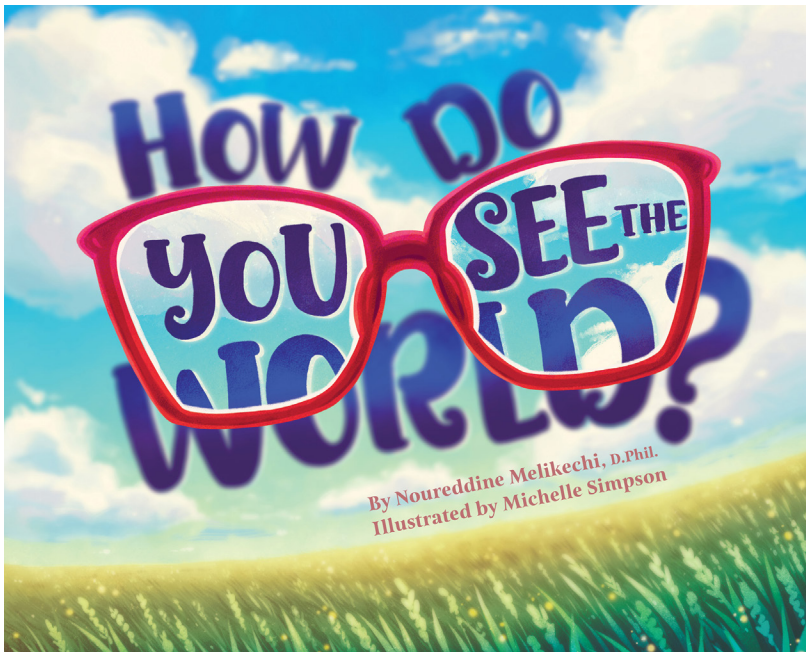


How Do You See the World? Teacher's Guide

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To be used with:
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Sparking curiosity through reading

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Sparking curiosity
through reading

Pre-Reading: Magnifying Glasses

GRADES: 1st - 5th

MATERIALS: Magnifying glasses
blank papers, objects to put under the
magnifying glass

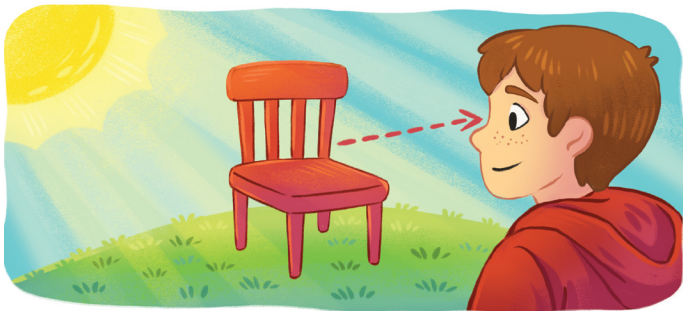
SUBJECT: Observing Changes in Sight

NGSS: 4-PS4-2

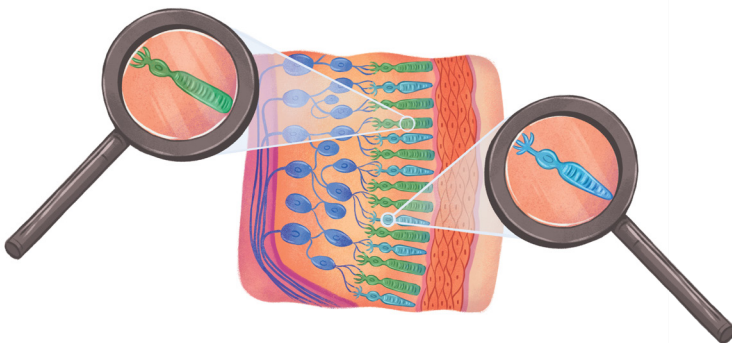
SKILLS: Making observations,
understanding near and far sightedness

Activity:

1. Lay out white papers in front of students, and hand out the magnifying glasses.
2. Put 5 objects out on the tables in front of the students for them to choose from.
3. Have students look at the objects with the naked eye and write down the details about what they see with the objects.
4. Give the students 15 minutes to allow them to put the objects on the paper and look at it under the magnifying glass.
5. Bring the students back together and write down on the board what the students observed about the sizes of the objects, and the details they were able to see with the magnifying glasses.
6. Then split the students into groups and have them write down the differences between the magnifying glass versus the naked eye.



