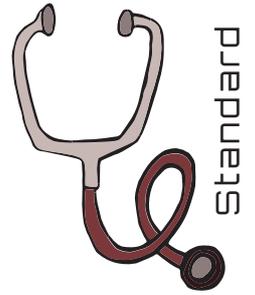




LUNGS

Puzzle 1 • Page 1 of 3

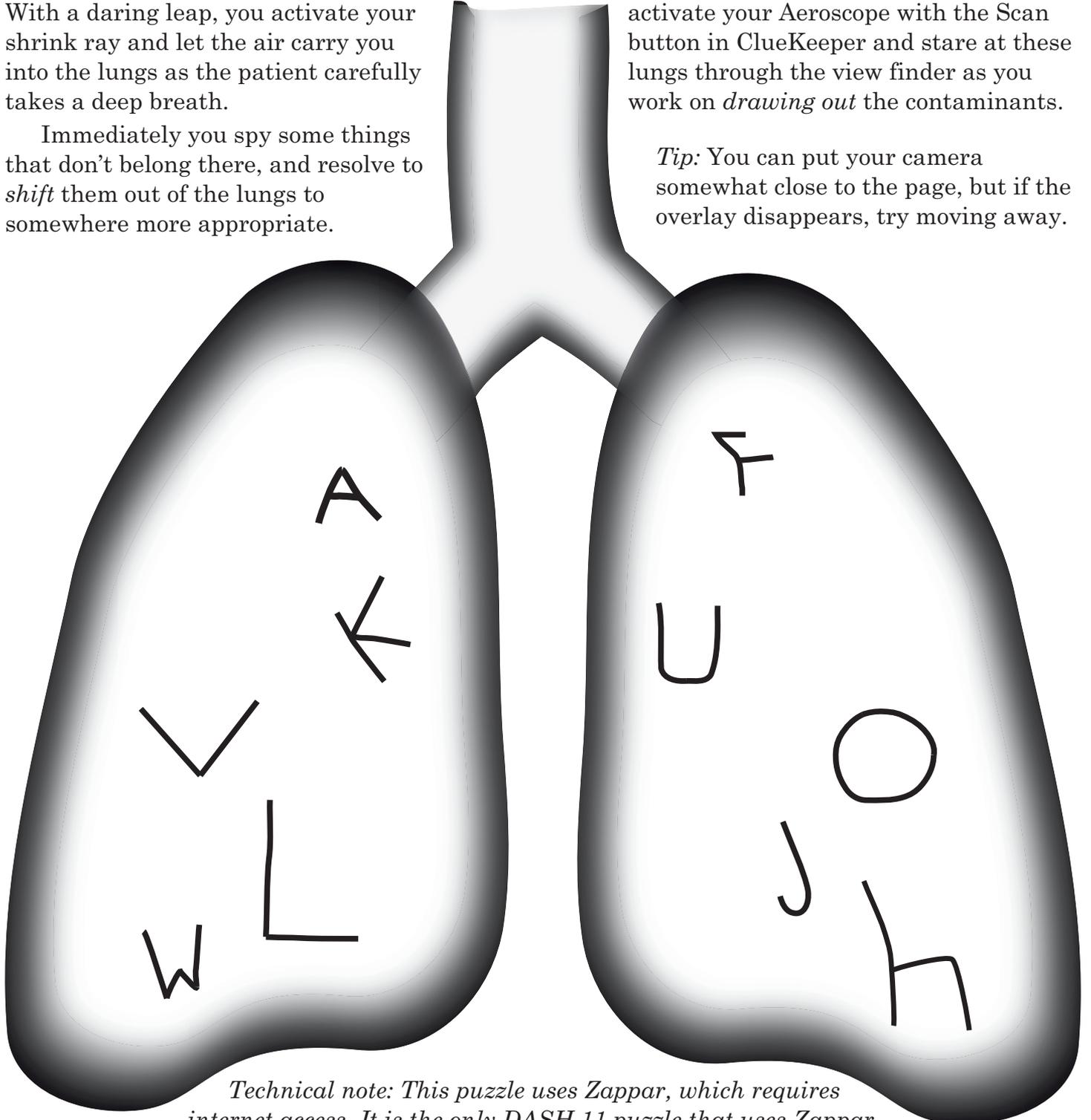


It *sounds* like something very strange is contaminating the air in the patient's lungs. With a daring leap, you activate your shrink ray and let the air carry you into the lungs as the patient carefully takes a deep breath.

Immediately you spy some things that don't belong there, and resolve to *shift* them out of the lungs to somewhere more appropriate.

But first, beware! There's more than meets the eye here... you'll need to activate your Aeroscope with the Scan button in ClueKeeper and stare at these lungs through the view finder as you work on *drawing out* the contaminants.

Tip: You can put your camera somewhat close to the page, but if the overlay disappears, try moving away.



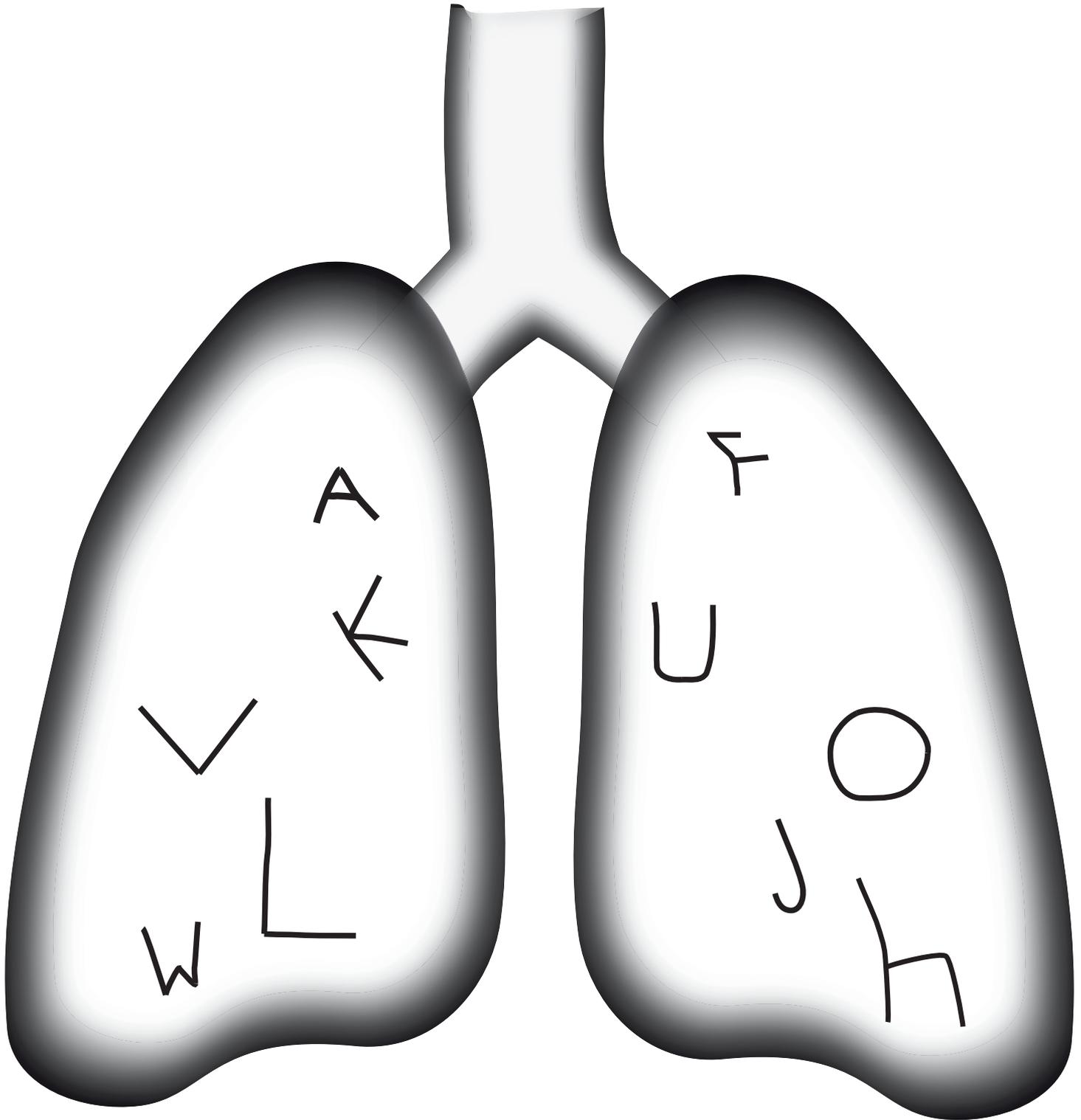
Technical note: This puzzle uses Zappar, which requires internet access. It is the only DASH 11 puzzle that uses Zappar.



1. Lungs



A copy of the lungs is provided here for your convenience.



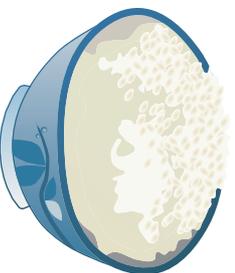


1. Lungs

Meanwhile, *shift* your attention to identifying these. As you take things that are *not air* out of the lungs, you'll find *sound* places to re-attach them here. Once everything is fully re-paired, you'll know how to treat the first things you spied. Then maybe everyone can breathe a little easier!



