

LIGHT AND SPECTRUM

ESCAPE ROOM

LEVEL 1 DECODER

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

LEVEL 2 DECODER

| | | | |
|---|--|---|----|
| + | | = | 10 |
| + | | = | 8 |

RECORDING SHEET

| | | | | |
|---------|----|----|----|----|
| LEVEL 1 | Q1 | Q2 | Q3 | Q4 |
| | # | # | # | # |

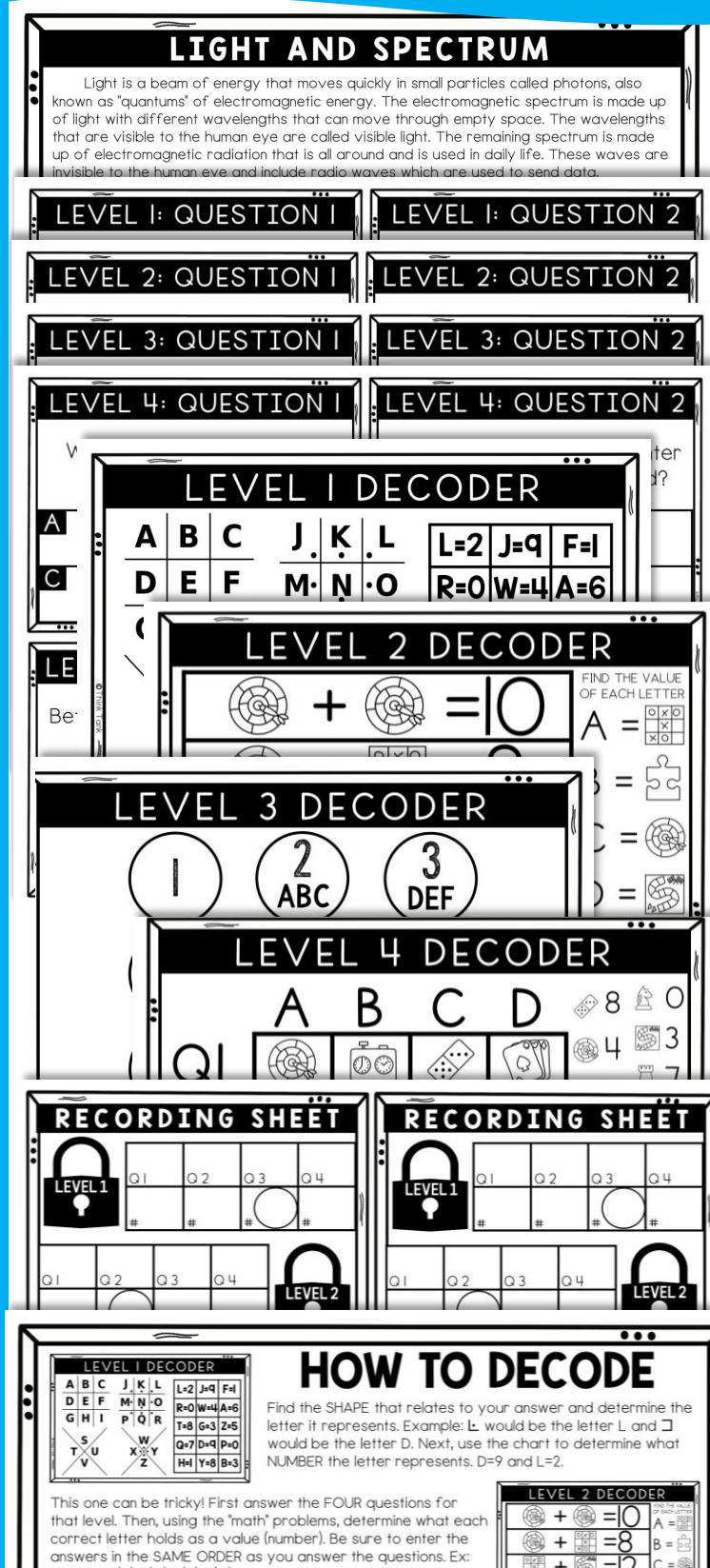
QUESTION 2

What color is considered a combination of all colors?

| | |
|--------------------------|--------|
| <input type="checkbox"/> | Black |
| <input type="checkbox"/> | Maroon |
| <input type="checkbox"/> | White |
| <input type="checkbox"/> | Gray |

THINK TANK

WHAT'S INCLUDED?