Background: *How Do You See The World?* introduces children to the world around them using vision and sight. Before the students read the book, have them understand that there are forces that change what we see.



Discussion:

What did you see with just your eyes?

What did you see better with the magnifying glass?

How did the objects look different with the magnifying glass?

What else do people use that changes the way we see?

Pre-Reading: Sharing Stories

GRADES: 1st - 5th

MATERIALS: *How Do You See The World?*

SUBJECT: Discussing eyes and their function

NGSS: 4-PS4-2

SKILLS: Critical thinking and making observations



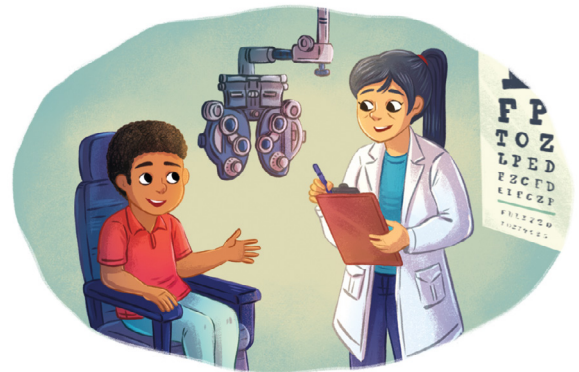
Background: *How Do You See The World?* introduces children to the world around them using vision and sight. Before students read the book, help them gather any information they already have about their eyes and their function.



Activity:

Gather students and start asking them the following questions:

1. What do you use your eyes for every day?
2. Have you ever worn glasses or visited an eye doctor, or has someone in your family? What happened?
3. What can make our eyes feel hurt or uncomfortable?
4. Why do you think it's important to keep our eyes safe?
5. What can we do to keep our eyes healthy?



Discussion:

After students have answered, briefly summarize the key points. Reinforce that seeing an eye doctor and wearing protective glasses are common and helpful practices for maintaining good eye health.

Inform students that the book you are about to read will provide more information about eye health and different eye conditions they, or someone close to them, may have.

After-Reading: Guess The Object

Background: *How Do You See The World?* introduces children to the world around them using vision and sight. After the students read the book, help them understand how sight works in practice and how we use it in our daily lives.

Activity:

Choose a student to come up to the front of the room and put on a blindfold:

1. Place a classroom object in front of the blindfolded student without them seeing it.
2. Ask the blindfolded student to use their sense of touch to guess what the object is. They have up to five guesses to figure it out.
3. Tell the students that without sight, we rely more on our other senses, like touch, to identify objects.
4. After the student has made their guesses, discuss how using touch helped them guess the object and what it was like to try and identify something without seeing it.

GRADES: 1st - 5th

MATERIALS: Blindfold, classroom objects

SUBJECT: Understanding uses of sight

NGSS: 2-PSI-1

SKILLS: Making observations, understanding how our eyes help us see, understanding the function of vision in practice

Discussion:

Is it harder to guess objects without using your eyes? Why do you think that is?

What do our eyes do to help us see and understand objects?

Is it easier to see something far away or close up when you have your sight?

How does knowing this help us understand what it's like for people who have trouble seeing?



Parts of the Eye Worksheet

Background: *How Do You See The World?* introduces children to the world around them using vision and sight. This activity helps students understand all the parts that make up our eyes and help us to be able to see the world around us.

Activity:

1. Hand out the worksheet to the students.
2. Allow them to work together in order to establish which parts of the eye go where.
3. Once finished, put the worksheet up on the board and work through the worksheet together to make sure all the parts of the eye are where they should be.
4. Go over the function of each part using the proper terms and wording (as written in the book).

ANSWERS:

1: *cornea* 2: *iris* 3: *lens* 4: *pupil* 5: *retina* 6: *optic nerve*

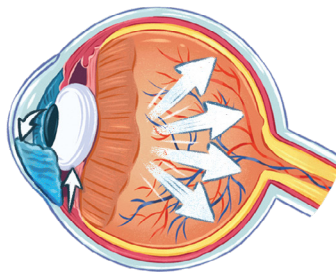
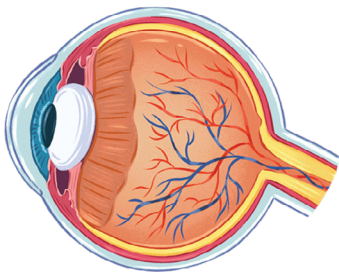
GRADES: 2nd - 5th