KPPAN



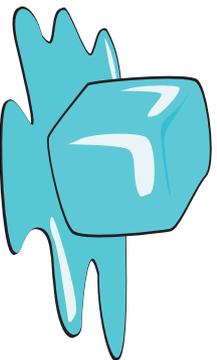
LCWY



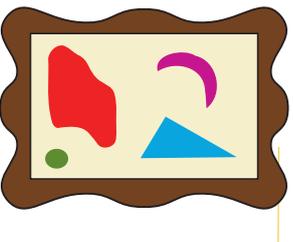
UDIW



RGQK



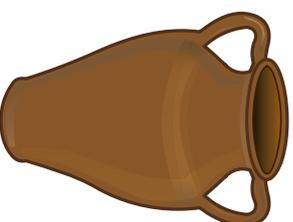
DXZ



ZQS



TOBKZE



VSO



NWGA

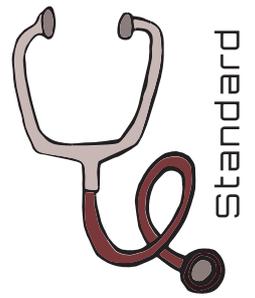


JAFY



HEART

Puzzle 2 • Page 1 of 2



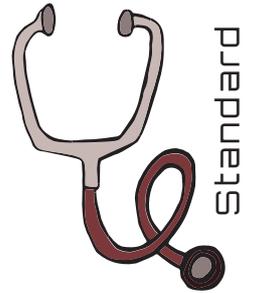
Oh no! There seems to be a problem with the circulation *around* the heart. Cut out the 16 squares on page 2 and use them to determine how you can enrich it with more *oxygen*!





KIDNEY

Puzzle 3 • Page 1 of 2

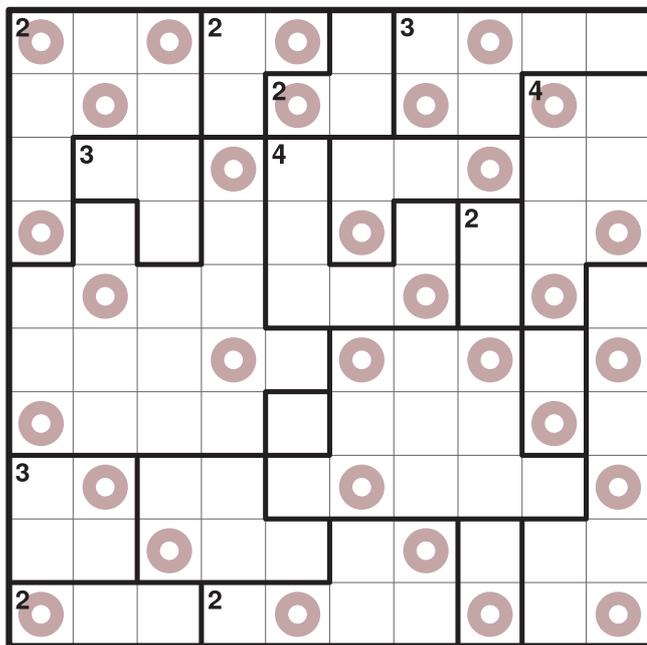


Scanners show a distinct stone in every sector of the kidney. If they all drop, the bottom half of the kidney will be completely blocked! What can your team do to help?

Shade cells in the grid below according to these rules:

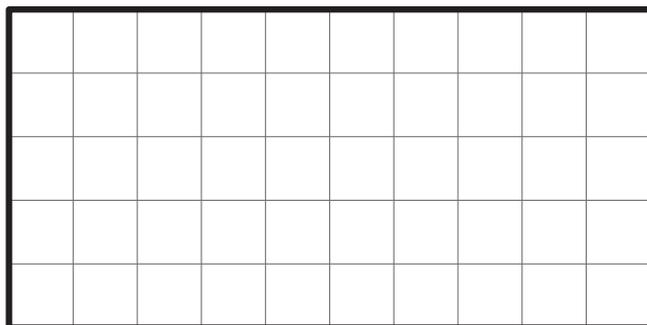
1. Each sector – a bold-outlined region – must contain exactly one stone.
2. A stone is a mass of contiguous shaded cells (sharing edges).
3. Stones from different sectors may not share sides, but can touch at corners.
4. If a region contains a number, exactly that many cells must be shaded.
5. Shade half the cells in each column.
6. If dropped, stones will stack at the bottom of the grid, clearing the top half. Each stone remains intact, keeping its shape, but will not rotate. It must be able to nest perfectly on any stones below it, so that the stones completely fill the lower half of the grid.

The grids on the right show the solution for a sample puzzle.



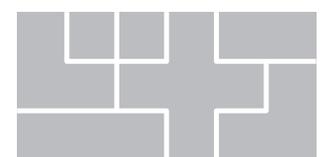
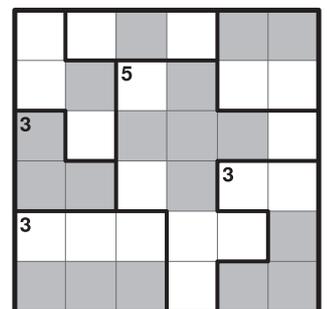
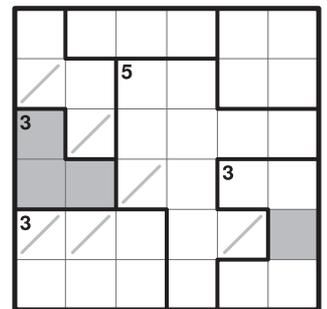
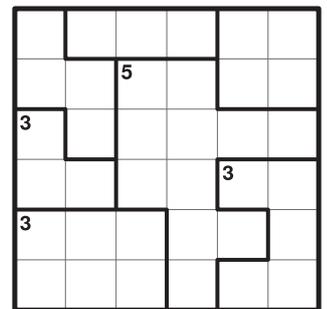
Tip: Play the example to help understand the rules and learn strategy.

The circles in this grid mark locations that can create weak spots in the stones. You will use them in combination with the grid on the next page; they are not relevant for locating stones.



← You can use this grid to record how the stones stack.

Example





3. Kidney



The letters in the grid below are clued in two ways:

- Each row contains two words, written one after the other in the order they're clued.
- The grid can be partitioned along gridlines into the ten pentomino shapes below. These shapes will remain in the given orientation and will not overlap.

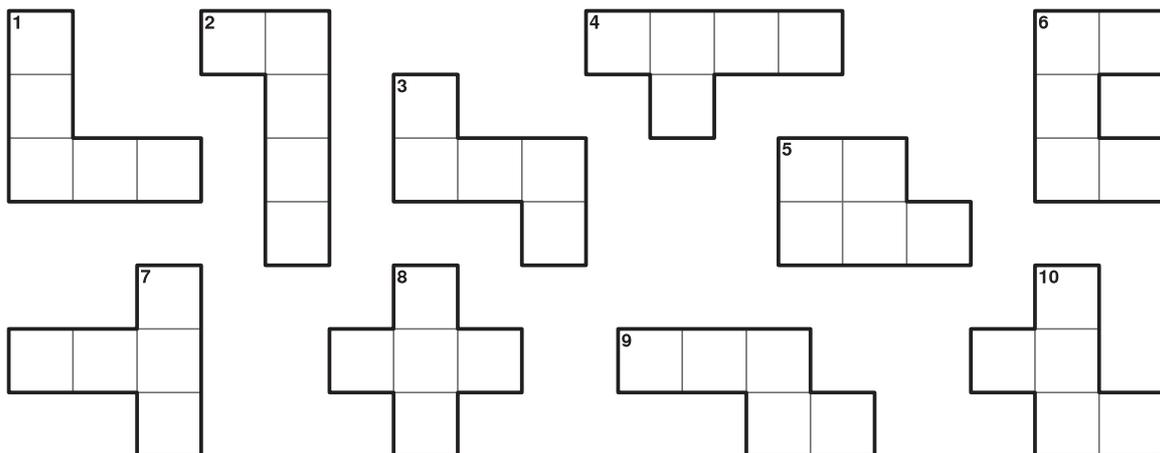
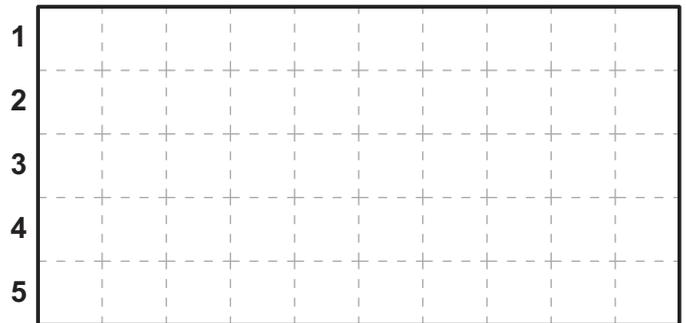
Pentomino Clues

Write the 5-letter answers to these clues in the indicated pentominos below, filling them from left to right, top to bottom (normal reading order). The answers in this list are in alphabetical order.

