



Johnson & Johnson VISION

DEAR PARENTS,

The first time you saw your child...the first time they smiled at you...your first game of peek-a-boo...**sight**—our most precious sense! It allows us to uniquely connect with life's moments--and with each other.

When you think about education, you might not think about how much your child's vision, their eye health, can affect their learning and development. But actually, **80% of what we learn is through our eyes**¹ and school-age children with vision impairment can experience lower levels of educational achievement and self-esteem than their normally-sighted peers². Giving children every opportunity to succeed is just one of the reasons we're passionate about eye health and the importance of getting your child a comprehensive eye exam.

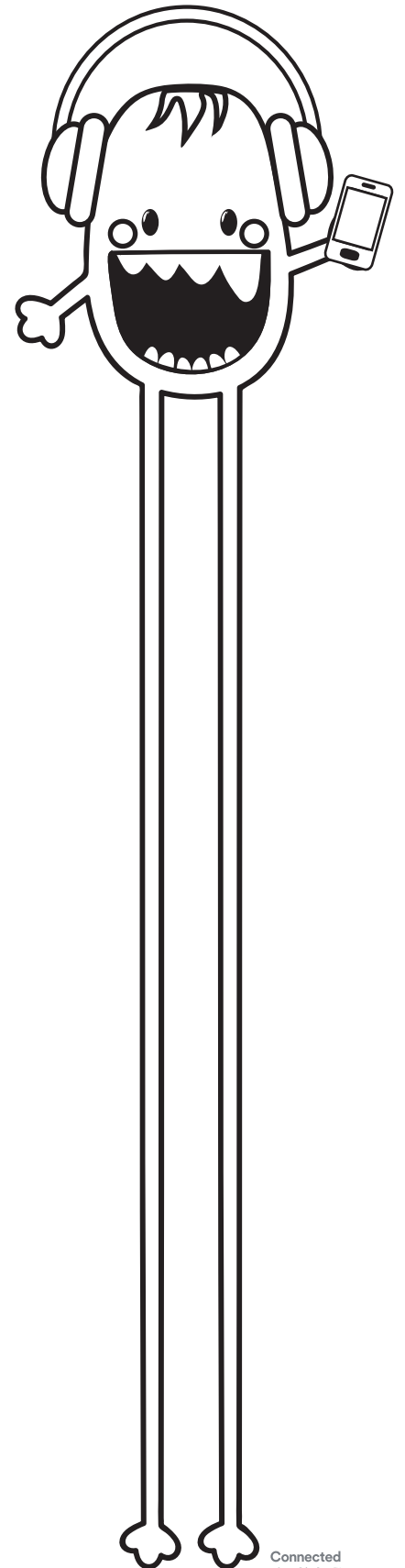
We're also passionate about serving our communities, so we've combined education and eye health to provide this fun little booklet for teachers and parents alike to share with their kids. From protecting and correcting vision to allow our youngest patients to grow, play, and learn; to enhancing and restoring vision to fully experience the lives we've built—we're there every step of the way to help people see better, connect better, live better.

Sincerely,

Johnson & Johnson Vision

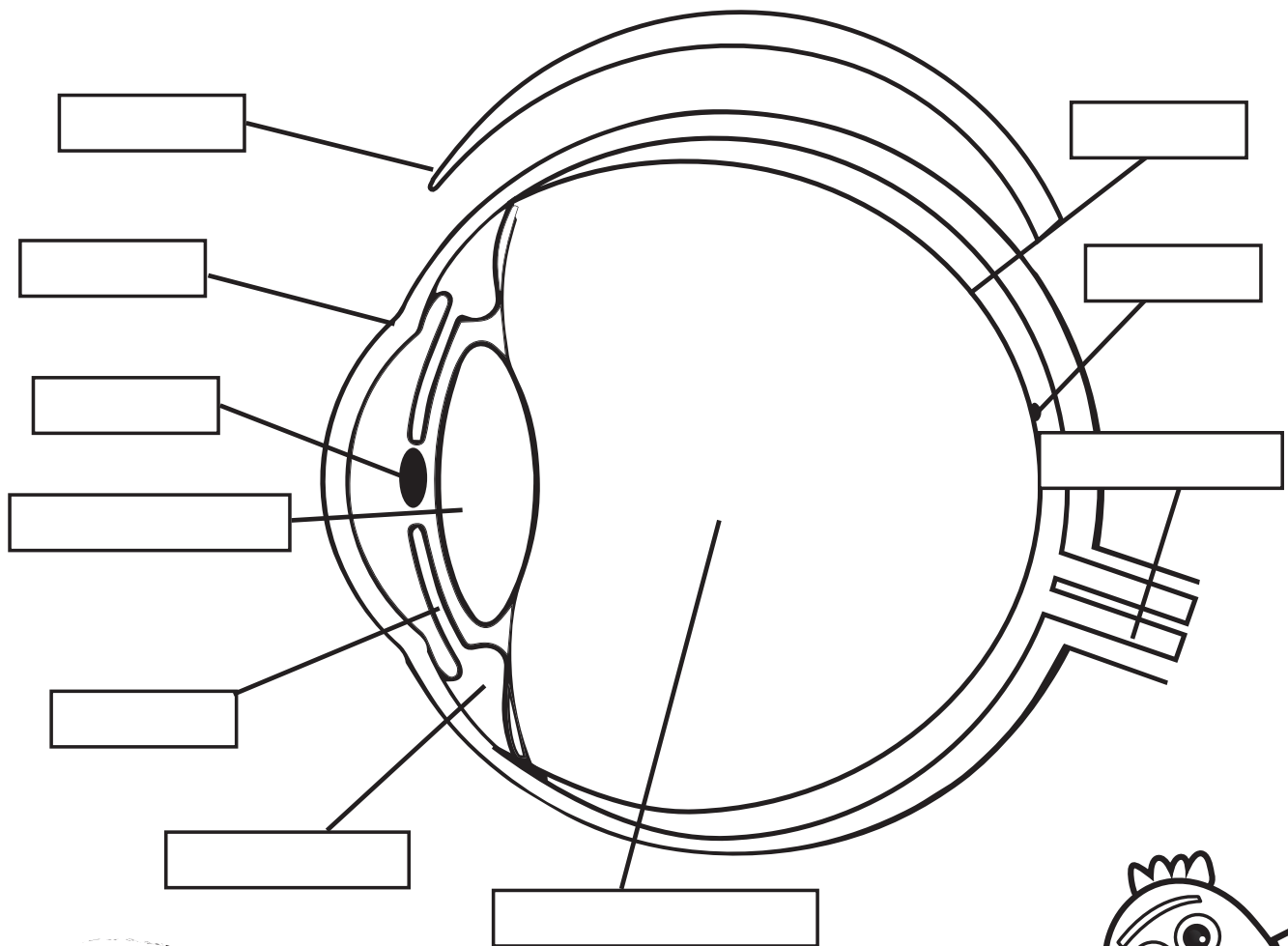
1. J Zaba. Journal of Behavioral Optometry. Volume 22, 2011

