muscle fibers, which are long cells that contract when they receive signals from the nervous system.



WOW FACT



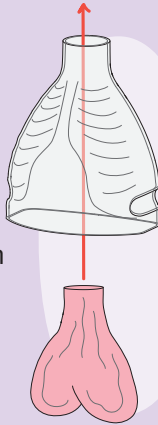
"Muscle mania"



LUNGS

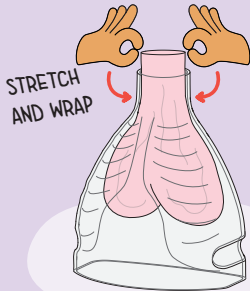
1

Push the **lungs** **balloon** through the **lungs container** from the bottom, pulling it out from the top.



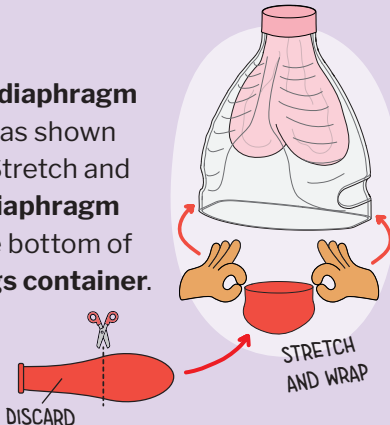
2

Stretch the **lungs** **balloon** over the top of the **lungs container** to fix it in place.



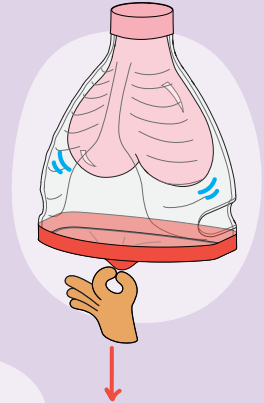
3

Cut the **diaphragm** **balloon** as shown below. Stretch and fit the **diaphragm** over the bottom of the **lungs** **container**.



4

Pinch the **diaphragm** in the center and pull it downward. What do you observe?



“Your powerful lungs”

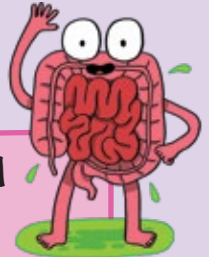


A Breath of Fresh Air

When you pull down on the **diaphragm**, you can see the **lungs** inflate! The diaphragm is a thin, dome-shaped muscle that separates the chest cavity from the abdominal cavity. When you inhale, the diaphragm contracts and flattens, which increases space in your chest cavity. This creates a vacuum that pulls air through your nose and mouth into your lungs.

Your lungs aren't actually like balloons — they are more like delicate sponges with countless small air sacs that take oxygen from the air and put it in the blood, and remove carbon dioxide from the blood and put it in the air.

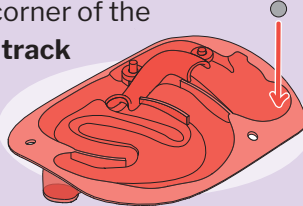
DIGESTIVE TRACK



- 1 Attach the **intestine tube** to the **digestive track back**.



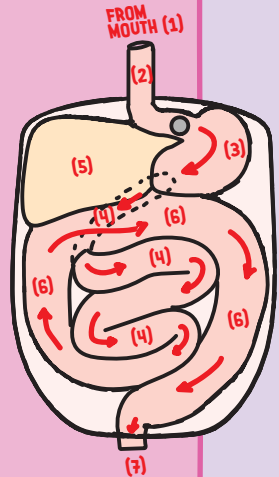
- 2 Place the **small ball** in the top right corner of the **digestive track back**.



A Long and Winding Road

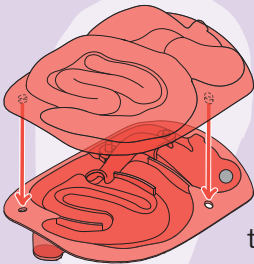
The ball represents a piece of food at the start of the maze and poop by the end! The maze itself is a model of the human **digestive track** — a long, winding tube that goes through the body, from mouth to anus. As food travels along the digestive track, it is broken down, or digested, through chemical and physical processes, enabling nutrients from the food to be absorbed into the body.