- ✓ READING PASSAGE
- ✓ 4 PUZZLE DECODERS
- ✓ 16 MULTIPLE CHOICE Q'S
- ✓ TEACHER GUIDE
- ✓ ANSWER KEY
- ✓ STUDENT DIRECTIONS
- ✓ HINT CARDS



16 QUESTIONS

T AND SPECTR
...gy that moves quickly in small particles of electromagnetic energy. The electromagnetic spectrum includes wavelengths that can move through empty space. The wavelengths that can be seen by the human eye are called visible light. The radiation that is all around and is used to heat and cook food, and electric and magnetic fields include radio waves which are used to cook food, and electric and magnetic radiation. The study of light is called optics. Light has both electric and magnetic properties. The study of light is called optics. Light has both electric and magnetic properties. The study of light is called optics.

LEVEL 1: QUESTION 1
What are the small particles of light called?
A Fulcrums B Prisms
C Photons D Protons

LEVEL 1: QUESTION 2
What color is considered a combination of red and blue?
A Maroon B Gray
C Yellow D Purple

LEVEL 2: QUESTION 1
Which waves are used to send data?
A Liquid B Translucent
C Radio D Tangible

LEVEL 1: QUESTION 3
What are objects called that block light from passing through them?
A Opaque B Transparent
C Translucent D Reflective

RECORDING SHEET
LEVEL 1
Q1 Q2 Q3 Q4
#

RECORDING SHEET
LEVEL 1
Q1 Q2 Q3 Q4
#

LEVEL 1 DECODER
B C J K L
E F M N O
H I P Q R
U X Y Z
L=2 J=q
R=0 W=4
T=8 G=3
Q=7 D=9
H=1 Y=8
N=4 C=6

LEVEL 4: QUESTION 1
Who was the first to discover the relationship between light and color?
A Galileo Galilei B Isaac Newton
C Dmitri Mendeleev D Johannes Sebastian Bach

LEVEL 4: QUESTION 2
Who discovered the periodic table?
A Dmitri Mendeleev B Isaac Newton
C Galileo Galilei D Johannes Sebastian Bach

LEVEL 3 DECODER
1 2 3
4 5 6
7 8 9
WXYZ

LEVEL 3: QUESTION 1
The visible spectrum begins at the frequency of ___ terahertz.
A 850 B 405
C 100 D 202

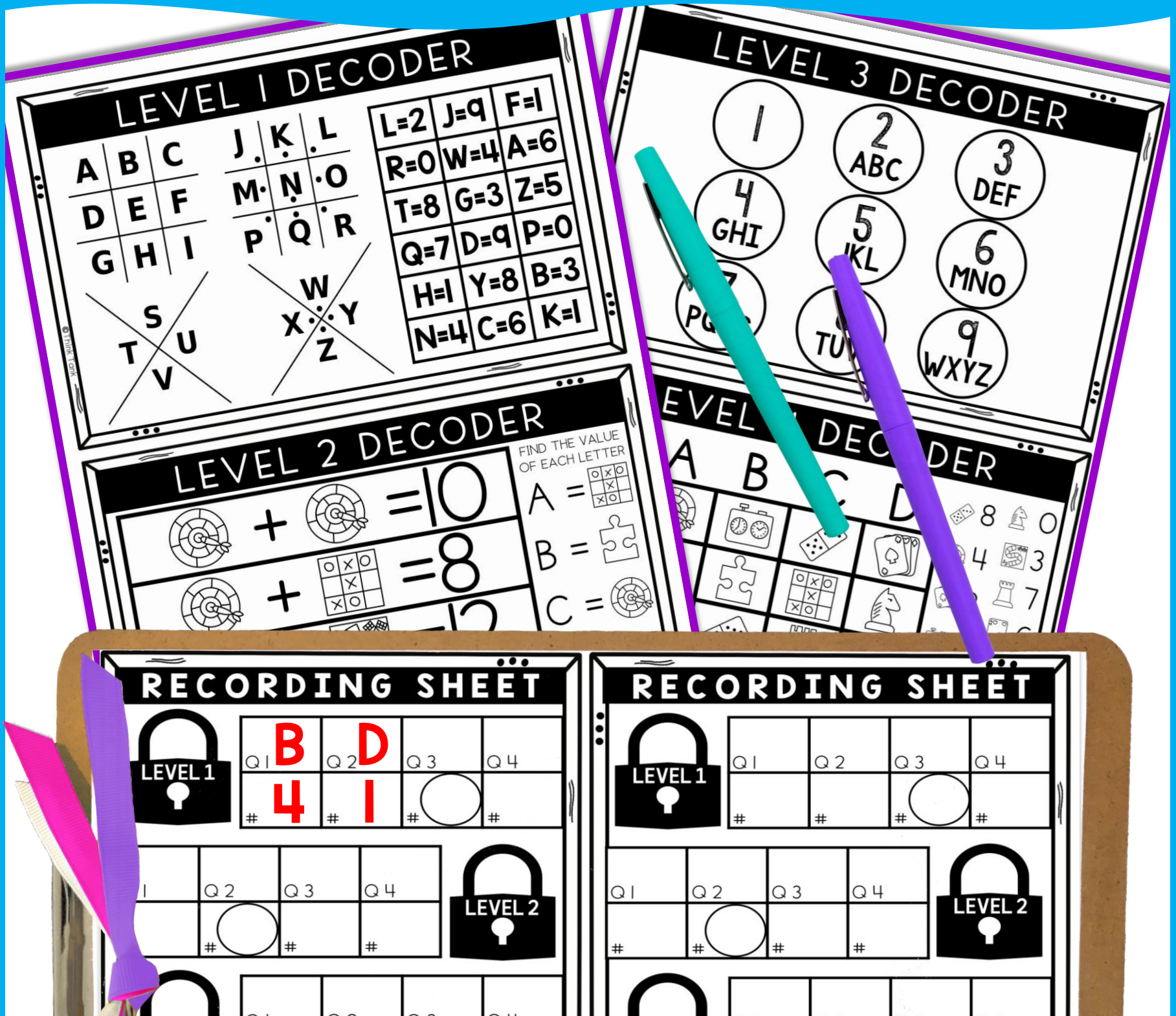
LEVEL 3: QUESTION 2
What are the wavelengths that are visible to the human eye called?
A Tangible light B Perishable light
C Visible light D Angiogram light