2. World report on vision. Geneva: World Health Organization; 2019. License: CC BY-NC-SA 3.0 IGO. page 14



DO YOU KNOW THE PARTS OF YOUR EYE?

See if you can name them below.



WORD LIST:

VITREOUS CHAMBER
EYE LIDS
CORNEA
IRIS
CILINARY BODY

PUPIL
CRYSTALLINE LENS
RETINA
MACULA
OPTIC NERVE

Did you know?

No one else in the world has the same eye color as you. How color appears in your eyes is unique to you!

Source:
<https://www.ao.org/eye-health/tips-prevention/eye-color-unique-as-fingerprint>

Vitreous Chamber: The area between the lens and the retina and includes a clear, jelly-like substance that fills the middle of the eye. It acts as a shock absorber to protect the retinal tissue.

Eye Lids: They are mostly muscle and contain the Meibomian gland. Eye lids protects the eye from foreign matter and spread tears over the surface of the eye to keep eye moist and vision clear.

Cornea: The clear, front window of the eye that transmits and focuses light into the eye. It helps bring light rays into focus on the retina.

Iris: The colored part of the eye that helps regulate the amount of light that enters and helps regulate pupil size.

Ciliary Body: Produces a watery and transparent fluid called aqueous humor that fills the interior of your eyeball. Home to the ciliary muscle, the contraction of which causes the lens to assume a more rounded shape.

Pupil: The dark aperture in the iris that determines how much light is let into the eye. It gets smaller with light and when focusing on something in the near distance.

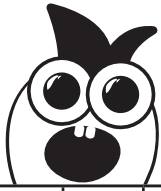
Crystalline Lens: A transparent, flexible structure that sits behind the iris. It adjusts to bring objects into focus at different distances and focuses light rays onto the retina.

Retina: A nerve layer that lines the back of the eye, senses light, and creates electrical impulses that travel through the optic nerve to the brain.

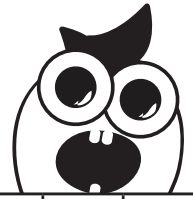
Macula: A small central area in the retina that contains special light-sensitive cells that allows us to see fine details clearly such as reading and driving.

Optic Nerve: Connects the eye to the brain and carries the electrical impulses formed by the retina to the visual cortex of the brain. The brain then interprets the messages as images and vision occurs!

WORD SEARCH



Theme: Parts of the Eye



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

WORD LIST:

CILIARY
CORNEA

EYELID
IRIS

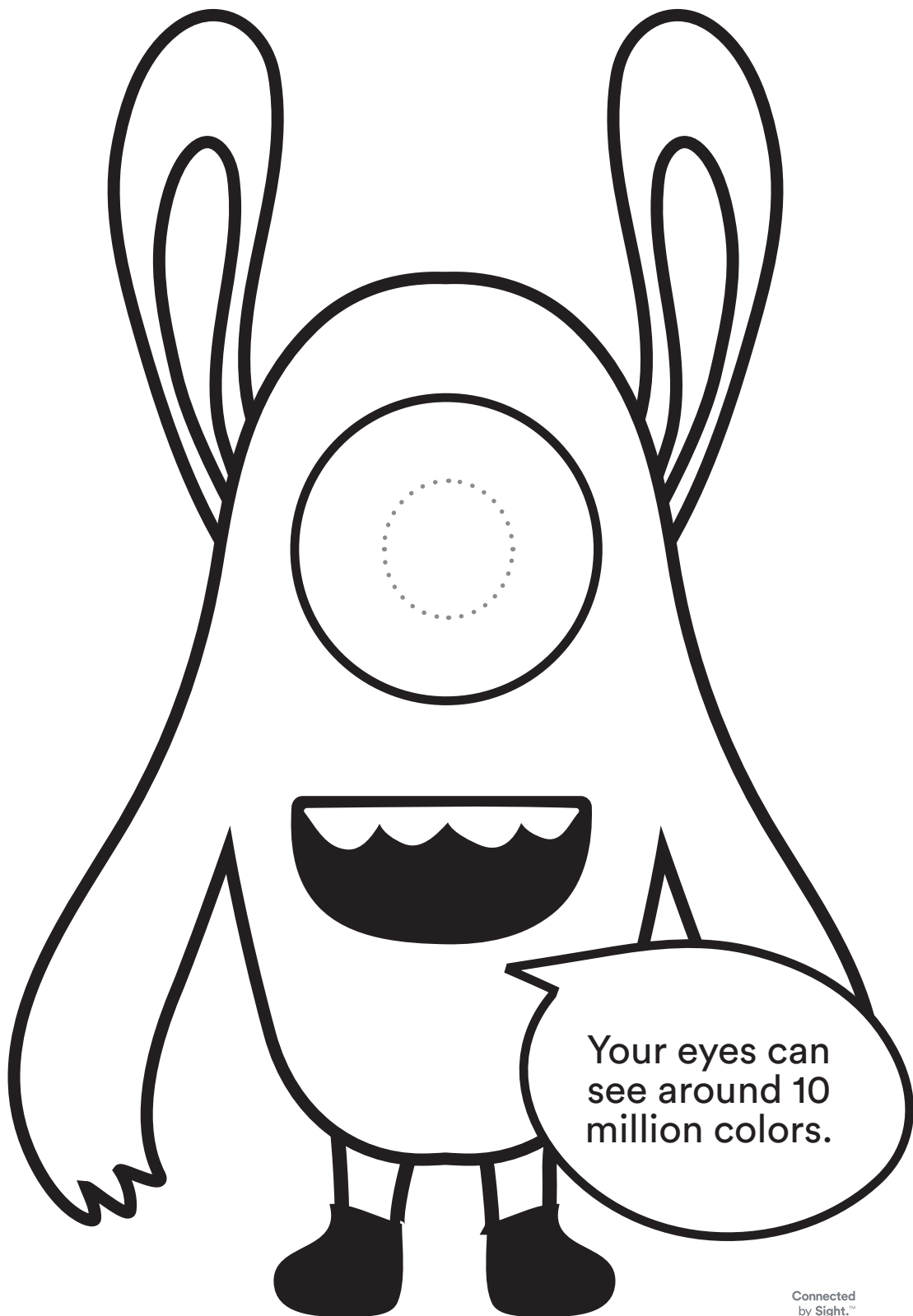
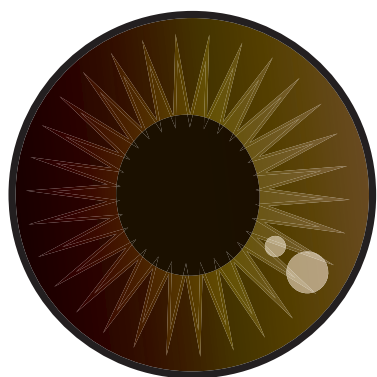
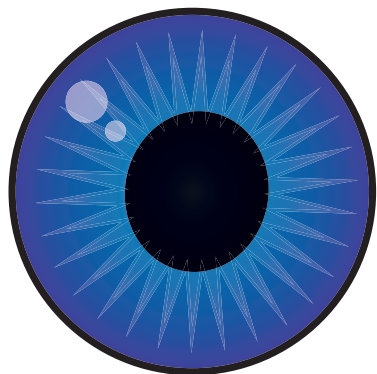
LENS
MACULA

