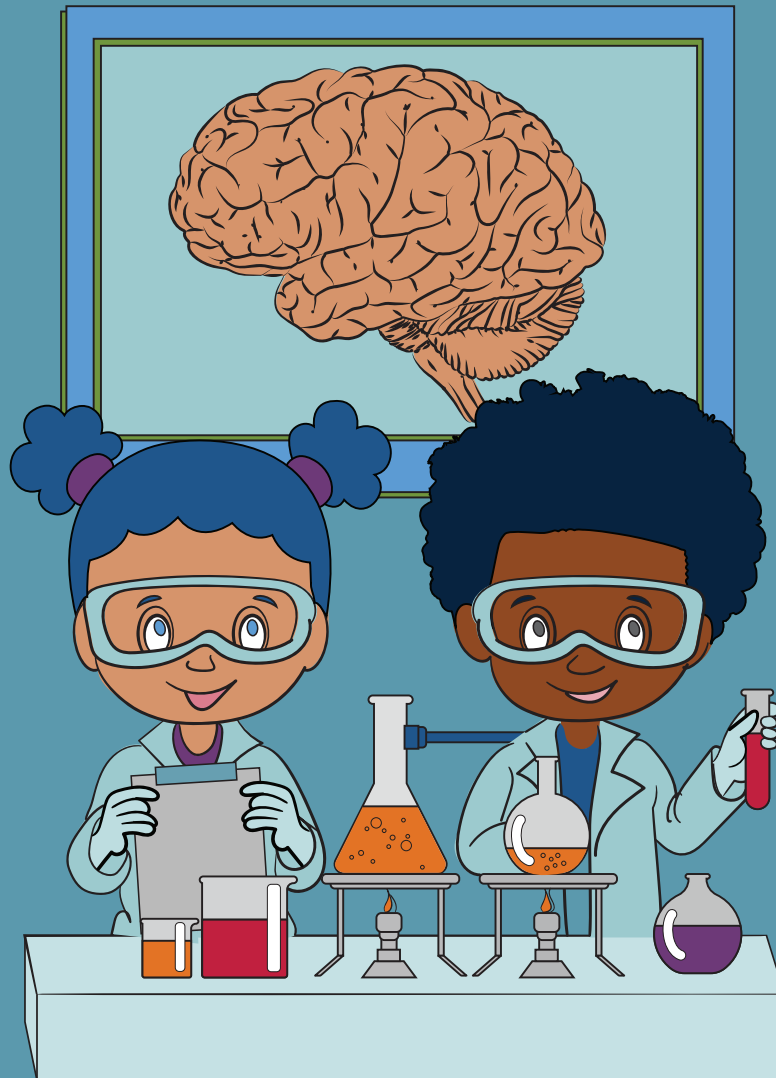


GET EXCITED ABOUT MENTAL HEALTH RESEARCH!