- 1 Schrödinger's cat, perhaps
- 2 Conscious
- 3 Yogi of baseball
- 4 One who says "I do"
- 5 Dislodged piece of turf
- 6 Degas or Poe
- 7 Run it to cover everything
- 8 "The Amazing _____" (magician)
- 9 Solid, liquid, or gas
- 10 What a clue this vague might do to your team

Row Clues

- 1 Card game or dentistry term
Sketch
- 2 Ray of light
Country west of Kenya
- 3 List of corrections
Take a chance
- 4 Volume knob, e.g.
Sculpture
- 5 Kind of candle
Office sub



After you have completed both grids, identify all the weak spots created in the stones in the first grid (places where a stone is marked with a circle). Determine where those weak spots end up after all the stones have dropped to the bottom, and mark the corresponding cells in the grid above.

BONES

Puzzle 4 • Page 1 of 3



You hear an apt song as you search the bones for clues for how to help the patient. You hope for the best but can't shake the feeling that things are not going to end up OK.

The toe bone's connected to the foot bone.

The foot bone's connected to the heel bone.

The heel bone's connected to the ankle bone.

The ankle bone's connected to the leg bone.

The leg bone's connected to the knee bone.

The knee bone's connected to the thigh bone.

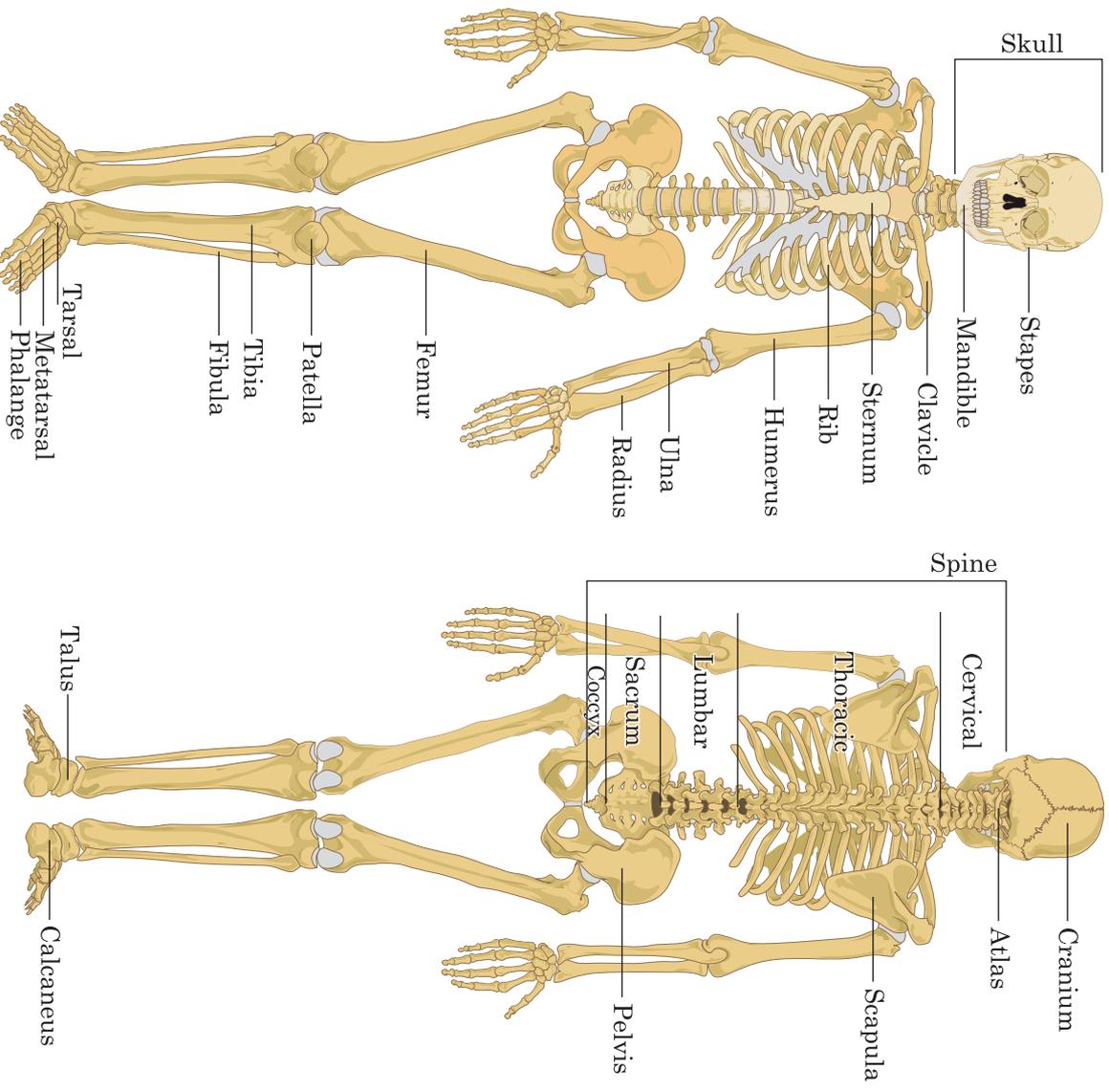
The thigh bone's connected to the hip bone.

The hip bone's connected to the back bone.

The back bone's connected to the shoulder bone.

The shoulder bone's connected to the neck bone.

The neck bone's connected to the head bone.





4. Bones



C	P	O	F	E	Z	T	T	S	D	G	N	F	Y	D	B	O	A	G	U	P	T	N	W
P	O	E	L	D	Q	P	G	N	E	Z	V	H	T	D	Y	D	Y	C	U	D	S	S	K
H	A	R	D	J	Z	A	B	Y	L	O	E	R	Q	H	R	E	V	E	P	R	E	J	Q
H	N	I	C	S	S	L	A	O	C	M	A	W	Z	A	J	Z	O	I	H	F	S	R	I
U	M	U	G	M	X	T	K	Y	I	G	T	S	J	P	O	C	D	I	D	O	H	W	T
Y	Q	D	R	W	P	R	O	V	A	S	Q	B	G	H	U	T	K	P	F	Y	U	H	J
O	K	K	C	Z	H	U	A	R	X	E	R	N	V	Q	Y	A	G	E	I	V	U	L	T
J	W	V	M	P	G	L	D	N	B	T	N	F	O	N	Z	L	D	Q	C	K	V	V	J
U	P	O	J	R	C	N	H	P	S	T	Z	I	E	C	P	Q	E	J	Z	N	A	T	L
P	D	Z	C	C	R	T	W	V	C	C	W	A	P	Q	N	H	A	S	A	B	C	D	E
M	Z	Y	P	A	P	N	Q	P	V	W	L	Y	T	S	A	X	I	Z	F	G	H	I	J
E	D	A	K	N	A	Z	Q	D	D	T	W	P	C	D	R	V	O	Y	K	L	M	N	O
B	G	N	A	Y	N	O	T	O	B	A	R	N	W	R	L	T	M	U	P	Q	R	S	T
P	C	B	S	A	T	D	E	R	Y	G	V	P	D	E	J	Z	Q	P	U	V	W	Y	Z
B	S	H	T	C	H	O	Q	N	J	O	N	M	P	Q	D	C	T	J	S	Z	T	C	E
G	R	C	C	K	I	O	C	C	W	M	M	I	O	X	R	O	C	C	W	R	E	D	U
S	F	E	V	G	N	W	R	I	C	S	D	C	H	W	R	J	S	G	M	V	I	R	R
N	A	D	M	L	G	T	G	F	W	C	T	E	F	T	Q	U	C	Y	A	I	E	R	K
Y	E	N	M	U	Z	I	E	S	Q	V	Z	K	W	R	E	M	M	U	G	D	M	A	N
F	O	Q	S	L	M	I	N	P	F	V	I	H	Y	R	H	M	K	E	V	O	M	F	K
J	U	F	O	W	Y	H	P	M	W	P	J	V	N	O	J	A	O	P	F	W	J	I	Z
U	B	V	R	I	P	T	C	H	O	D	K	G	R	N	D	Z	R	S	F	F	T	T	P
D	R	L	O	S	T	A	N	E	B	Y	L	K	B	R	Y	D	I	N	X	T	A	L	E
B	Z	L	C	H	W	O	A	U	S	F	T	V	O	Z	M	L	C	F	I	A	E	L	Z
A	N	M	D	K	O	X	C	L	A	C	A	L	S	T	T	I	B	I	A	O	P	C	V
A	B	C	D	E	D	R	C	Z	M	K	E	U	Y	M	N	K	D	L	O	L	S	D	R
F	G	H	I	J	C	P	O	F	A	D	Z	L	A	S	H	F	M	L	H	V	O	D	Z
K	L	M	N	O	W	F	R	Z	D	Q	P	G	R	A	T	O	J	K	T	Y	J	F	K
P	Q	R	S	T	V	I	Y	R	H	R	Z	B	V	E	T	A	N	Q	Z	E	R	Q	H
U	V	W	Y	Z	F	S	R	I	N	P	B	D	X	M	L	E	G	N	A	U	D	V	I
E	M	Q	Q	E	A	F	F	W	G	T	S	J	Y	U	O	P	H	A	L	J	R	F	L
H	O	I	A	V	R	Z	K	U	O	W	Q	E	H	U	T	K	A	U	K	K	E	R	O



4. Bones



A copy of the grid is provided here for your convenience.