LEVEL 3: QUESTION 3
When light passes through matter, the matter is called _____.
A Lacertid B Translucent
C Opaque D Transparent

LEVEL 3: QUESTION 4
How many colors are in the visible spectrum?
A 7 B 10
C 12 D 16

LEVEL 4 DECODER
A B C D
Q1 Q2 Q3
8 9 0
4 3
2 7
6


PUZZLE TYPES



PRINT, CUT, PLAY



HOW IT WORKS



ENGAGING READING COMPREHENSION PRACTICE!

1

Students work individually (or in pairs) and visit 16 question cards.

2

Students will answer the questions found directly in the passage on their recording sheet.

3

Students will use that specific “decoder” to reveal a 4-digit code for each level.

LIGHT AND SPE

Light is a beam of energy that moves quickly in small packets known as “quanta” of electromagnetic energy. The elements of light with different wavelengths that can move through the atmosphere that are visible to the human eye are called visible light. These are part of the electromagnetic radiation that is all around and is invisible to the human eye and include radio waves which are used for communication, microwaves that are used to cook food, and gamma rays which are used in treatments to cure cancer. Light has both electric and magnetic fields.

LEVEL 1 DECODER

| | | | | | | | | |
|--------------|--------------|--------------|--------------|--------------|--------------|-----|-----|-----|
| A | B | C | J | K | L | L=2 | J=9 | F=1 |
| D | E | F | M | N | O | R=0 | W=4 | A=7 |
| G | H | I | P | Q | R | T=8 | G=3 | Z=6 |
| T | S | U | X | W | Y | Q=7 | D=9 | P=0 |
| | | | | | | H=1 | Y=8 | B=3 |
| | | | | | | N=4 | C=6 | K=1 |

LEVEL 1: QUESTION 1

What are the small particles of light called?

Fulcrums

A

Prisms

Photons

B

Protons

LEVEL 1: QUESTION 3

What are objects called that block light from traveling through them?

Spacious

C

LEVEL 1: QUESTION 2

What color is the combination of red and blue?

Maroon

D

Gray





LEVEL 1: QUESTION 4




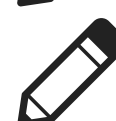
Light has both electric and magnetic fields.

BENEFITS



THINK OUTSIDE THE BOX!

-  ANTICIPATORY SETS
-  UNIT REVIEW
-  EARLY FINISHERS
-  STATIONS
-  SUB PLANS
-  PARTNER WORK
-  ENRICHMENT

-  LOW PREP
-  PRINT, CUT & PLAY
-  CROSS-CURRICULAR
-  HIGHLY ENGAGING