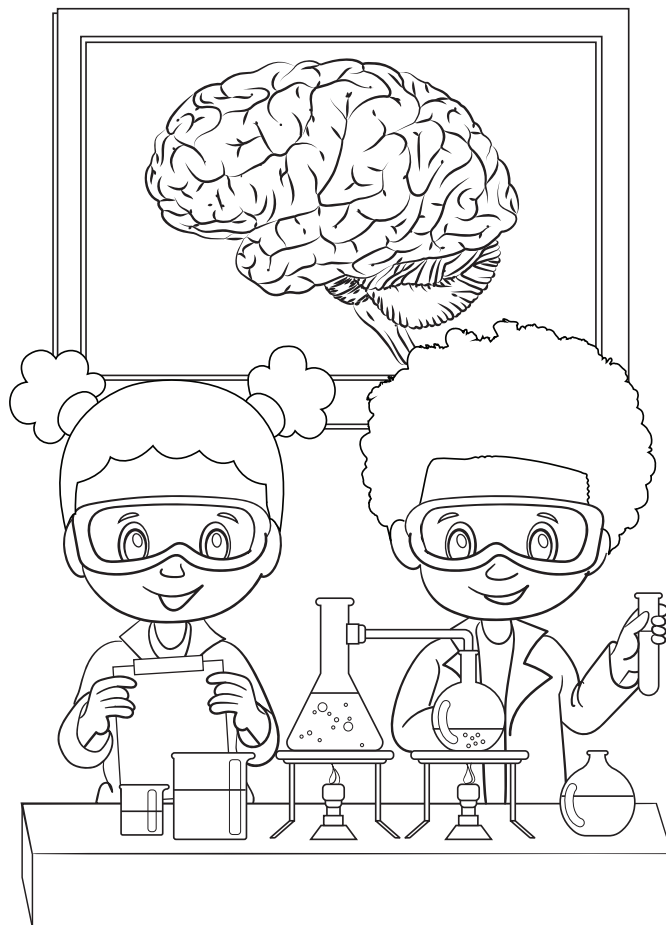


A COLORING & ACTIVITY BOOK FOR KIDS AGES 8-12

From the **NATIONAL INSTITUTE of MENTAL HEALTH**

From the **NATIONAL INSTITUTE of MENTAL HEALTH**

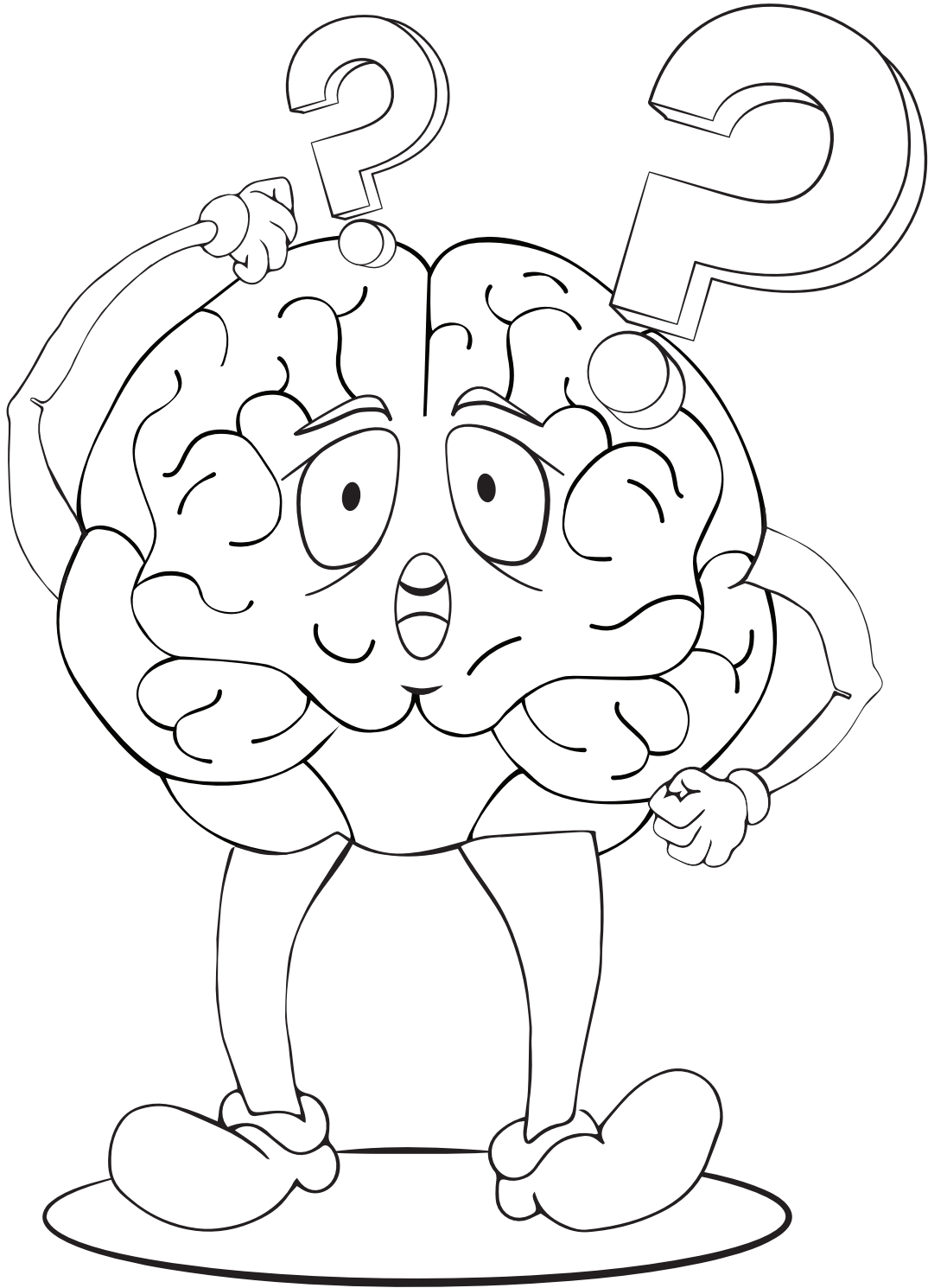
GET EXCITED ABOUT MENTAL HEALTH RESEARCH!



A COLORING & ACTIVITY BOOK FOR KIDS AGES 8-12

The National Institute of Mental Health (NIMH) is the lead federal agency for research on mental disorders. NIMH is one of the 27 Institutes and Centers that make up the National Institutes of Health (NIH), the nation's largest medical research agency. NIH is part of the U.S. Department of Health and Human Services.

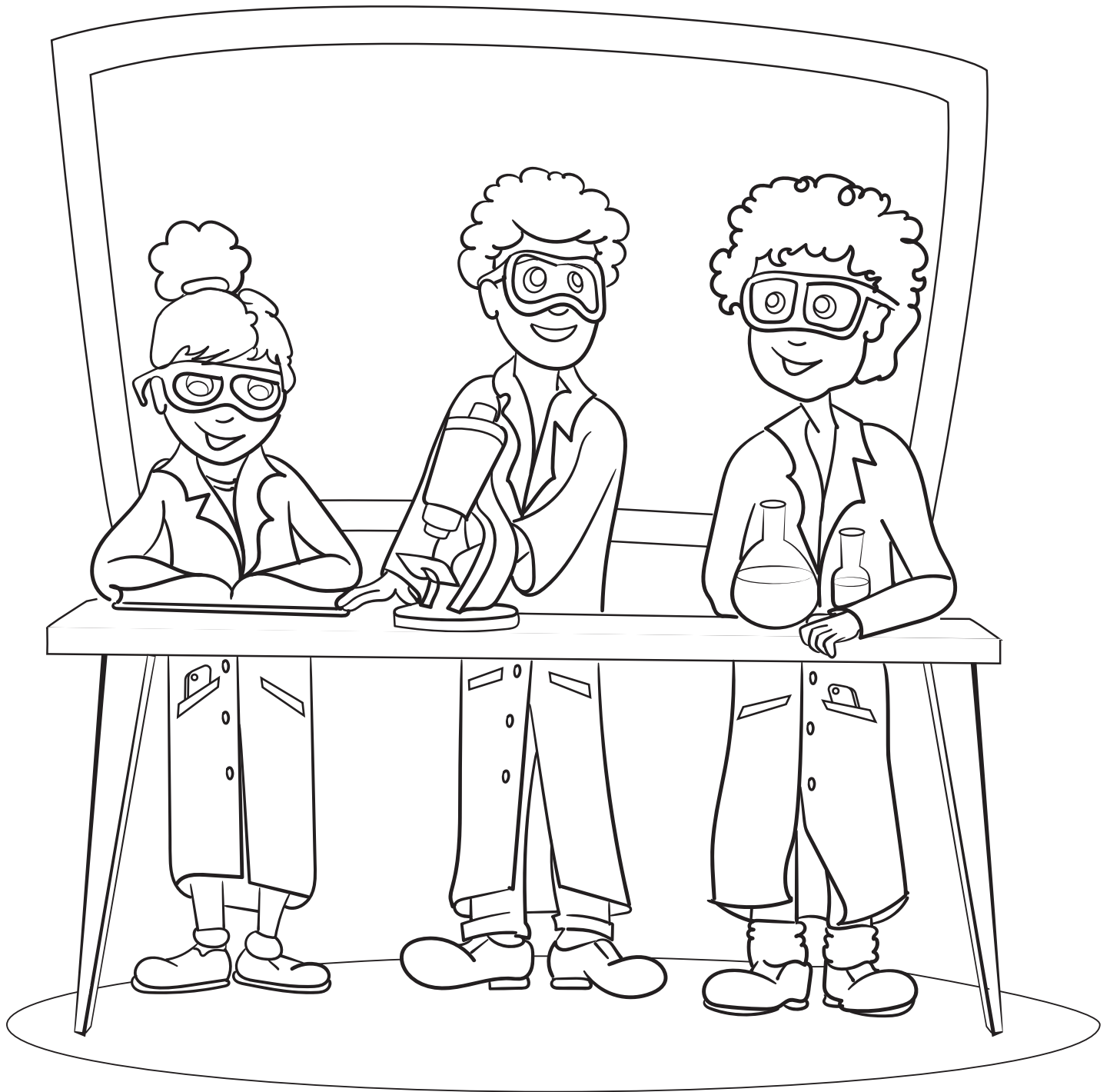
WHAT IS MENTAL HEALTH?



FUN FACT

Mental health includes how we feel, think, and act. Your genes, the way your brain works, and things going on in your life can affect your mental health. Changes in the way you think, feel, or act that make it harder to do your schoolwork or be with family and friends could be a sign of a **mental disorder**. Just like when you have an ear infection or the flu, you may need help to get better.