C	P	O	F	E	Z	T	T	S	D	G	N	F	Y	D	B	O	A	G	U	P	T	N	W
P	O	E	L	D	Q	P	G	N	E	Z	V	H	T	D	Y	D	Y	C	U	D	S	S	K
H	A	R	D	J	Z	A	B	Y	L	O	E	R	Q	H	R	E	V	E	P	R	E	J	Q
H	N	I	C	S	S	L	A	O	C	M	A	W	Z	A	J	Z	O	I	H	F	S	R	I
U	M	U	G	M	X	T	K	Y	I	G	T	S	J	P	O	C	D	I	D	O	H	W	T
Y	Q	D	R	W	P	R	O	V	A	S	Q	B	G	H	U	T	K	P	F	Y	U	H	J
O	K	K	C	Z	H	U	A	R	X	E	R	N	V	Q	Y	A	G	E	I	V	U	L	T
J	W	V	M	P	G	L	D	N	B	T	N	F	O	N	Z	L	D	Q	C	K	V	V	J
U	P	O	J	R	C	N	H	P	S	T	Z	I	E	C	P	Q	E	J	Z	N	A	T	L
P	D	Z	C	C	R	T	W	V	C	C	W	A	P	Q	N	H	A	S	A	B	C	D	E
M	Z	Y	P	A	P	N	Q	P	V	W	L	Y	T	S	A	X	I	Z	F	G	H	I	J
E	D	A	K	N	A	Z	Q	D	D	T	W	P	C	D	R	V	O	Y	K	L	M	N	O
B	G	N	A	Y	N	O	T	O	B	A	R	N	W	R	L	T	M	U	P	Q	R	S	T
P	C	B	S	A	T	D	E	R	Y	G	V	P	D	E	J	Z	Q	P	U	V	W	Y	Z
B	S	H	T	C	H	O	Q	N	J	O	N	M	P	Q	D	C	T	J	S	Z	T	C	E
G	R	C	C	K	I	O	C	C	W	M	M	I	O	X	R	O	C	C	W	R	E	D	U
S	F	E	V	G	N	W	R	I	C	S	D	C	H	W	R	J	S	G	M	V	I	R	R
N	A	D	M	L	G	T	G	F	W	C	T	E	F	T	Q	U	C	Y	A	I	E	R	K
Y	E	N	M	U	Z	I	E	S	Q	V	Z	K	W	R	E	M	M	U	G	D	M	A	N
F	O	Q	S	L	M	I	N	P	F	V	I	H	Y	R	H	M	K	E	V	O	M	F	K
J	U	F	O	W	Y	H	P	M	W	P	J	V	N	O	J	A	O	P	F	W	J	I	Z
U	B	V	R	I	P	T	C	H	O	D	K	G	R	N	D	Z	R	S	F	F	T	T	P
D	R	L	O	S	T	A	N	E	B	Y	L	K	B	R	Y	D	I	N	X	T	A	L	E
B	Z	L	C	H	W	O	A	U	S	F	T	V	O	Z	M	L	C	F	I	A	E	L	Z
A	N	M	D	K	O	X	C	L	A	C	A	L	S	T	T	I	B	I	A	O	P	C	V
A	B	C	D	E	D	R	C	Z	M	K	E	U	Y	M	N	K	D	L	O	L	S	D	R
F	G	H	I	J	C	P	O	F	A	D	Z	L	A	S	H	F	M	L	H	V	O	D	Z
K	L	M	N	O	W	F	R	Z	D	Q	P	G	R	A	T	O	J	K	T	Y	J	F	K
P	Q	R	S	T	V	I	Y	R	H	R	Z	B	V	E	T	A	N	Q	Z	E	R	Q	H
U	V	W	Y	Z	F	S	R	I	N	P	B	D	X	M	L	E	G	N	A	U	D	V	I
E	M	Q	Q	E	A	F	F	W	G	T	S	J	Y	U	O	P	H	A	L	J	R	F	L
H	O	I	A	V	R	Z	K	U	O	W	Q	E	H	U	T	K	A	U	K	K	E	R	O

HANDS

Puzzle 5 • Page 1 of 2



Something is afflicting one of the patient's hands. Fortunately, the other one seems fine, so your team can explore both *left* and *right* to identify how things have *changed* and work out how to draw up a plan for treatment.



Right Hand:

- Actual
- Eiffel, for example
- Correct
- Military rank
- Movie
- Agreement
- Come into flower
- Projectile
- Made a sound like a cat
- African country
- Czech city
- Danny, or Donald
- Dining or locker, for instance
- DNA pioneer Francis
- Strong disinfectant
- Tooth
- Mythology
- Neckband
- Annul
- Fireplace
- Musty

Left Hand:

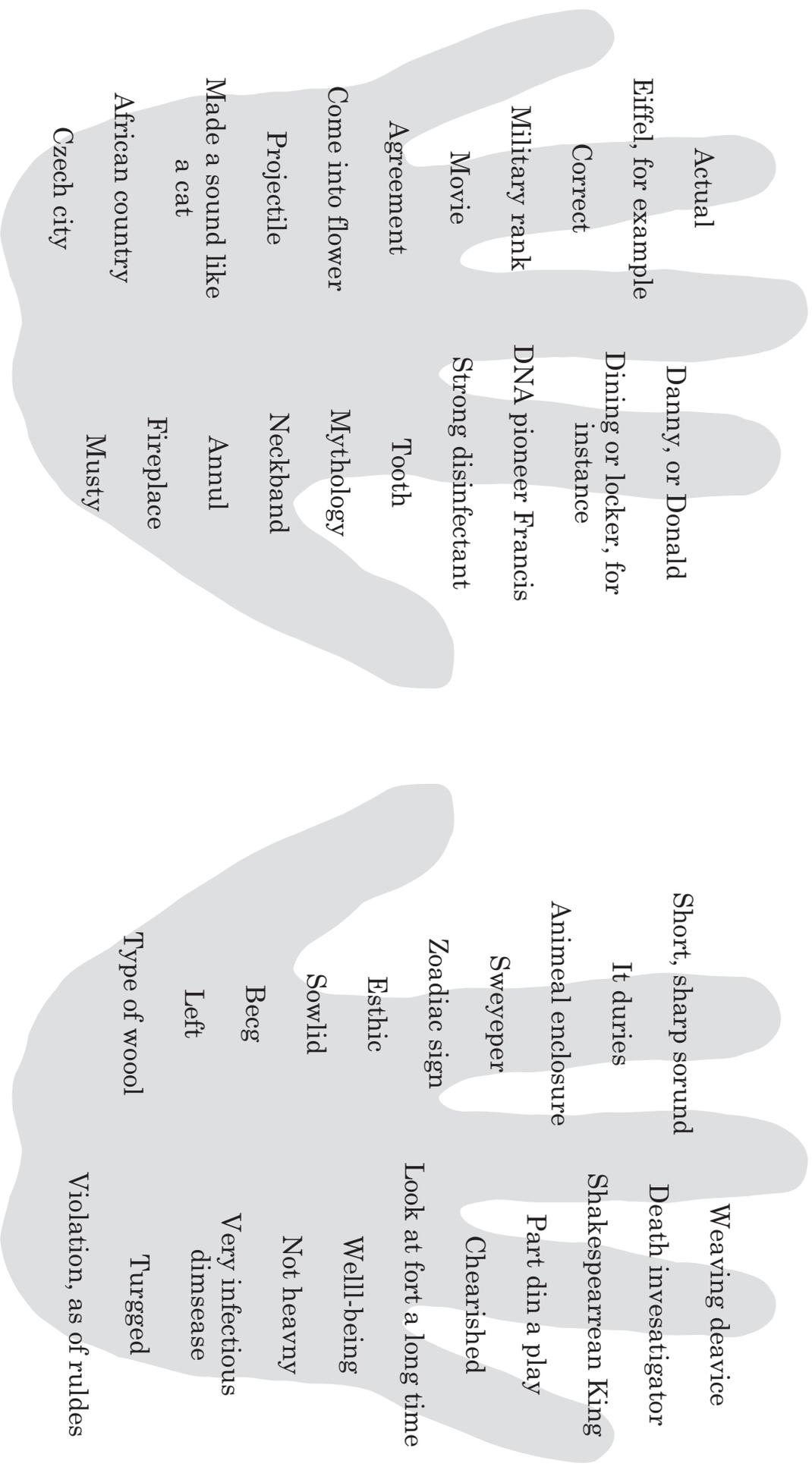
- Short, sharp surround
- It duries
- Animel enclosure
- Sweyeper
- Zoadiac sign
- Esthic
- Sowlid
- Becg
- Left
- Type of woool
- Weaving deavice
- Death invesatigator
- Shakespearrean King
- Part din a play
- Chearished
- Look at fort a long time
- Welll-being
- Not heavyvy
- Very infectious
- dimnsease
- Turgedd
- Violation, as of ruldres



S. Hands

This is a copy of the puzzle for your convenience.