OPTIC
PUPIL

RETINA
VITREOUS

COLORING

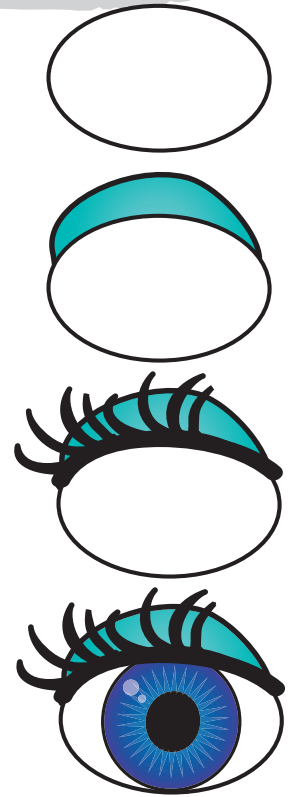
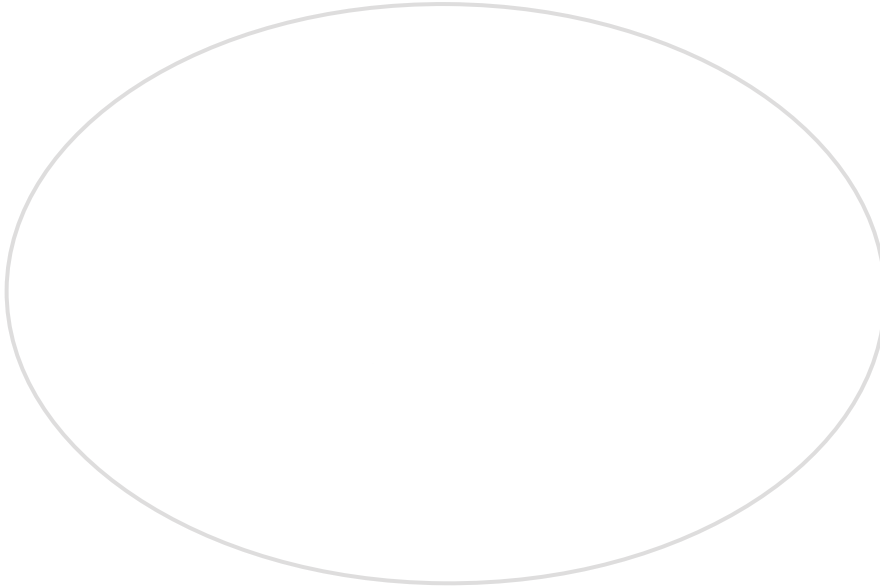
Have fun making your own iris creation.



Your eyes can
see around 10
million colors.

DRAWING

In the blink of an eye! Your eye is one of the fastest muscles in your body.



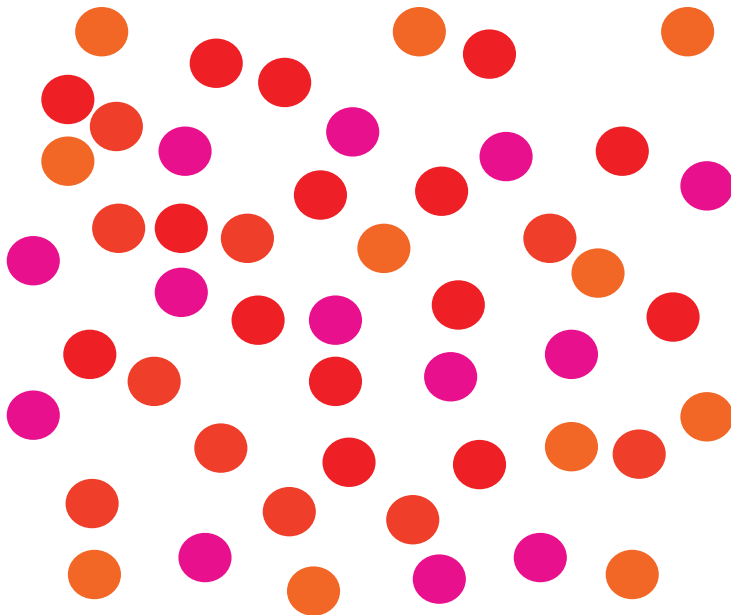
Draw an eye

- 1 Draw an oval to represent eyeball
- 2 Add two small circles inside the first one to represent the iris and the pupil
- 3 Sketching lines inside the iris gives more texture. You can also add blood vessels on the white part of the eyeball, called the sclera
- 4 For 3D effect, add shadows and reflections

OPTICAL ILLUSION

An optical illusion is something that deceives the eye by appearing to be other than it is. Optical illusions help us understand our visual system. In the case of color, sometimes we perceive an object's color not based on its actual color, but how it compares to the surrounding colors...it's all about how the brain interprets them.

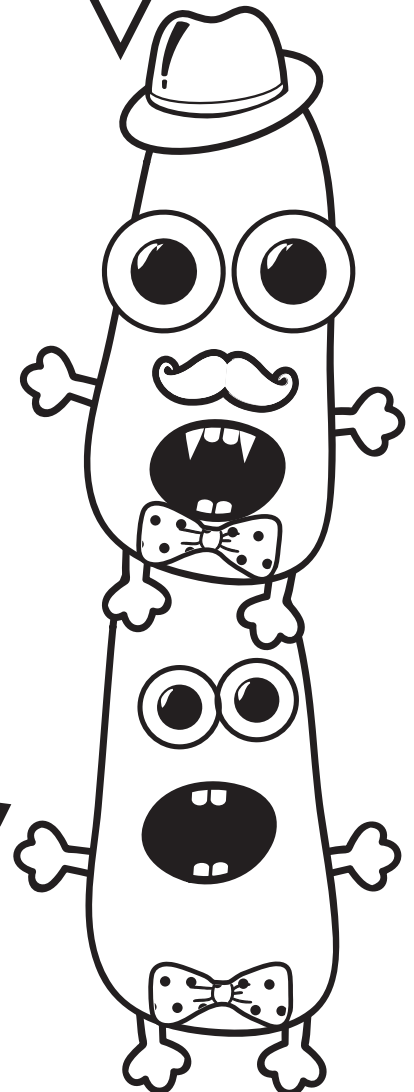
How many red dots do you see?



Seeing requires about half the brain to get involved.

Many birds, insects, and fish can see ultraviolet light which humans cannot.

Dogs cannot distinguish between red and green.