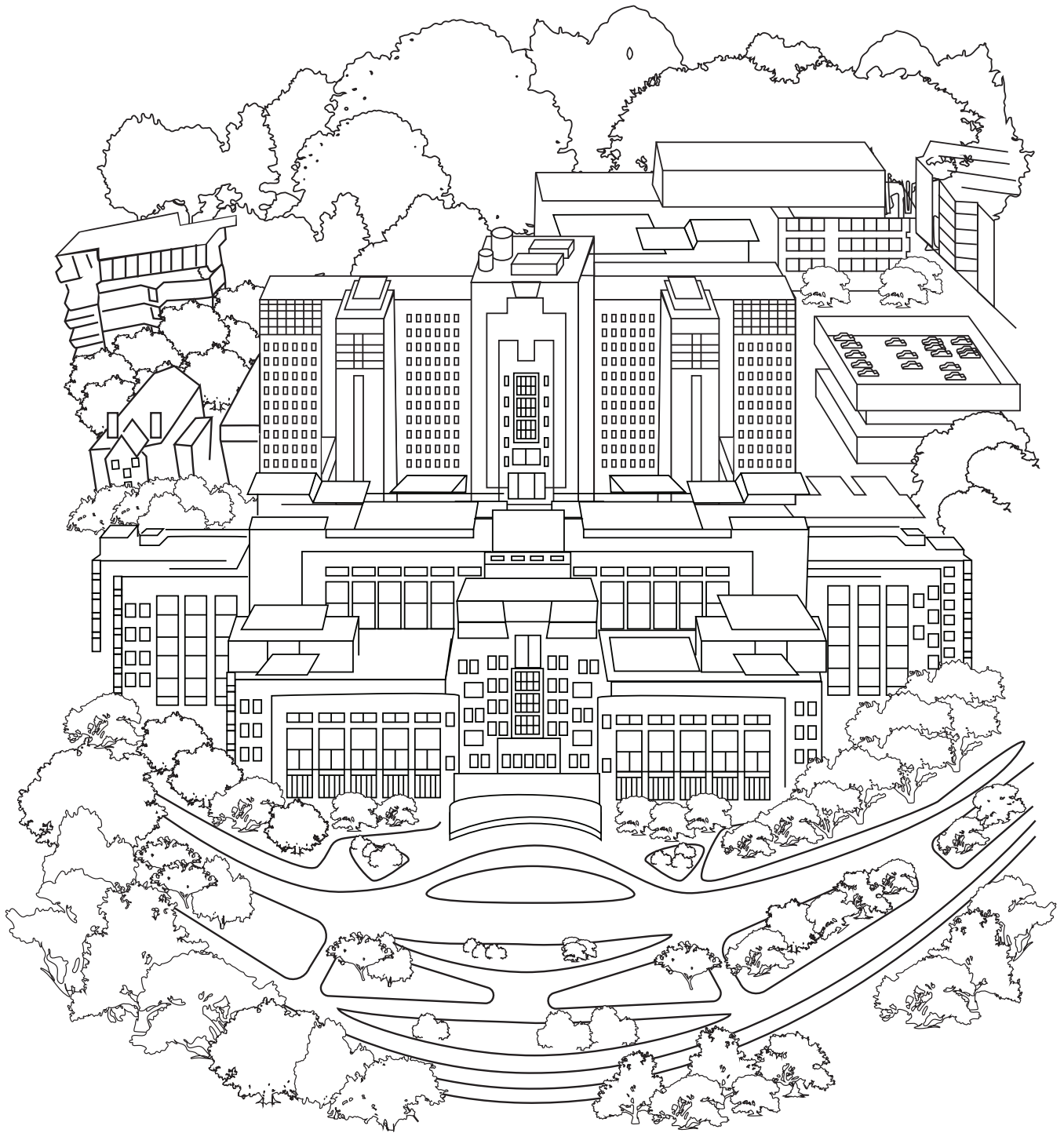
MENTAL HEALTH RESEARCH



FUN FACT

Mental health researchers study mental health, the causes of mental disorders, and new ways to treat them.