MATERIALS: *How Do You See The World?*, worksheet (listed below), pencils

SUBJECT: Understanding the parts of the eye

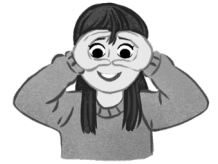
NGSS: 4-PS4-2

SKILLS: Making observations, understanding how our eyes help us see, understanding the parts of our eyes and where they go



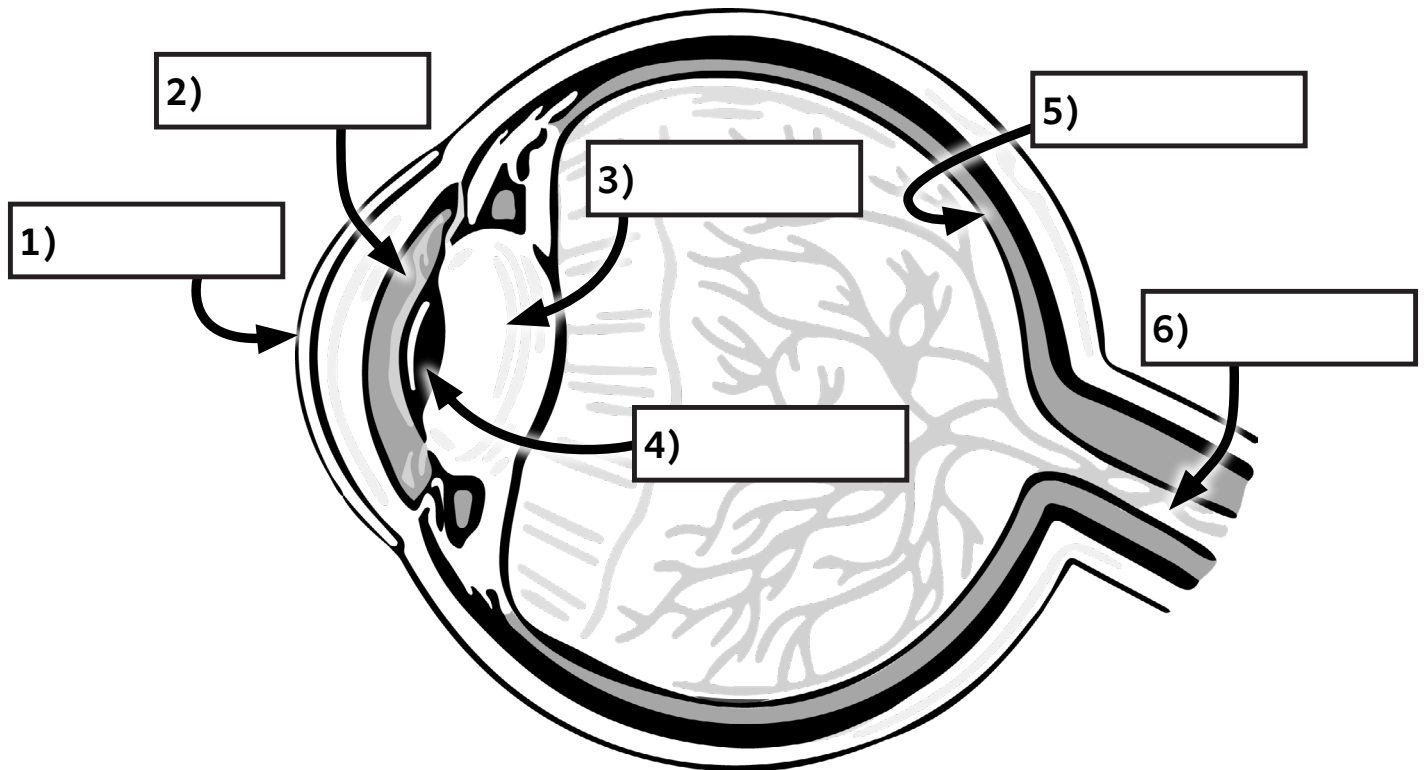
Name: _____

Date: ___/___/___



How many
do you know?