Something is afflicting one of the patient's hands. Fortunately, the other one seems fine, so your team can explore both *left* and *right* to identify how things have *changed* and work out how to draw up a plan for treatment.



Actual

Eiffel, for example

Correct

Military rank

Movie

Agreement

Come into flower

Projectile

Made a sound like a cat

African country

Czech city

Danny, or Donald

Dining or locker, for instance

DNA pioneer Francis

Strong disinfectant

Tooth

Mythology

Neckband

Annul

Fireplace

Musty

Short, sharp sorund

It duries

Animeal enclosure

Sweyeper

Zoadiac sign

Esthic

Sowlid

Beccg

Left

Type of woool

Weaving deavice

Death invesigator

Shakespearrean King

Part din a play

Chearished

Look at fort a long time

Welll-being

Not heavyy

Very infectious

dimnsease

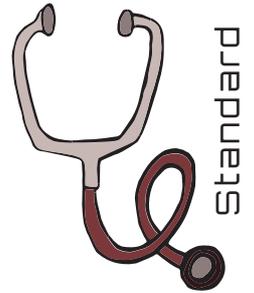
Turrgged

Violation, as of ruldres



STOMACH

Puzzle 6 • Page 1 of 3



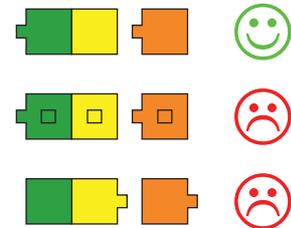
You enter the stomach and find yourself in a storm of churning acid. Either the patient is having an anxiety attack or is suffering from some kind of nasty stomach bug. You take some RNA samples from the stomach to see if you can identify the cause of the upset.

In each group of samples, use the six-letter answers to determine the correct order for linking up the RNA snippets. Once you know the order of the snippets, chain together their colored amino acid fragments, building the resulting chain with the snap-blocks. Fold the chain into a protein according to the given rules. **Do not flip or rotate the proteins once folded.**

When all 6 proteins are folded, assemble them into a rectangle to discover the culprit.

Tip: to make folding easier, use these guidelines when building your chains:

- Orient the cubes so that a smooth face (with no hole) is face up, on the top surface; this will result in the tab on one side and sockets on the other three sides.
- Add a cube to the chain by plugging its tab into the end of the existing chain.



①

Got smaller	14-line poem	Something learned	Foot-leg connectors
□ □ □ □ □ □	□ □ □ □ □ □	□ □ □ □ □ □	□ □ □ □ □ □

To fold: Start with the sequence running south. The first cube is the north- and west-most cube. The first three cubes make an L-shape. The sequence of three green cubes runs vertically, and they are among the farthest-west cubes. The final green cube is adjacent to another green cube. The final shape fits in an area that is 2 cubes wide and 6 cubes high.

②

___ and hawed	Snake-haired lady	Country's song	Baby
□ □ □ □ □ □	□ □ □ □ □ □	□ □ □ □ □ □	□ □ □ □ □ □

To fold: Start with the sequence running south. The only turns are after cubes 3, 4, and 6. The last cube in the sequence ends up farther west than the first cube. The final shape fits in an area that is 5 cubes wide and 3 cubes high.



6. Stomach



Tip: to make folding easier, use these guidelines when building your chains:

- Orient the cubes so that a smooth face (with no hole) is face up, on the top surface; this will result in the tab on one side and sockets on the other three sides.
- Add a cube to the chain by plugging its tab into the end of the existing chain.

③

Attacked by a bug

Shrek's pal

Bunny

Muscle-bone connector

To fold: Start with the sequence running north. The first cube is the south- and west-most cube. The black cube is in the same row as the first cube. The green cube has a two-cube-wide gap directly to the east of it. All of the yellow cubes except the first share a side with at least one other yellow cube. The most northerly cube is orange. The final shape fits in an area that is 7 cubes wide and 3 cubes high.

④

Like some tea

Extreme fright

A dance with tutus

Envelope contents

To fold: Start with the sequence running west. The chain turns south after the third cube. The second black cube has only one cube due east and only one cube due north. Three of the green cubes are in the top row. The two yellow cubes lie due south of one of the orange cubes. The final shape fits in an area that is 8 cubes wide and 3 cubes high.

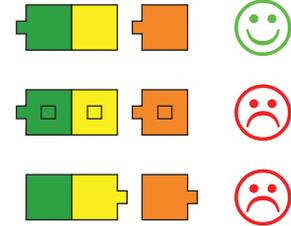


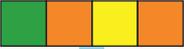
6. Stomach



Tip: to make folding easier, use these guidelines when building your chains:

- Orient the cubes so that a smooth face (with no hole) is face up, on the top surface; this will result in the tab on one side and sockets on the other three sides.
- Add a cube to the chain by plugging its tab into the end of the existing chain.



⑤ 

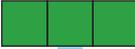
Lower back area



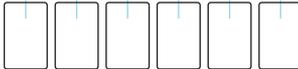


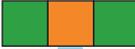
Oily to the touch





Sanctuary

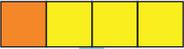




He cuts your hair



To fold: Start with the sequence running east. The first turn is at an orange cube. The black cube has adjacent cubes to the east, west, and south, and no cubes due north. The yellow cube is one of two cubes in the top row. There are no gaps in the bottom row. The final shape fits in an area that is 7 cubes wide and 3 cubes high.

⑥ 

Hand-to-hand _____





Journey





The Dark Knight





Plush fabric





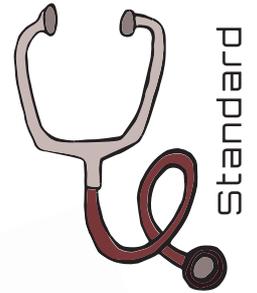
Of-peated phrase



To fold: Start with the sequence running north. The first cube is the south- and west-most cube. The first black cube is on a diagonal line with the first cube. All three black cubes end up stacked vertically on one another. The three green cubes are in the southeast corner. The cubes completely fill a rectangle that is 7 cubes wide and 3 cubes high.



PANCREAS



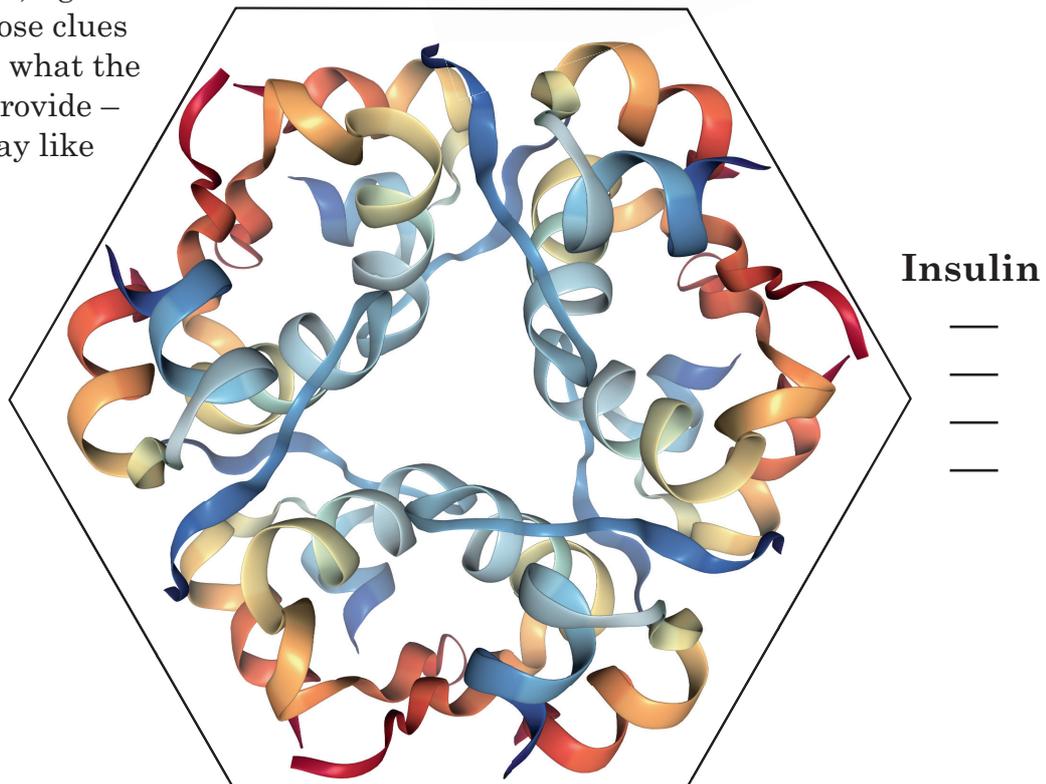
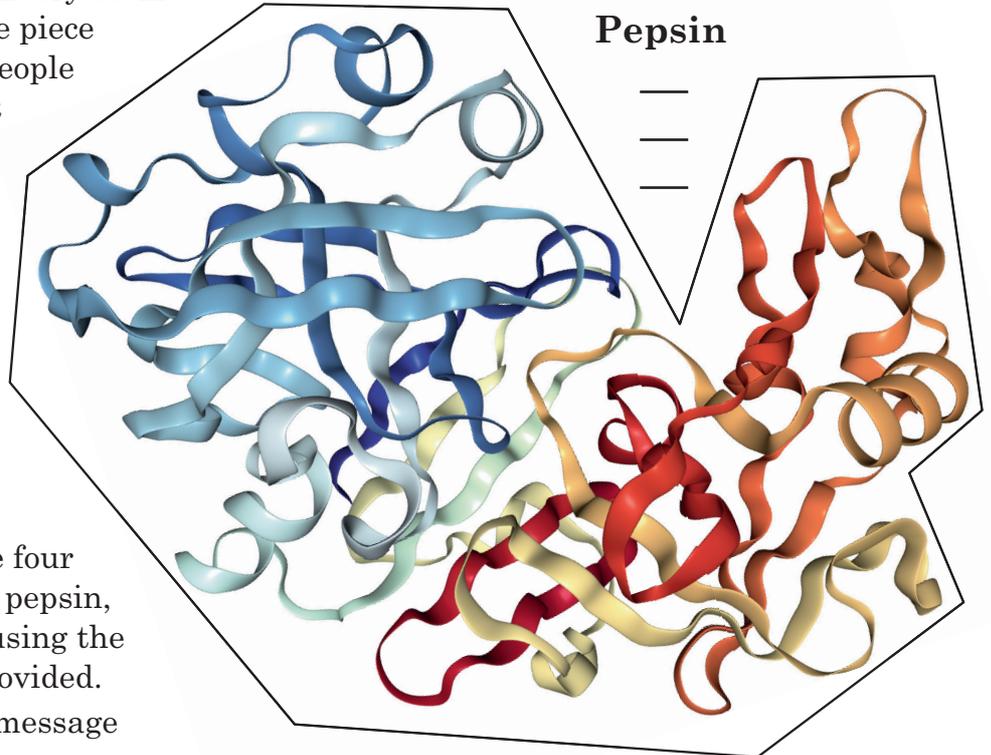
Puzzle 7 • Page 1 of 4