THE NATIONAL INSTITUTE OF MENTAL HEALTH

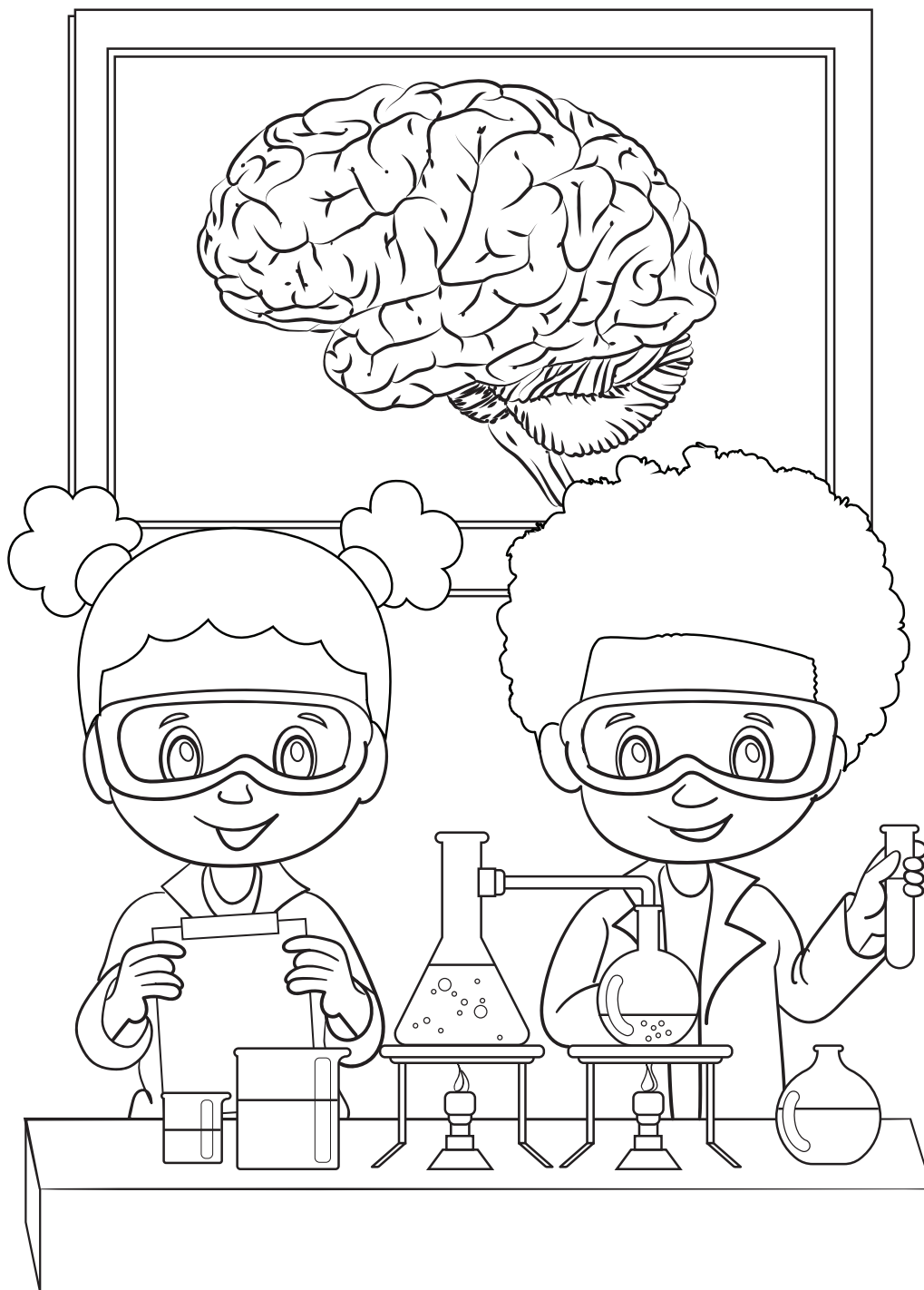


FUN FACT

The National Institute of Mental Health (NIMH) is one of many agencies that are part of the United States government. NIMH supports researchers who study mental disorders. NIMH has labs in Maryland, and NIMH also supports researchers all over the country and the world. If you become a mental health researcher, you could wind up working for or being supported by NIMH!

GET EXCITED ABOUT MENTAL HEALTH RESEARCH!

CLINICAL TRIALS



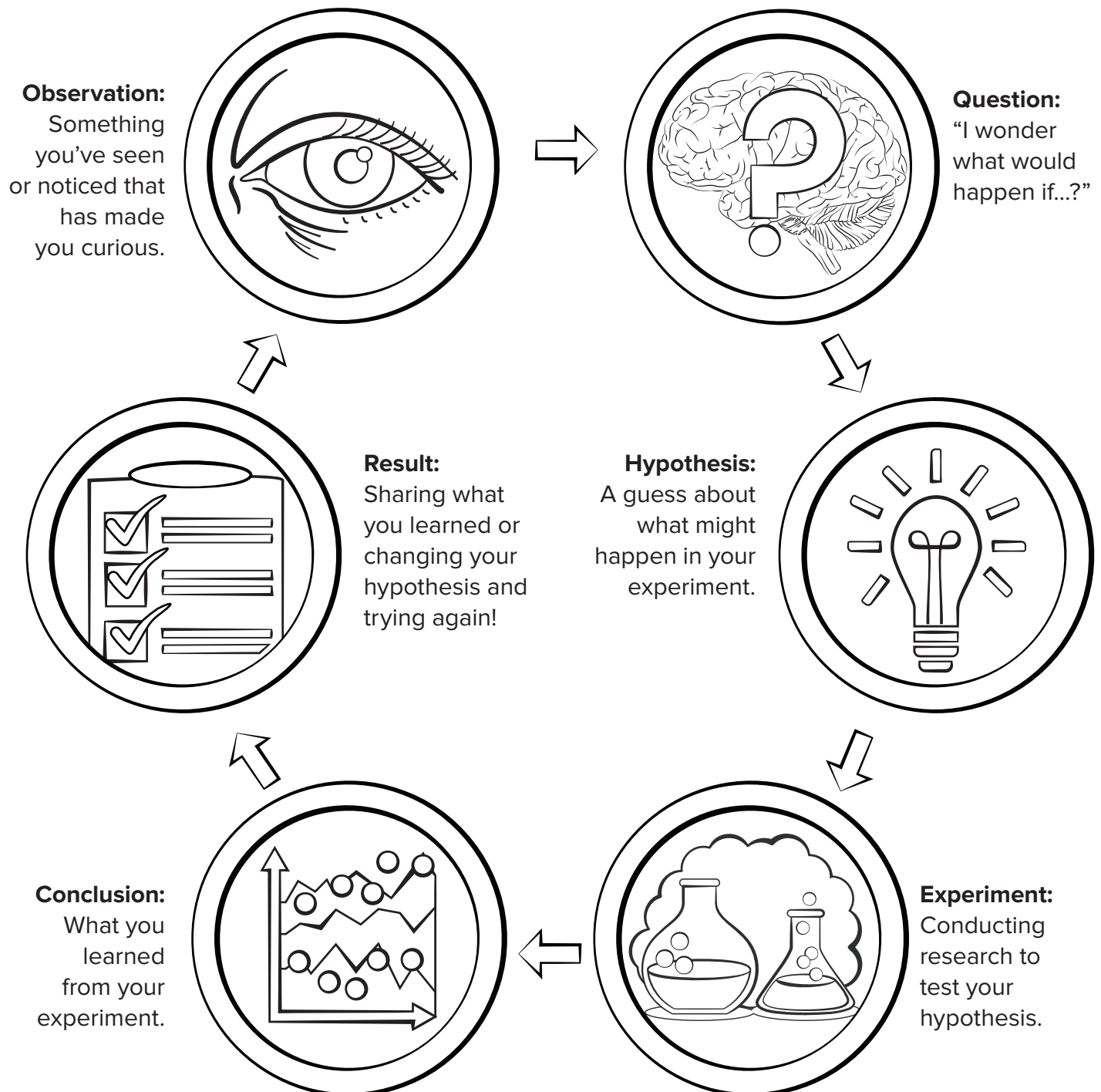
FUN FACT

Clinical trials are one type of mental health research. In clinical trials, researchers try new treatments to see if they work and are safe for people. People volunteer to take part in clinical trials to help find new and better treatments for mental disorders.