FOOD IS FIRST BROKEN DOWN IN THE **MOUTH (1)** WITH CHEWING AND SALIVA. THE FOOD MOVES DOWN A MUSCULAR TUBE CALLED THE **ESOPHAGUS (2)**. ACIDS AND ENZYMES IN THE **STOMACH (3)** BREAK THE FOOD DOWN INTO CHYME, A THICK LIQUID. NUTRIENTS FROM THE CHYME ARE ABSORBED BY THE WALLS OF THE **SMALL INTESTINE (4)**. THE **LIVER (5)** AND PANCREAS PROVIDE MORE DIGESTIVE JUICES TO THE SMALL INTESTINE. WATER AND ELECTROLYTES ARE REMOVED FROM REMAINING CHYME IN THE **LARGE INTESTINE (6)**. UNDIGESTED MATERIAL (FECES, OR POOP) IS STORED UNTIL IT IS ELIMINATED THROUGH THE **ANUS (7)**.

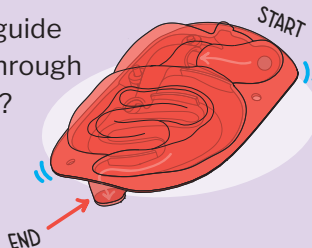


3

Close the digestive track by snapping the **digestive track front** to the **digestive track back**.



- 4 Can you guide the ball through the maze?



WOW FACT



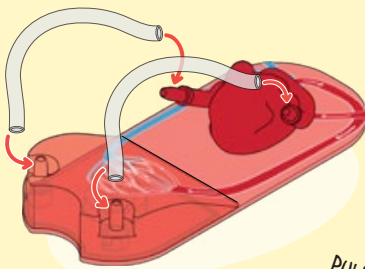
“What goes in must come out”

HEART & CIRCULATORY SYSTEM

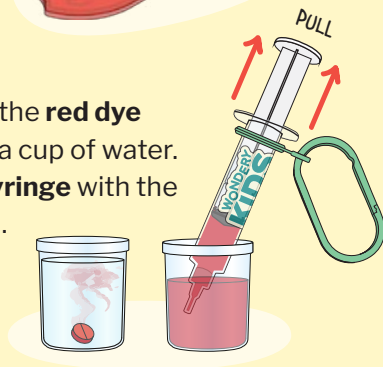


"All heart"

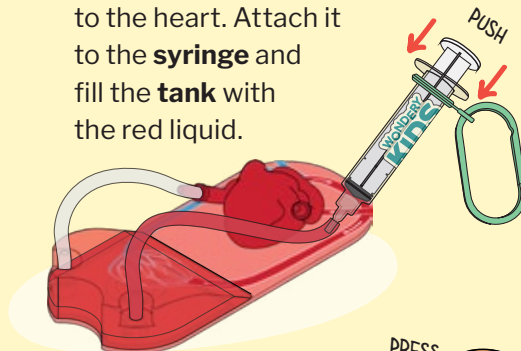
- 1 Cut the **flexible tube** in half. Connect the **tubes** to the **circulatory system** as shown.



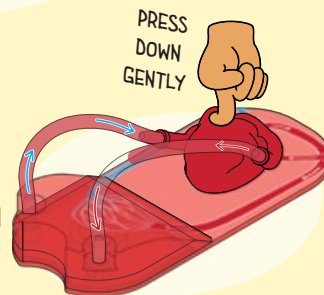
- 2 Dissolve the **red dye tablet** in a cup of water. Fill the **syringe** with the red liquid.



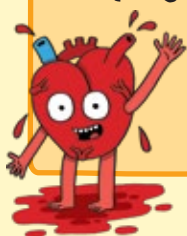
- 3 Detach the end of the right **tube** connected to the heart. Attach it to the **syringe** and fill the **tank** with the red liquid.



- 4 Press down gently on the **heart** to pump the **red liquid** through the **tubes**.