We are what we eat. Literally. Every atom in our bodies originated in some piece of food we ate. Whereas some people *progressively nibble* throughout the day on just about anything, others watch what they eat and always strive to find good wholesome products.

However we choose to eat, though, the pancreas is the unsung hero that helps us process all this food, providing energy for all our biological processes.

To learn more, construct the four pancreatic digestive enzymes – pepsin, insulin, lipase, and amylase – using the twenty basic building blocks provided.

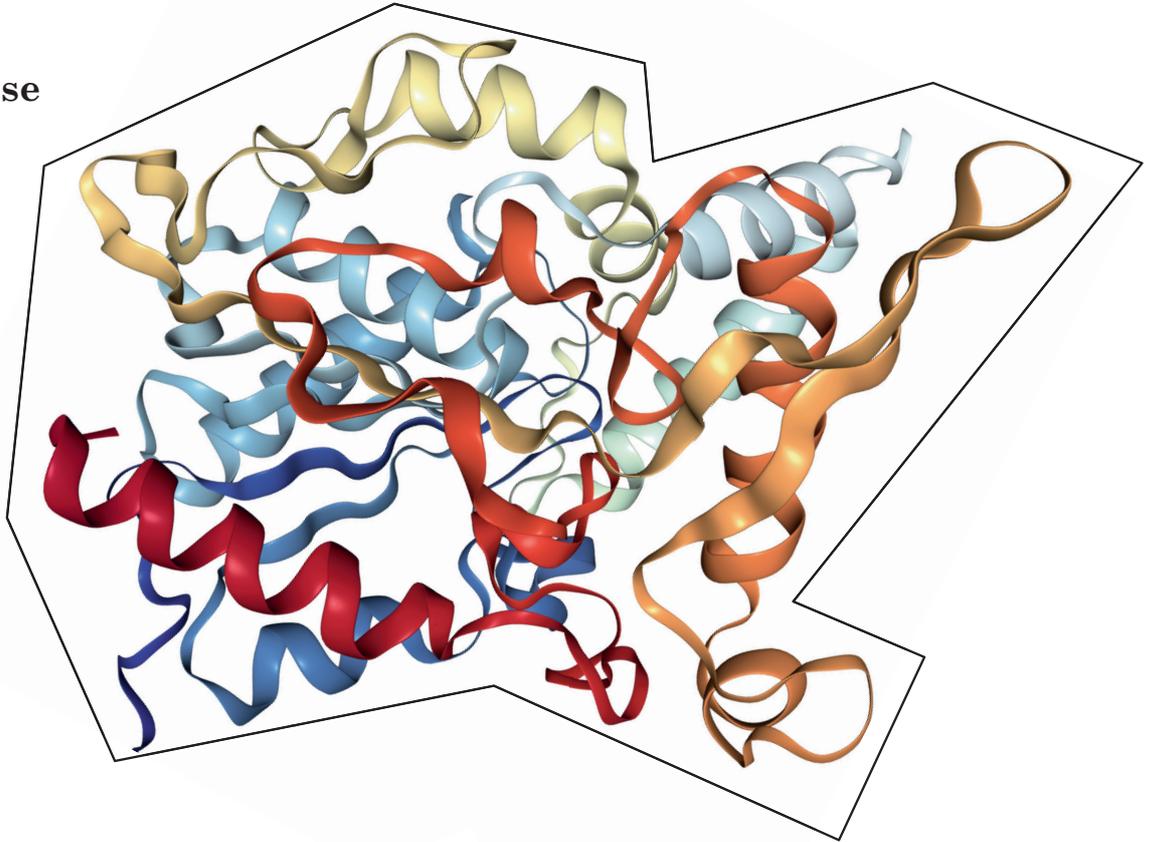
After you've discovered the message from each enzyme, figure out how to use all those clues together to learn what the pancreas helps provide – especially on a day like today.



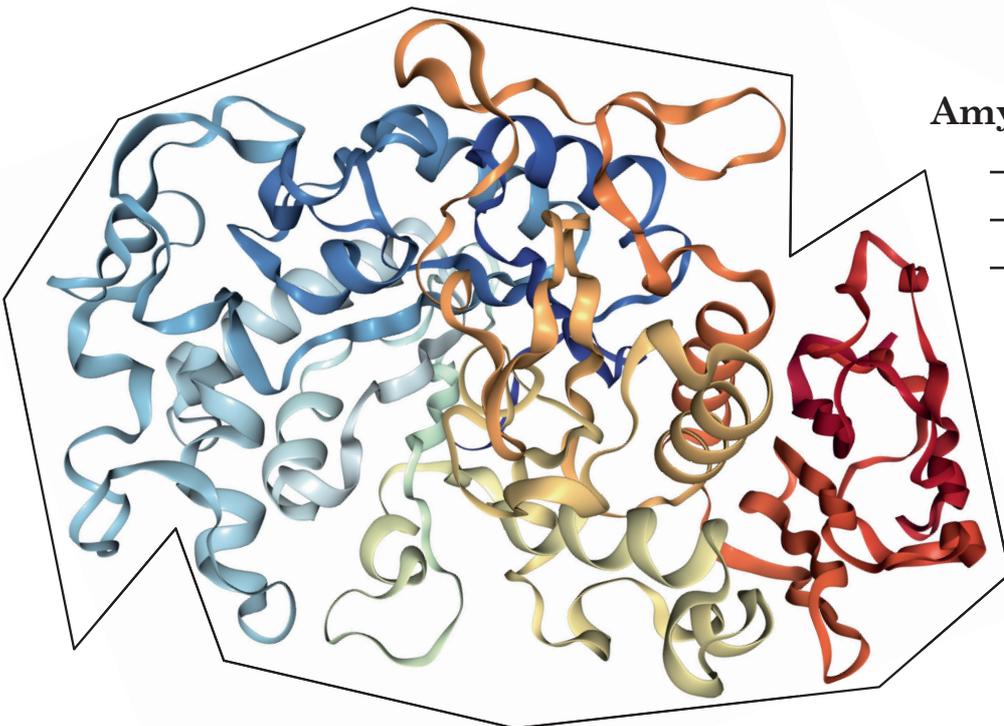
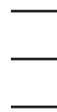