THE SCIENTIFIC METHOD

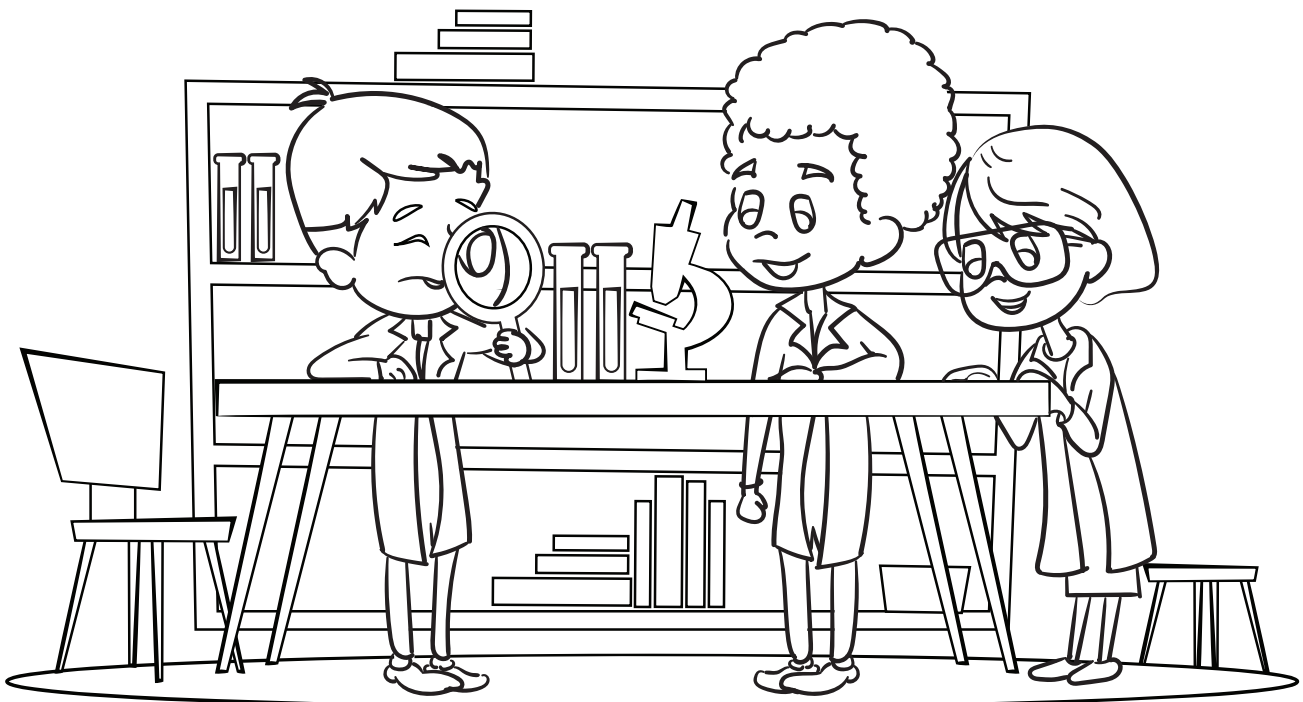
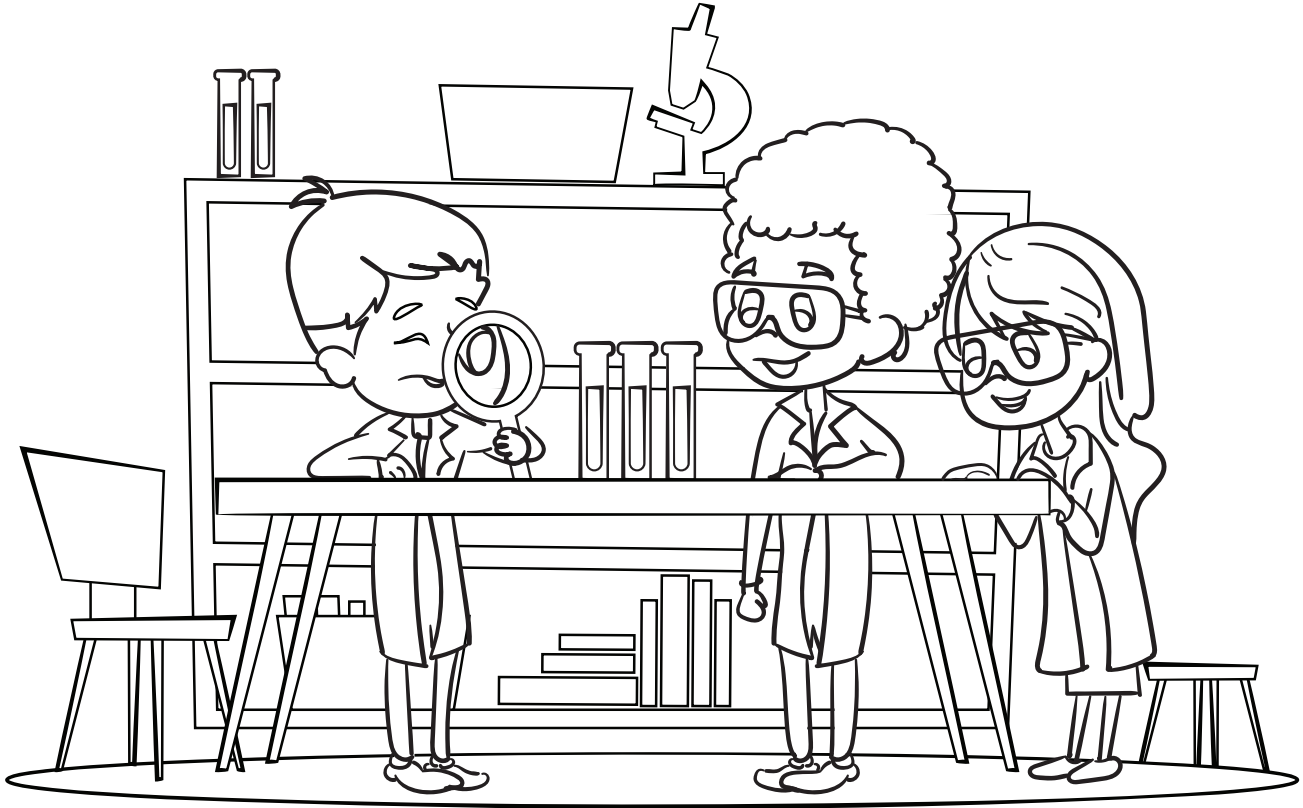
FUN FACT

All researchers use the scientific method to ask questions, perform tests, and solve problems. Sometimes the research doesn't answer the original question, and that's okay too! New knowledge can lead to new questions and answers.



CAN YOU SPOT THE DIFFERENCES?

Can you find all eight (8) differences between them?