Parts of the Eye Worksheet



Use the word bank to label the parts of the human eye:

RETINA

PUPIL

LENS

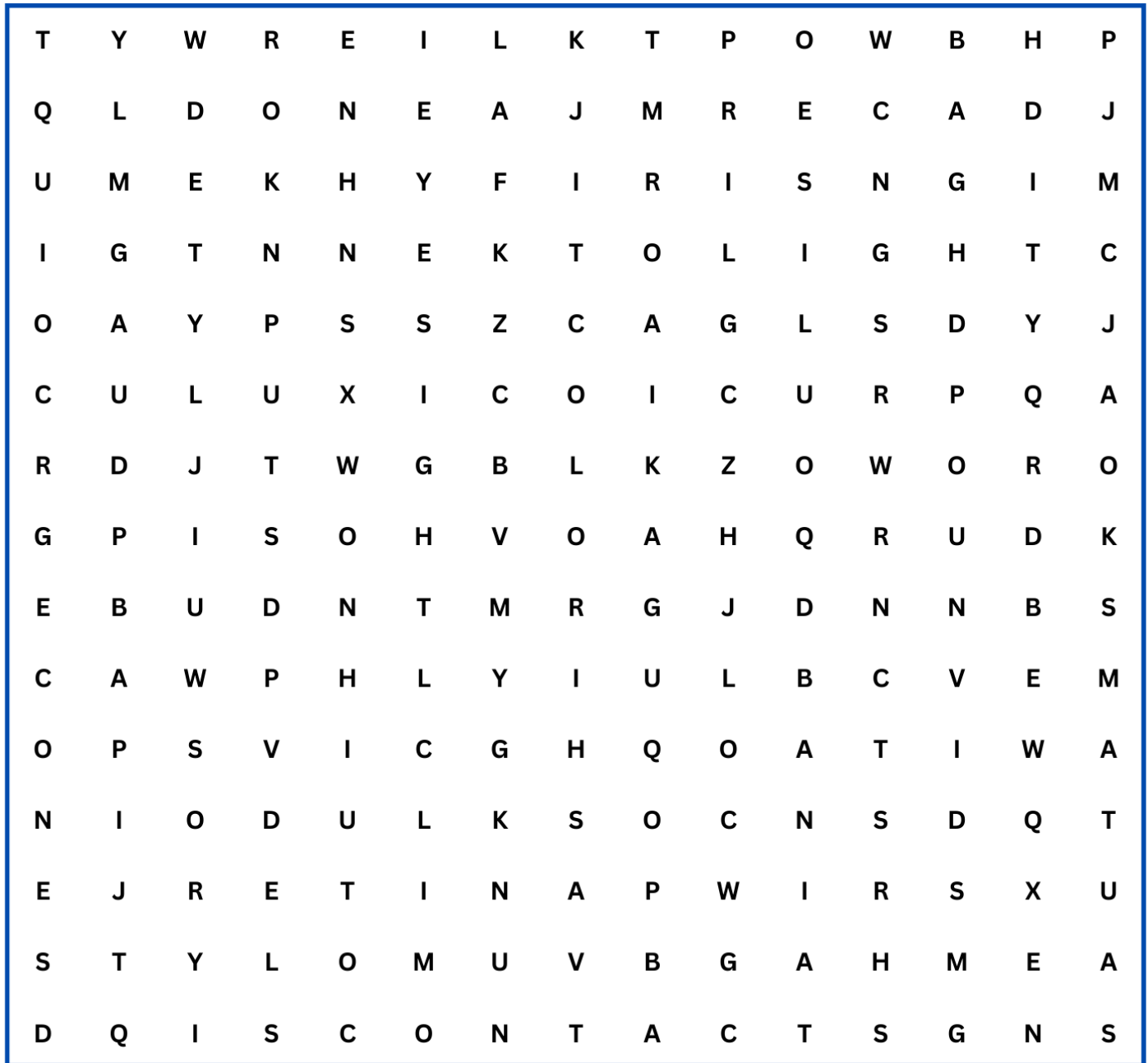
IRIS

OPTIC NERVE

CORNEA

Eyesight Word Search

Find the words listed below in the puzzle. Words are written forwards, vertical, and diagonal.



EYESIGHT
CORNEA
RETINA
LIGHT

PUPIL
IRIS
LENS
COLOR

CONTACTS
GLASSES
CONES
RODS

Word Search Answers

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



DESIGN YOUR GLASSES!

Color in the glasses below in the style that you like best. They could be your favorite color, striped, or polka dot, or even rainbow. When you are done coloring them in, cut them out with the help of an adult and tape a popsicle stick or straw to the side. *Now you can wear them!*