7. Pancreas

Lipase



Amylase



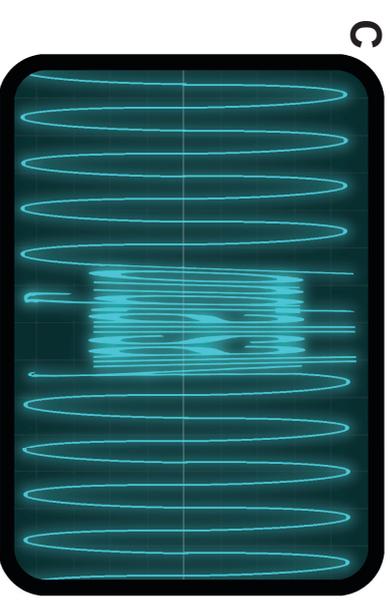
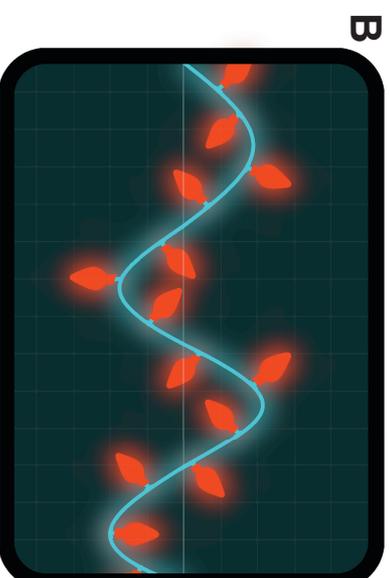
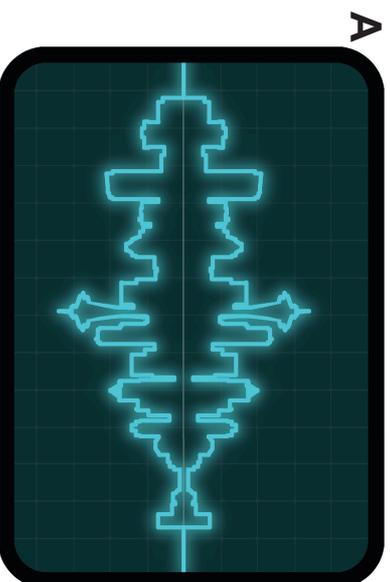
EPARS

Puzzle 8 • Page 1 of 3



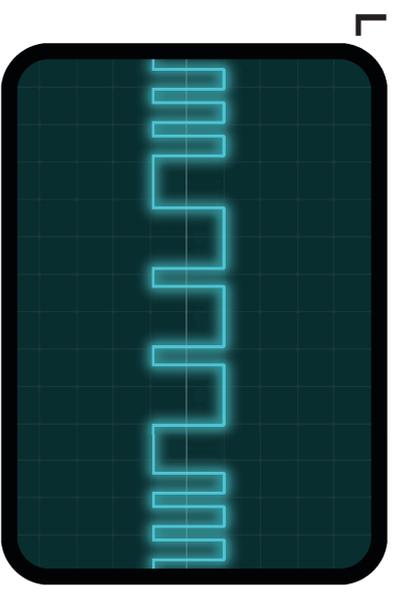
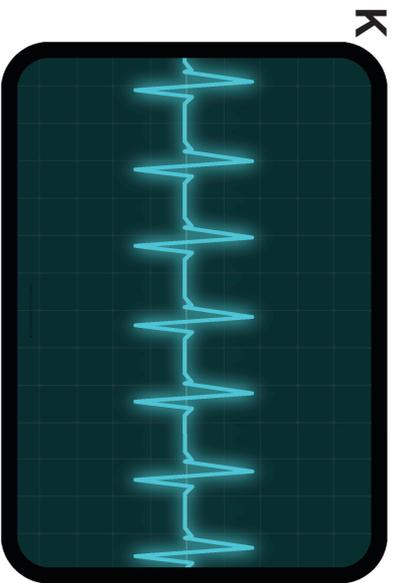
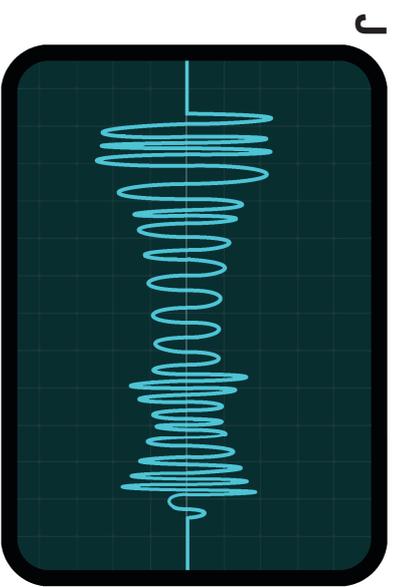
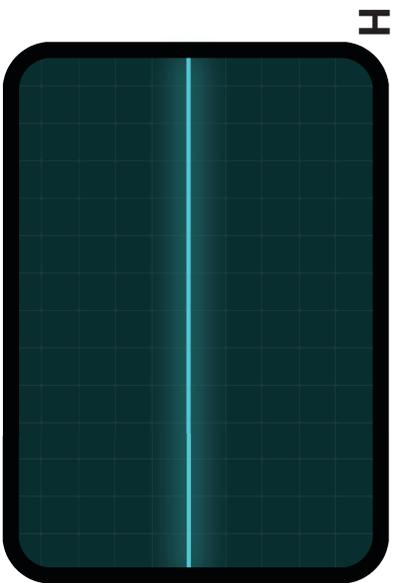
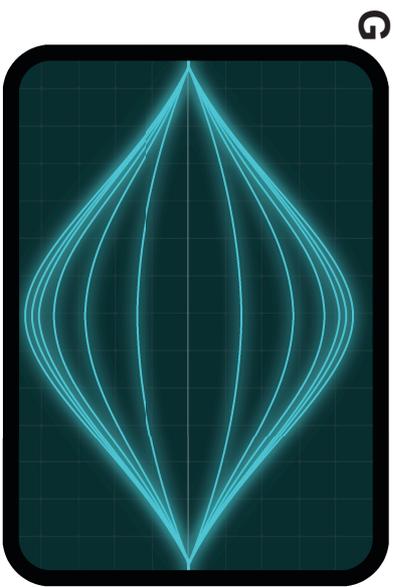
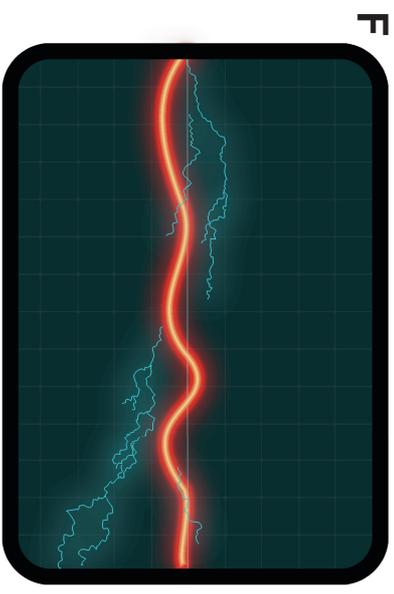
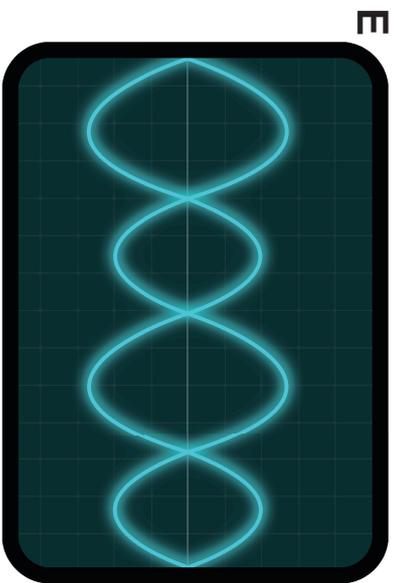
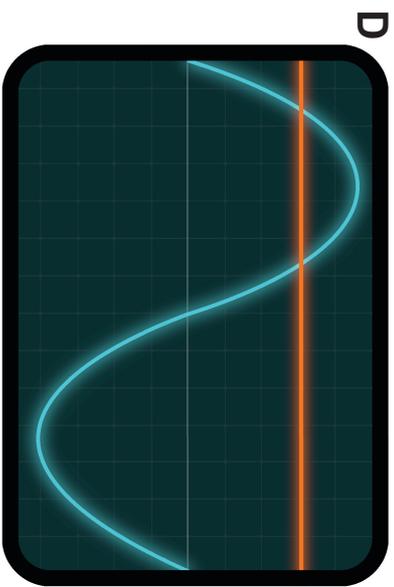
Something's gone wrong with the ears, and you'll need to make sense of all this gibberish to figure out how to fix them. If only you could understand these wonky display modes on your oscilloscope!