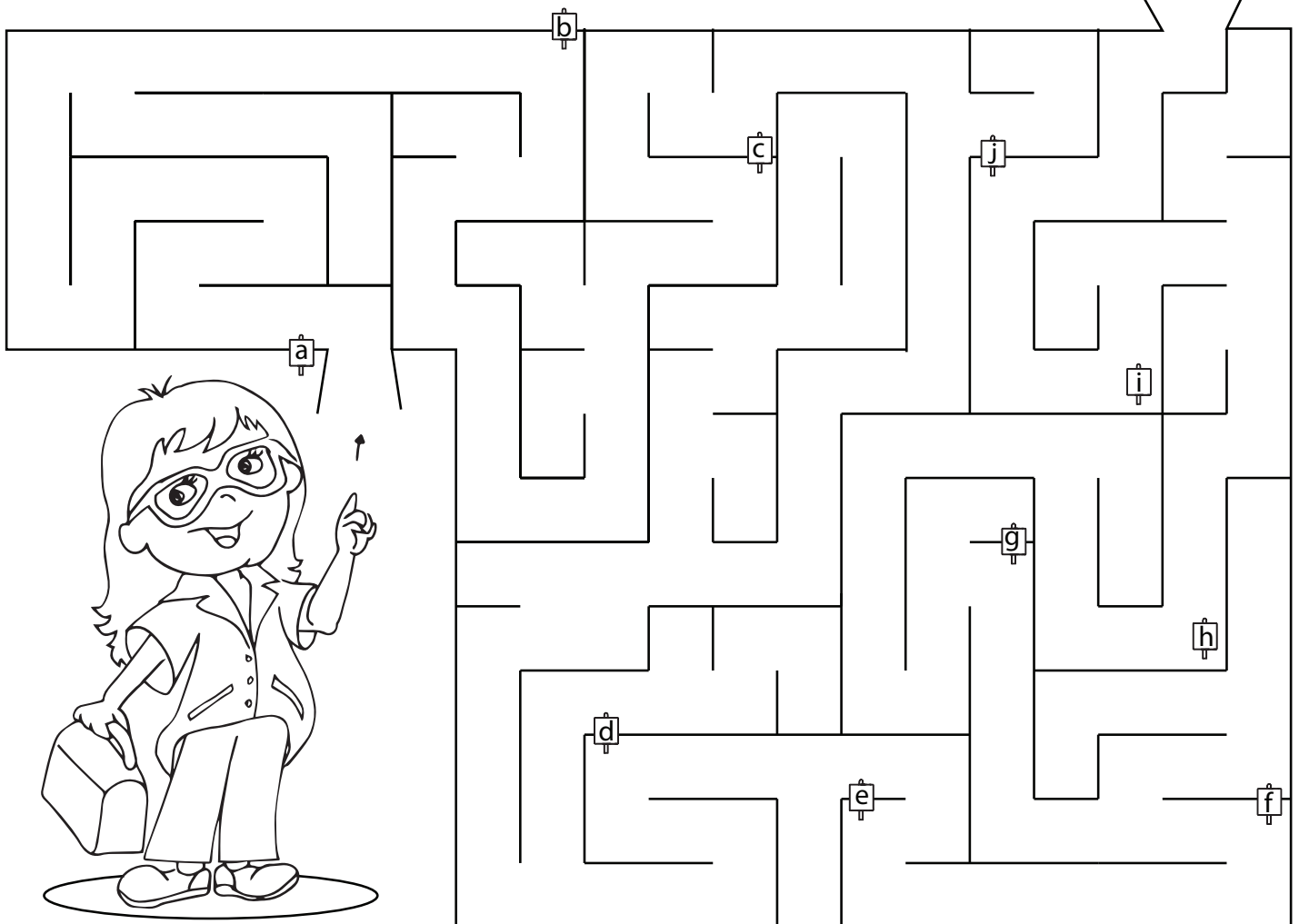
Answers can be found on page 13.

MAZE

Help the student become a researcher!

Help the student find their way along the path to becoming a mental health researcher. Though you can pick just one path for this student, there are many paths you can take!

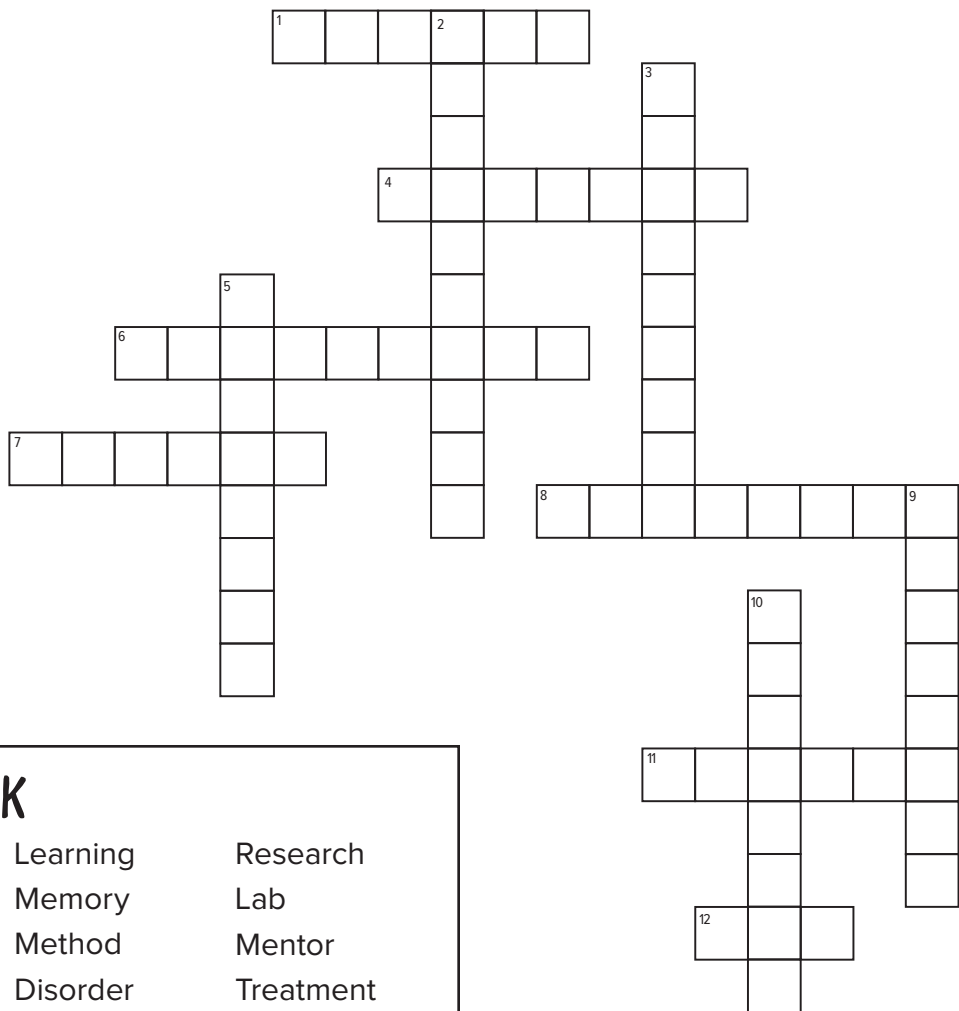
- a. Take classes about science and psychology that interest or excite you.
- b. Consider volunteer opportunities, like peer counseling or working at a nursing home.
- c. Graduate high school.
- d. Go to college and explore more exciting areas of science, health, and psychology.
- e. Find a mentor—a person or friend with more experience—to help guide you along your path.
- f. Look for internships or opportunities in laboratories to help scientists conduct their research.
- g. Explore volunteer opportunities like peer counseling, working for a hotline that takes calls from people who need help with their mental health, or volunteering at a hospital.
- h. Consider getting an advanced degree, like a master's, medical (M.D.), or doctoral (Ph.D.) degree.
- i. Consider becoming a nurse, therapist, or social worker.
- j. Contribute to making the world a more mentally healthy place.



Answers can be found on page 13.

TEST YOUR KNOWLEDGE ABOUT CONDUCTING MENTAL HEALTH RESEARCH

Use the word bank to solve the crossword clues below.