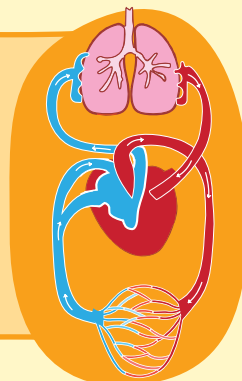


Get Your Blood Pumping



This model of the **circulatory system** shows in a simplified way how the heart pumps blood around the body. In the circulatory system, the heart pumps blood to the lungs, where the blood picks up oxygen. The oxygen-rich blood is then pumped all around the body, where it can be put to

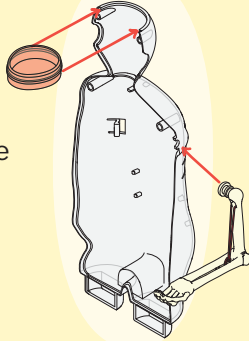
work. The oxygen-depleted blood is then pumped back to the lungs to be oxygenated again. As in the model, the blood in the body travels through tubes, which are called blood vessels. And, like in the model, the blood only travels in one direction through the blood vessels.



THE AMAZING HUMAN BODY

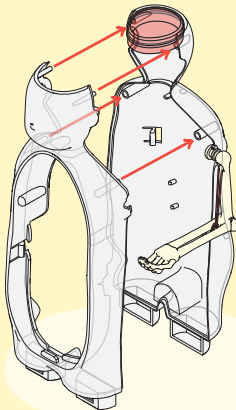
1

Place the **skeletal arm** in the arm socket and slide the **brain tray** into the **back body shell**.



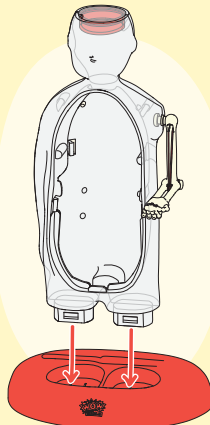
2

Snap the **front body shell** and **back body shell** together to lock the brain tray and arm in place.



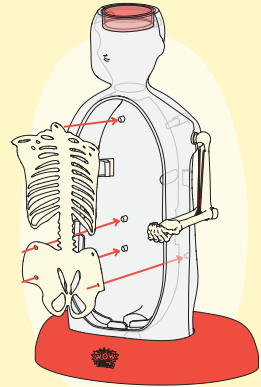
3

Insert the **body shell** into the **base**.



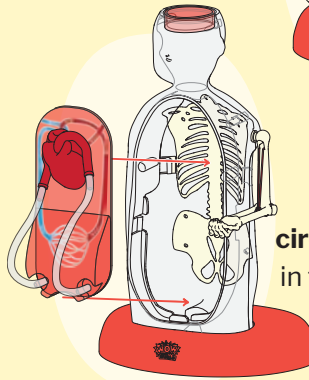
4

Attach the **back skeleton** by pressing it onto the small pegs in the back.



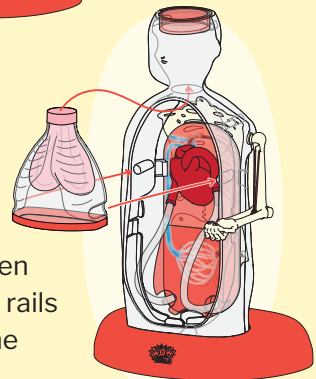
5

Insert the **circulatory system** in front of the **back skeleton**.



6

Attach the **lungs model** by first sliding it up into the throat and then between the two rails on the sides of the **body shell**.



CONTINUED ON NEXT PAGE

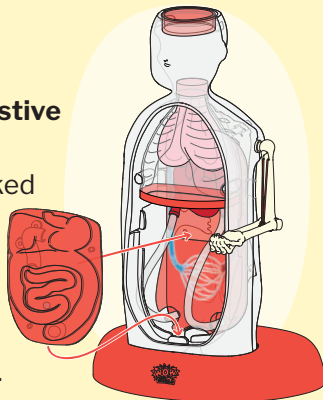
THE AMAZING HUMAN BODY



“It’s what keeps
your insides in”

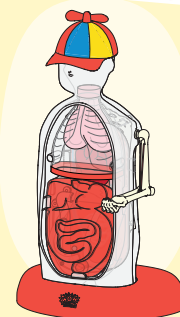
7

Place the **digestive system** below the **lungs**, tucked behind the three tabs on the bottom and sides of the **body shell**.



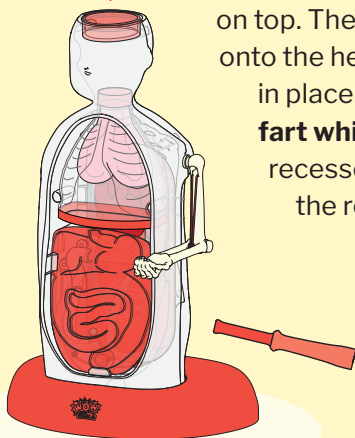
9

Add eyes, a mouth, and other decorations to your **Amazing Human Body** with the **stickers**! Choose eyes and a mouth for the face. Place the arm muscle sticker inside the model’s right arm area and the brain sticker in the brain tray.