Source:
<https://www.aoa.org/eye-health/tips-prevention/how-humans-see-in-color>
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5717654/>

JUMBLE

Unscramble the eye-healthy foods.

NCHSIPA _ _ _ _ _

CILRBOCO _ _ _ _ _

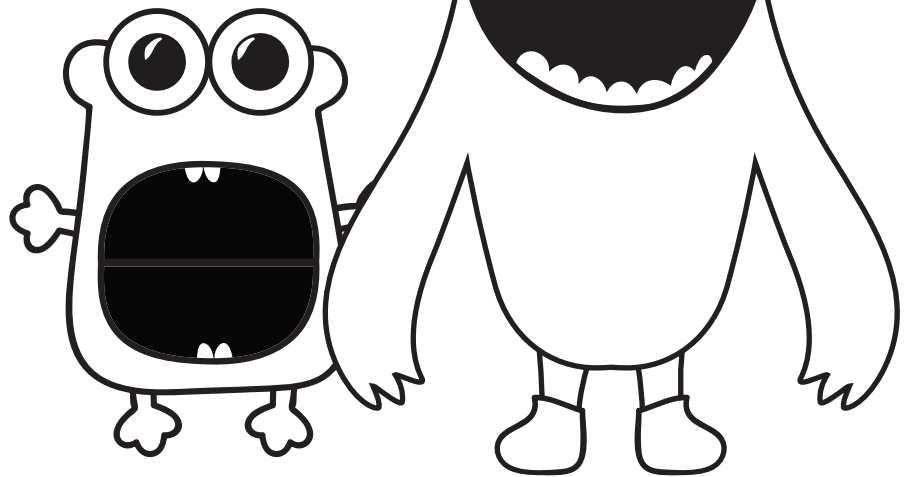
TSROACR _ _ _ _ _

NAUT _ _ _ _ _

TSUN _ _ _ _ _

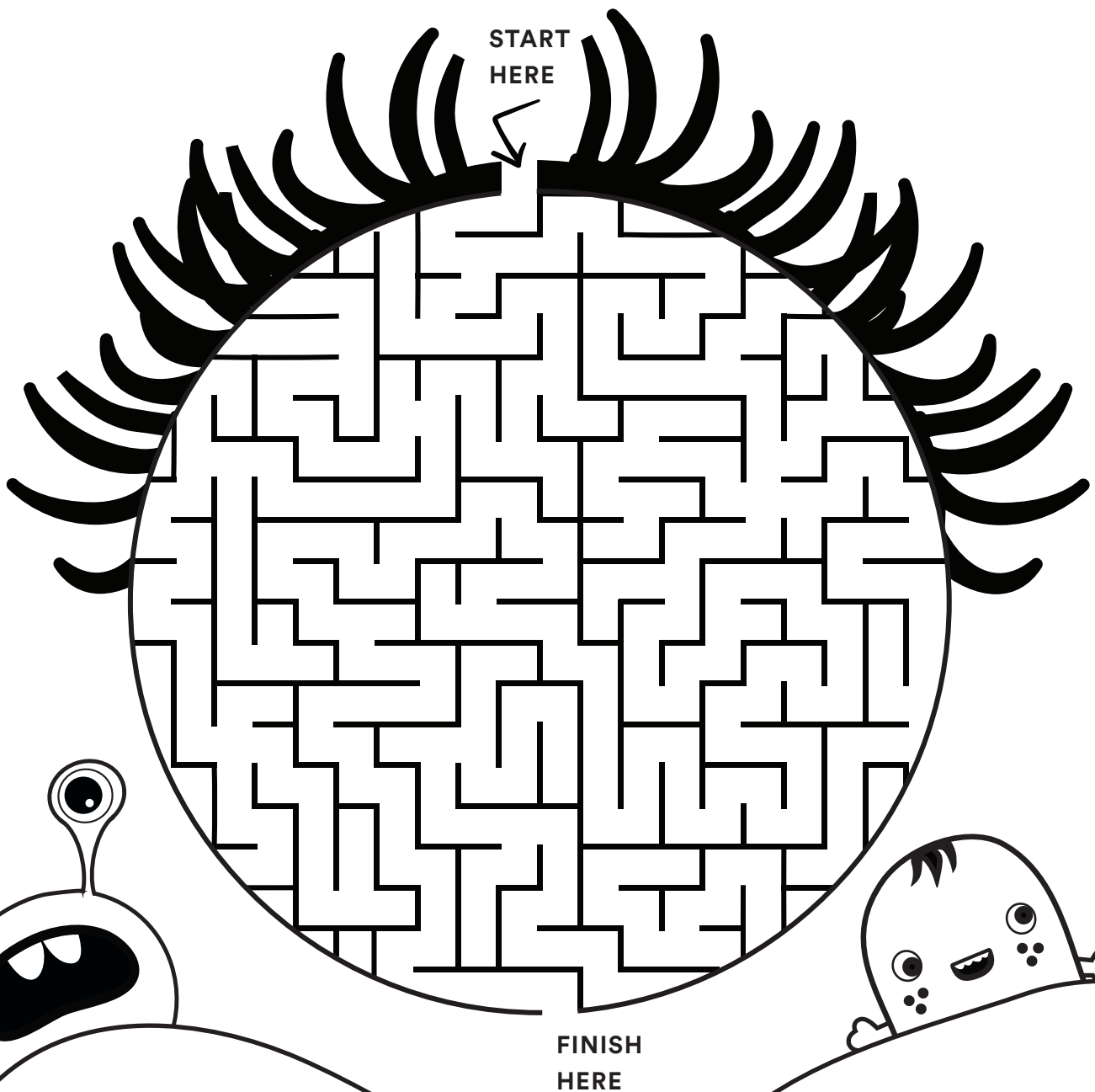
TWSEE OTSATEOP _ _ _ _ _

Antioxidants in
dark leafy greens
help protect your eyes from
damaging light.