WORD BANK

Clinical	Learning	Research
Diagnosis	Memory	Lab
Hypothesis	Method	Mentor
Journal	Disorder	Treatment

ACROSS

- The scientific _____
- Where a scientific research paper might be published
- Medical care for an illness or injury
- How the brain stores and remembers information
- Depression and anxiety are types of these
- A person or friend with experience who can guide you in your career
- Physical space where research is conducted

DOWN

- A guess about what might happen in your experiment
- Identifying an illness by looking at symptoms
- Gaining knowledge or skills by experiencing something, studying, or being taught
- Careful study and investigation to discover new information
- Research that involves trying new treatments on a group of people: _____ trials

Answers can be found on page 13.

ALL ABOUT MENTAL HEALTH RESEARCH

Search up, down, forward, backward, and diagonally to find the hidden words.

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

**BRAIN
DISORDER
RESEARCH
THOUGHTS**

**DISCOVERY
FEELINGS
SCIENCE
TREATMENT**

**DIAGNOSIS
MENTOR
THERAPY
VOLUNTEER**

Answers can be found on page 14.

A CRYPTIC MESSAGE ABOUT YOUR FUTURE

Solve the math problems, then use the letters below your answers to decode the hidden message in the blanks below.

$12 + 12$	5×0	$8 + 8$	$16 + 16$	$6 + 6$	1×9	$30 - 2$	$25 + 8$	$5 + 1$	$90 - 9$	$55 + 8$	$60 + 20$	$10 + 8$
A	B	C	D	E	F	G	H	I	J	K	L	M

$4 + 4$	$15 + 15$	$30 - 5$	$9 + 6$	$50 + 6$	2×1	$2 + 2$	$30 - 3$	$10 + 10$	3×1	$3 + 4$	$7 + 7$	$24 + 2$
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

HIDDEN MESSAGE

$\frac{6}{9}$ $\frac{14}{30}$ $\frac{27}{3}$ $\frac{30}{56}$ $\frac{63}{33}$ $\frac{24}{56}$ $\frac{32}{24}$ $\frac{8}{32}$

$\frac{9}{30}$ $\frac{80}{80}$ $\frac{30}{3}$ $\frac{14}{30}$ $\frac{27}{56}$ $\frac{6}{8}$ $\frac{4}{12}$ $\frac{56}{12}$ $\frac{2}{4}$ $\frac{2}{2}$,

$\frac{14}{30}$ $\frac{27}{16}$ $\frac{30}{27}$ $\frac{80}{32}$ $\frac{0}{12}$ $\frac{16}{30}$ $\frac{18}{12}$ $\frac{24}{24}$

$\frac{18}{12}$ $\frac{8}{4}$ $\frac{24}{80}$ $\frac{33}{12}$ $\frac{24}{80}$ $\frac{4}{33}$ $\frac{56}{12}$ $\frac{2}{12}$ $\frac{24}{56}$ $\frac{16}{33}$ $\frac{12}{56}$

$\frac{24}{8}$ $\frac{32}{32}$ $\frac{6}{2}$ $\frac{16}{30}$ $\frac{20}{12}$ $\frac{56}{56}$ $\frac{4}{33}$ $\frac{12}{63}$ $\frac{12}{14}$

$\frac{4}{33}$ $\frac{24}{4}$ $\frac{33}{12}$ $\frac{80}{25}$ $\frac{2}{27}$ $\frac{2}{27}$ $\frac{8}{80}$ $\frac{30}{16}$ $\frac{63}{4}$ $\frac{33}{12}$

$\frac{18}{14}$ $\frac{2}{4}$ $\frac{12}{56}$ $\frac{6}{12}$ $\frac{2}{30}$ $\frac{9}{4}$ $\frac{33}{12}$ $\frac{0}{56}$ $\frac{24}{6}$ $\frac{8}{8}$.

Answers can be found on page 14.

CONDUCT YOUR OWN EXPERIMENT!

Now it's your turn to be the researcher! This quick experiment will help you understand a little bit more about how the brain remembers things.

First, let's start with a hypothesis! You're going to test the idea that it's easier to remember a list of words if they have something in common. You can do this experiment on your own or with a small group of family members or friends as volunteers.

What you'll need:

- You or some volunteers
- A piece of paper
- The word boxes below and on the next page
- A watch or timer

Step 1:

1. Set your timer for 2 minutes.
2. Look at Word Box A for 2 minutes and try to memorize as many words as you can.
3. When the 2 minutes are over, cover the Word Box and write down as many words in the empty spaces as you can remember.
4. Count how many words you remembered and write that number in the Data Box on the next page.

WORD BOX A:

Nine	Cat	Face	Ring	Play
Plugs	Lamp	Apple	Table	Car
Army	Bank	Fire	Hold	Phone
Clock	Horse	Color	Baby	Sword
Desk	Grab	TV	Bird	Rock

Even though you had 2 minutes to memorize the words, you might have found it hard to remember even a couple of the words.

CONDUCT YOUR OWN EXPERIMENT! (CONT.)

Step 2:

1. Set your timer for 2 minutes.

2. Look at Word Box B for 2 minutes. Read the words across each row from left to right and try to memorize as many of the words as you can.
3. When the 2 minutes are over, cover the Word Box and write down as many words in the empty spaces as you can remember.

4. Count how many words you remembered and write that number in the Data Box.

WORD BOX B:

Horse	Cat	Dog	Fish	Bird
Orange	Yellow	Blue	Green	Black
Table	Chair	Desk	Bookshelf	Bed
Teacher	School	Student	Homework	Class
Apple	Banana	Kiwi	Grape	Pear

DATA BOX:

Total words remembered from Word Box A	
Total words remembered from Word Box B	

Observations and Conclusions

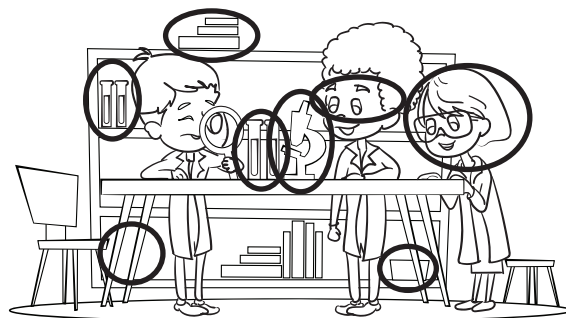
What did you observe about how many words you remembered from Word Box A and Word Box B? Even though you had 2 minutes to memorize the words, you might have found it hard to remember even a couple of the words from Word Box A because they were all different.

You probably remembered more words from Word Box B. The words in Word Box B are “chunked” to make them easy to group based on categories.