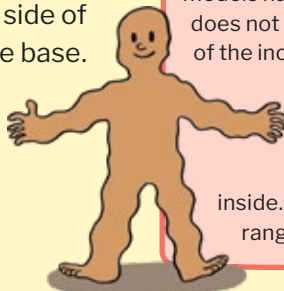
8

Place the **brain** inside the head and cover it with the **hat** on top. The hat snaps onto the head to stay in place. Place the **fart whistle** in the recessed area on the rear side of the base.



Supermodels of Science

This Amazing Human Body is a **scientific model**. It is a simplified representation of the human body, made for the purpose of teaching about some of the major body systems and organs. All scientific models have limitations. This model does not include every body part and all of the included body parts have been simplified. It also cannot show the tremendous diversity in the human species. We made the “skin” clear so you can see inside. In reality, human skin has a huge range of different colors.

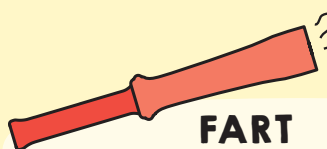




SQUISHY BRAIN



Squeeze the **model brain**! The real brain is soft and squishy because it's mostly made of water and fat. This softness allows it to function efficiently by transmitting electrical and chemical signals between brain cells called neurons. The squishy brain needs the skull and a layer of fluid around it to keep it safe.



FART WHISTLE



Blow through the **fart whistle**! The fart whistle models how actual farts make noise. Farts happen when gas builds up in the intestines and needs to escape. This gas comes from swallowed air and bacteria breaking down food. When a fart comes out, it makes noise by vibrating the skin around the anus. The speed and tightness change how loud it sounds.



GLOW-IN-THE-DARK SKELETON

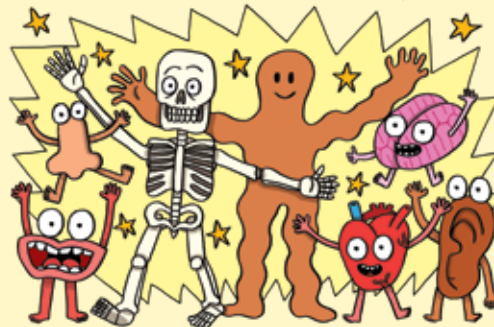


Move the **skeleton** into a completely dark room and see how it glows in the dark! This is mostly just for fun, but real bones can glow in the dark under special lights, like UV light, because they contain phosphorus and calcium. These minerals absorb light energy and can shine faintly. Scientists use this trick to study bones! But normal bones don't glow on their own — you need the right kind of light to see it.



"Tooting your own horn"

Many different parts make one amazing human body!



"Glowing bones"

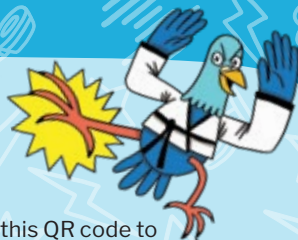
NEXT-LEVEL CHALLENGES

Try these experiments on your own!

1. Add more rubber bands to the arm. How does this affect the strength of the arm?
2. Measure your pulse at rest and after exercise. How does exercise affect your heart rate?
3. Put a cracker in a plastic bag with some vinegar and mush it up to make a stomach model.



Scan this QR code to
KEEP THE WOW ROLLING
with additional
educational resources
related to this item.



This kit was completed by:

Write your name(s) in the spaces below.

X

X

X

X



**PLAY IT
FORWARD!**

When you are done playing and learning with this toy, we encourage you to pass it on to another curious kid!

**Grown-ups, elevate
your audio experience
by trying WONDERY+**



- ◆ Discover exclusive podcasts made for the whole family.
- ◆ Enjoy early access to new episodes and skip the ads on many of your favorite shows.
- ◆ Have fun learning, spark conversations, and let imaginations soar!

**Don't miss out – subscribe now
and let the adventure begin!**



Download on the
App Store



GET IT ON
Google Play