1. LIZ AND TOY EARHARDT
2. BURR THE PLAY SOFT CRUNCH MEW SICK
3. CHIN GULL ALL DEW EH
4. SIR FIN YOU ESSAY
5. HOOEY AGAIN KNACK ALL
6. HAYSEED EASY
7. ISLE I COUGH HE ISLE LIKED HE WANT YOLK COMMAND CHUMP WHIFF MAY
8. NUMB BROTH ICKY SONOGRAM P AND O
9. HELL PINE HEED SAMBA DEE
10. LEE TELLER TFGH HARD
11. THIS SOW END OFF SIGH LENS
12. WEVIL RUG QUEUE



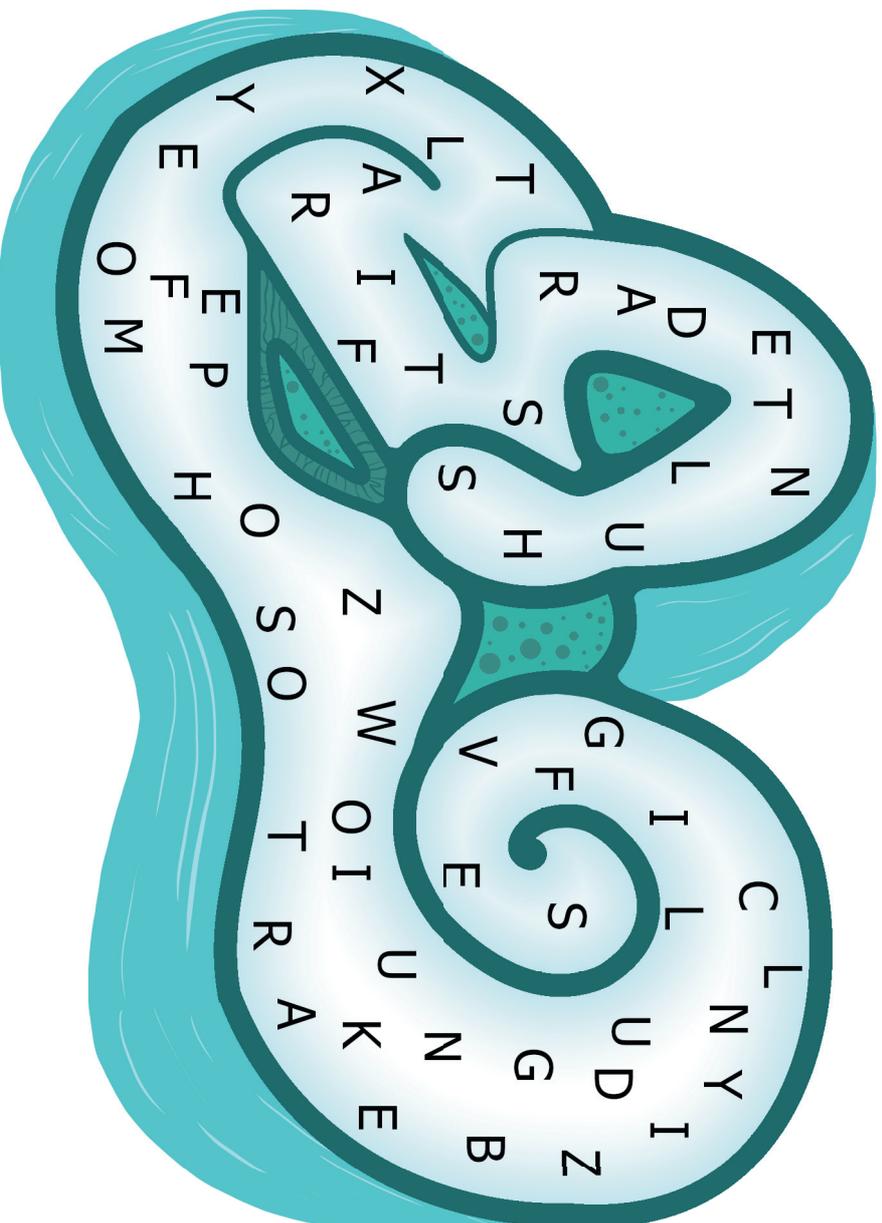


B. EARS



B. Ears

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12



- A
- B
- C
- D
- E
- F
- G
- H
- I
- J
- K
- L

The Osseous Labyrinth

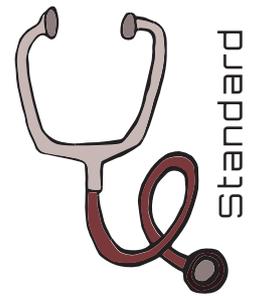
A bony structure of the inner ear.





BRAIN

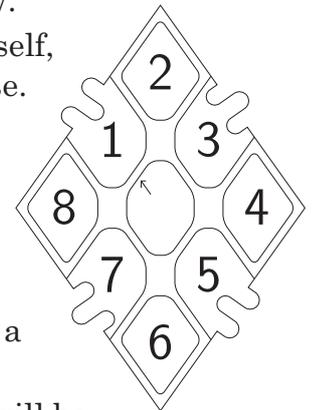
Puzzle 9 (meta) • Page 1 of 5



You've finally made it to the brain, and it seems like this is the source of all of the patient's problems. Twelve neurons have gone rogue and have been responsible for causing all sorts of issues throughout the body.

First, read about the twelve neurons on the next four pages. Solve each neuron's problems to get two words. A list of clues for all twenty-four solution words appears below.

Second, copy eight letters from each neuron's solutions onto the neuron itself, starting with "1" in the space indicated by the arrow and proceeding clockwise. (See the diagram to the right.) If an answer blank is marked with a star, draw a small star next to the corresponding letter on the neuron. Be extremely careful, and make sure you follow the special instructions on the last three neurons.



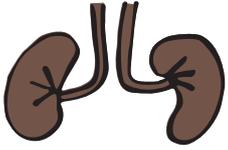
Third, assemble the twelve neurons to create the 3D brain. Each letter in the half-cell along the middle of a neuron's edge will match with the letter in a half-cell of another neuron.

Finally, use metacognition to identify paths around the brain. Every cell will be used once. Note that the edge cells matched up in the previous step now count as just one cell. There are eight paths, each of which starts in a cell that you starred in the second step. A path may cross itself or another path. There are many ways to form individual paths, but there's only one way to form all the paths without revisiting a cell.

Nut	Verification
Yellow	Goad
Damaged	Fruit
Certain	Peruse
Banish	Street
Down	Nose
Deception	Fringe
Flower	Ripped
Yearned	Fish
Float	Adjuster
Country	Instrument
Weight	Child



9. Brain



This neuron is causing the **kidneys** to perfectly **MIRROR** each other like the **hands**.



		○			○
	○	○	○	○	
○		3	○		
D	E	N	T	A	L
S	O	D	I	U	M
T	R	A	C	E	S

4			○	5	
	○	○	○	○	
		○			○
B	U	R	G	E	R
T	O	X	I	N	S
L	E	A	K	E	D

Remember:

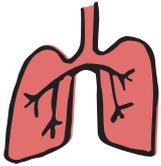
Each sector has one stone; stones can't touch; and when the stones fall, they should fill the bottom three rows.

Read marked letters from left to right across rows, top to bottom.

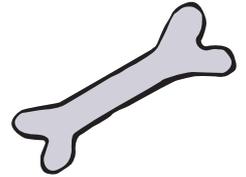
Left: 1 7 8 4 3

Right: 2* 5 6

After writing the letters on this neuron, draw a small star at the bottom of the center space.



This neuron is causing the **lungs** to shift the **bones** around!



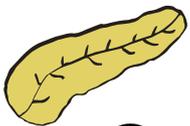
A	R	C	S	F	A	H	R	B	M	O	B	H	C
P	N	H	K	Q	T	U	V	I	R	F	A	V	A
G	I	S	N	D	I	J	A	N	C	J	E	R	N
L	U	T	A	Y	B	S	L	L	X	F	T	Z	U
C	M	O	M	E	L	G	C	O	E	B	S	W	M

Head bone: ETCPKWO
 Jaw bone: WKXNSLVO
 Shoulder bone: TCRMZTCV
 Chest bone: CDOBXEW

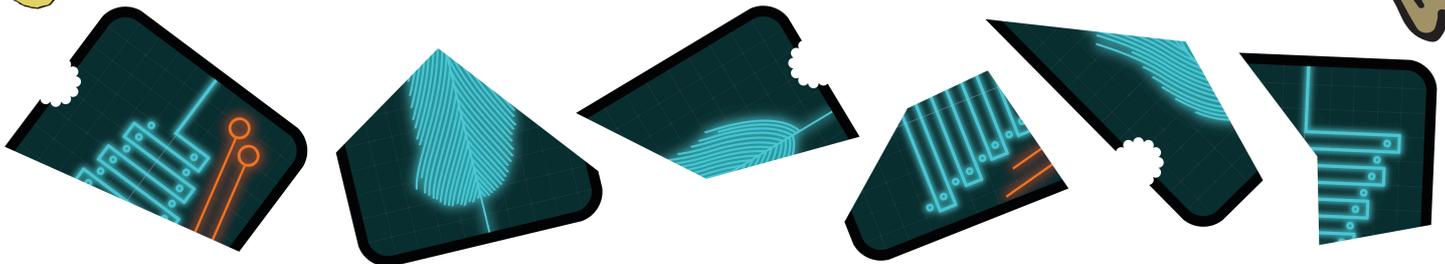
Word shapes: 4 5 2 3

Shifted letters: 7 1 8 6*

After writing the letters on this neuron, circle the arrow.



This neuron is causing the **pancreas** to digest sounds from the **ears**.



First wave: 3 2 4 1

Second wave: 5 6 8 7

After writing the letters on this neuron, cross out the arrow.