Source:
<https://www.medicalnewstoday.com/articles/321226#10-best-foods-for-eye-health>

MAZE



Did you know?

Your body makes 3 types of tears and a total of 15–30 gallons of tears each year.

Eyelashes are among the shortest hairs on the body with the longest lifespan.

Source:

<https://www.aao.org/eye-health/tips-prevention/facts-about-tears>

<https://www.aao.org/eye-health/tips-prevention/why-do-humans-have-eyebrows-eyelashes>

FUN FACTS

Green eyes are the rarest, with only about 2% of the world's population having them.

Out of all the muscles in your body, the muscles that control your eyes are the most active

You see things upside down—it is your brain that turns the image the right way up

An ostrich's eye is bigger than its brain

Of our five senses, sight determines 80% of what we remember

“Red eye” occurs in photos because light from the flash bounces off the back of the eye

The world's most common eye color is brown, and eye color is determined by melanin in your iris

Pirates believed that wearing gold earrings improved their eyesight

An eye is composed of more than 2 million working parts

Eyes heal quickly. With proper care, it only takes about 48 hours to repair a corneal scratch

Eyebrows help keep sweat from dripping into your eyes and eyelashes help keep out dirt

You should always wear sunglasses and a hat in bright light to protect your eyes from UV rays

Your eyeballs stay the same size from birth to death, while your nose and ears grow

Dolphins can sleep with one eye open

Owls cannot move their eyeballs which is why they move their head all the way around

Sources:

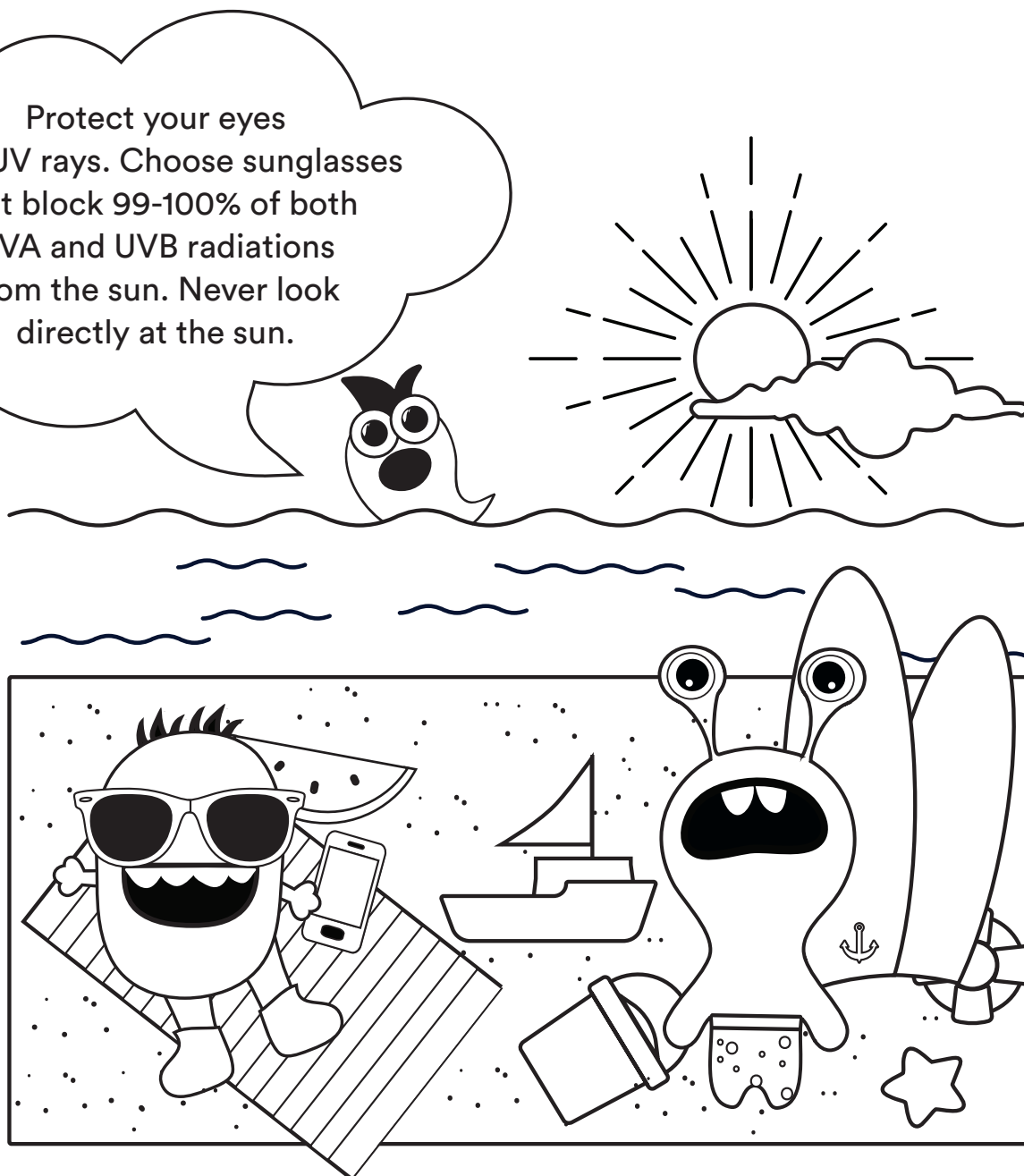
<https://www.vsp.com/eyes.html>
<https://discoveryeye.org/way-eyes-work/>
<https://opto.ca/health-library/funny-eye-facts>
<https://retinaeyedoctor.com/2010/03/eye-images-reversed-on-retina/>
<https://telanganatoday.com/ostrichs-eyes-are-bigger-than-its-brain>
https://en.wikipedia.org/wiki/Red-eye_effect
<http://news.mit.edu/1996/visualprocessing>
<https://www.worldatlas.com/articles/which-eye-color-is-the-most-common-in-the-world.html>
<https://ghr.nlm.nih.gov/primer/traits/eyecolor>
<https://www.livescience.com/33099-why-did-pirates-wear-earrings-.html>
<https://www.nursingschools.net/blog/2011/06/15-fascinating-facts-about-your-five-senses/>
https://www.health.harvard.edu/a_to_z/corneal-abrasion-a-to-z
<https://www.mcgill.ca/oss/article/did-you-know/owls-dont-have-eyeballs>
<https://perryponders.com/2017/07/31/dolphins-sleep-with-one-eye-open>
<https://visionsource.com/blog/6-amazing-fun-facts-about-our-eyes/>
<https://www.aao.org/eye-health/tips-prevention/how-humans-see-in-color>
<https://www.mypaininstitute.com/eye-care/the-benefits-of-eating-leafy-greens-for-your-eyes/>
<http://discoveryeye.org/20-facts-about-the-amazing-eye>
<https://www.aao.org/eye-health/tips-prevention/eye-color-unique-as-fingerprint>