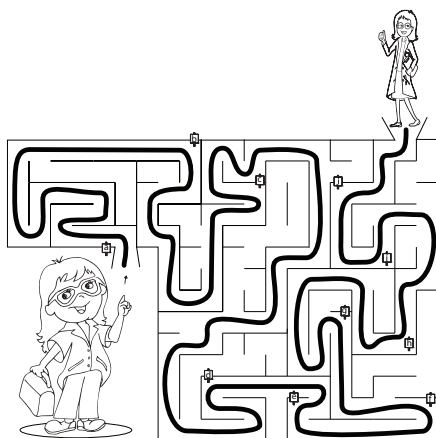
This idea of “chunking” or “clustering” items in groups, like animals or colors, can be a helpful tool for memorizing information!

ANSWERS TO ACTIVITY PUZZLES

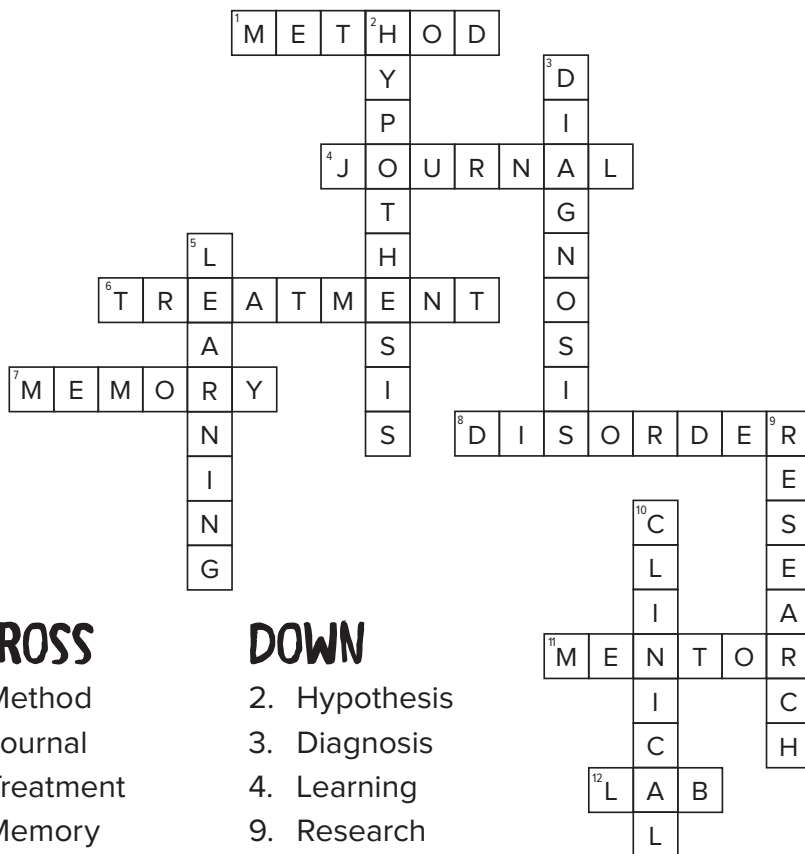
ANSWERS TO "CAN YOU SPOT THE DIFFERENCES?"



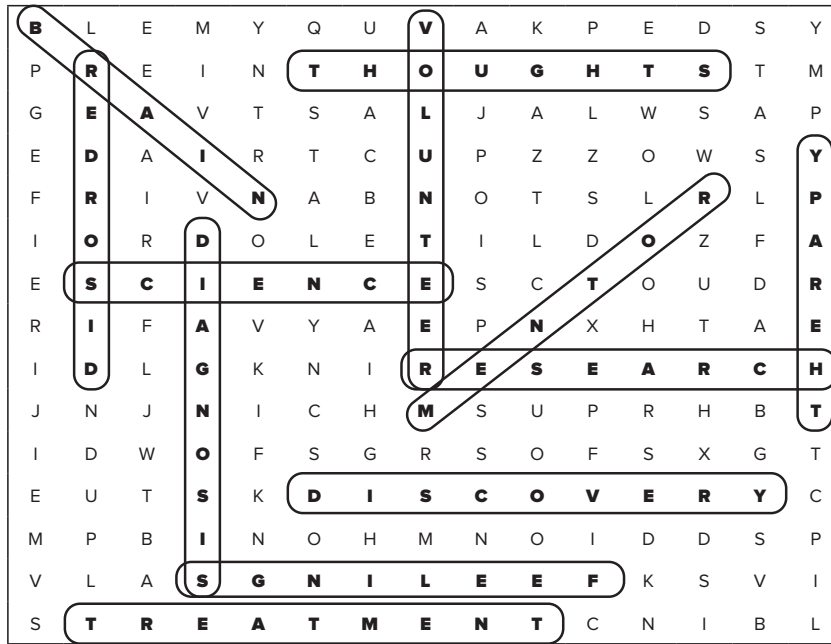
ANSWERS TO "MAZE"



ANSWERS TO "TEST YOUR KNOWLEDGE ABOUT CONDUCTING MENTAL HEALTH RESEARCH"



ANSWERS TO "ALL ABOUT MENTAL HEALTH RESEARCH"



ANSWERS TO "A CRYPTIC MESSAGE ABOUT YOUR FUTURE"

12 + 12	5 x 0	8 + 8	16 + 16	6 + 6	1 x 9	30 - 2	25 + 8	5 + 1	90 - 9	55 + 8	60 + 20	10 + 8
24	0	16	32	12	9	28	33	6	81	63	80	18
A	B	C	D	E	F	G	H	I	J	K	L	M

4 + 4	15 + 15	30 - 5	9 + 6	50 + 6	2 x 1	2 + 2	30 - 3	10 + 10	3 x 1	3 + 4	7 + 7	24 + 2
8	30	25	15	56	2	4	27	20	3	7	14	26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

I f y o u w o r k h a r d a n d
 6 9 14 30 27 3 30 56 63 33 24 56 32 24 8 32
 f o l l o w y o u r i n t e r e s t s ,
 9 30 80 80 30 3 14 30 27 56 6 8 4 12 56 12 2 4 2
 y o u c o u l d b e c o m e a
 14 30 27 16 30 27 80 32 0 12 16 30 18 12 24
 m e n t a l h e a l t h r e s e a r c h e r
 18 12 8 4 24 80 33 12 24 80 4 33 56 12 2 12 24 56 16 33 12 56
 a n d d i s c o v e r t h e k e y
 24 8 32 32 6 2 16 30 20 12 56 4 33 12 63 12 14
 t h a t h e l p s u s u n l o c k t h e
 4 33 24 4 33 12 80 25 2 27 2 27 8 80 30 16 63 4 33 12
 m y s t e r i e s o f t h e b r a i n .
 18 14 2 4 12 56 6 12 2 30 9 4 33 12 0 56 24 6 8



National Institute
of Mental Health

U.S. DEPARTMENT OF HEALTH
AND HUMAN SERVICES
National Institutes of Health
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For more information about mental health, visit the NIMH website at **www.nimh.nih.gov**. For information on a wide variety of health topics, visit the National Library of Medicine's MedlinePlus service at **<https://medlineplus.gov>**.

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