SEEK AND FIND

Can you spot these objects in the picture below?

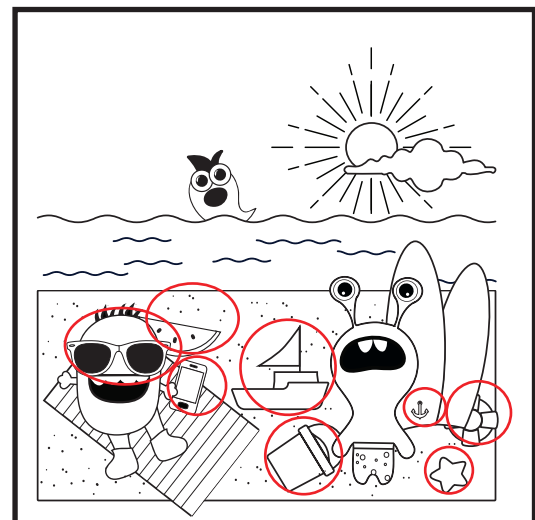
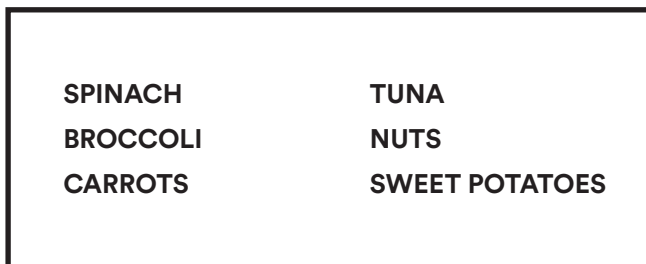
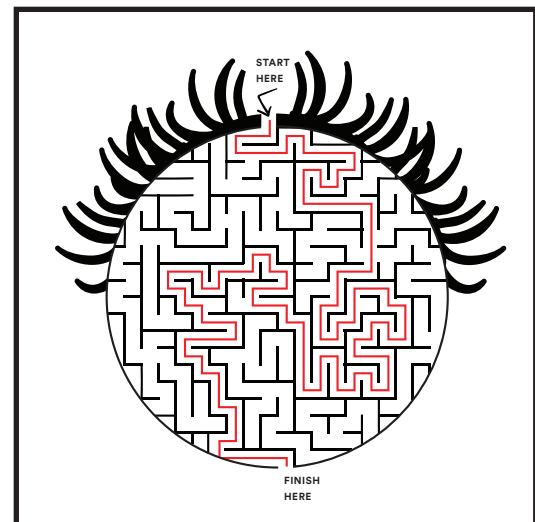
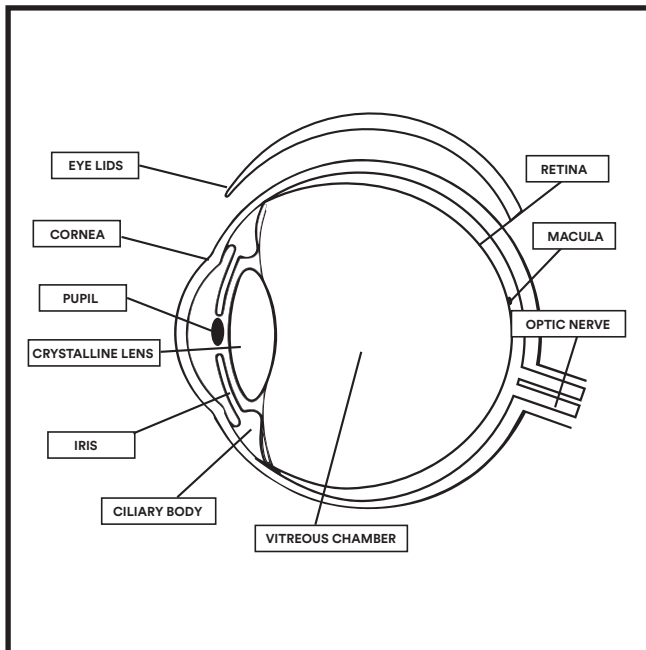
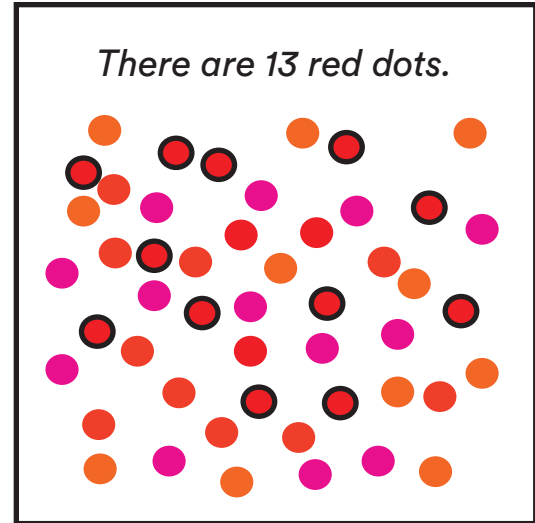
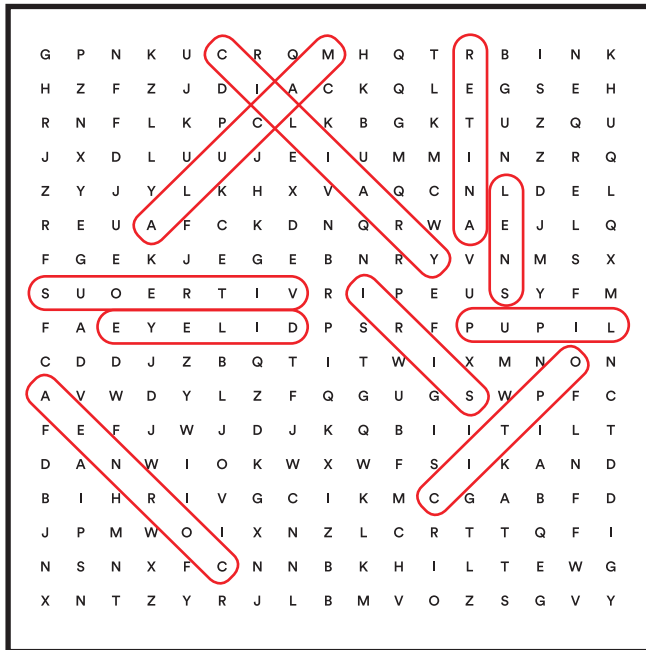


Protect your eyes
from UV rays. Choose sunglasses
that block 99-100% of both
UVA and UVB radiations
from the sun. Never look
directly at the sun.



Source:
<https://www.nei.nih.gov/learn-about-eye-health/nei-for-kids/healthy-vision-tips>

ANSWERS



Our recommended reading about eyes:

The Eye Book by Dr. Seuss

I Can Read Fancy Nancy Spectacular Spectacles by Jane O'Connor

The Patch by Justina Chen Heddley

Pearl and Wagner Four Eyes by Kate McMullan

About us

At Johnson & Johnson Vision, part of the Johnson & Johnson Medical Devices Companies, we have a bold ambition: **to change the trajectory of eye health worldwide.**

Vision is our most valued sense—yet little is done to preserve, correct, or enhance sight. While a comprehensive eye exam can detect more than 270 different medical conditions like diabetes and heart disease¹, unfortunately only 1 in 100 people understand the importance of getting one².

We encourage everyone to take the single most important step in eye health—**get an eye exam.** For eyes don't just help us see out; they help us look in—revealing insights to overall health and well being.

For more information, visit us at [jjvision.com](https://www.jjvision.com). Follow [@JNJVision](https://twitter.com/JNJVision) on Twitter and [Johnson & Johnson Vision](https://www.linkedin.com/company/johnson-johnson-vision) on LinkedIn.

1. Systemic Conditions with Ocular and Visual Manifestations. American Optometric Association. December 2019.

2. Surprising Eye Health Stats. VSP Vision. <https://www.vsp.com/eyewear-wellness/eye-health/eye-health-survey-results>. Accessed January 22, 2020.