

4th Grade

WORD PROBLEMS

SHERLOCK HOLMES
ESCAPE ROOM



PRINTABLE • GOOGLE • WEBSCAPE™



Dear Watson,

I've been assigned the Case of the Missing Stamp Collector. His home was found empty last Tuesday night. I need your help.

You must solve the clues in the stamp collector's house to find out where he has been taken.

- Find the crooked picture frame.
- Find the mop used to clean up the scene.
- Find the key to the hidden door.
- Unlock the door to find a letter from the rival stamp collector.

After each challenge, add the clue to your library to solve the case.

Sincerely,

Sherlock Holmes

Help Sherlock Holmes!

Students won't realize they are practicing Word Problems skills! They will be immersed in the storytelling and our original videos as they complete math challenges.

Learn more!



4 Mathematics Challenges

- Challenges focused Word Problems
- Each challenge takes about 20-30 minutes

Challenge #1

1. Solve each multiplicative comparison word problem.
2. Record answers on your brochure.
3. Check your answers in the Detective Decoder.
4. Add the frame to your library.
5. Scan the QR code in the corner of the next page.
6. Move on to the challenge #2.



1. The stamp collector goes to the craft store and buys a hook to hang a painting for \$100 and a stand that costs 3 times as much as the hook to hold another painting. How much money did he spend on the stand?

Show your Work

- a. \$8
- b. \$12
- c. \$9
- d. \$10

2. Sherlock Holmes has 12 paintings in his house. The stamp collector has 4 times as many paintings as Sherlock Holmes. How many paintings does the stamp collector have?

Show your Work

- a. 48 paintings
- b. 40 paintings
- c. 60 paintings
- d. 45 paintings

3. Sherlock Holmes spends 14 minutes walking to the Stamp Collector's house and 6 times as many minutes searching for the crooked picture frame. How many minutes did he spend searching for the crooked picture frame?

Show your Work

- a. 81 minutes
- b. 70 minutes

4. Sherlock Holmes looked for the key for 34 minutes and spent twice as long looking for the map. How many minutes did he spend looking for the map?

Show your Work

- a. 62 minutes
- b. 56 minutes
- c. 68 minutes
- d. 44 minutes

5. The crooked picture frame holds the smallest painting, which weighs 5 pounds. The largest painting weighs 8 times as much as the smallest. How much does the largest painting weigh?

Show your Work

- a. 30 pounds
- b. 40 pounds
- c. 20 pounds
- d. 42 pounds

6. Sherlock Holmes solved 14 cases in January. In February, he solved 3 times as many cases as he did in January. How many cases did he solve in February?

Show your Work

- a. 17 cases
- b. 37 cases
- c. 48 cases
- d. 42 cases

Challenge #2

1. Solve each multi-step word problem.
2. Record answers on your brochure.
3. Check your answers in the Detective Decoder.
4. Add the map to your library.
5. Scan the QR code in the corner of the next page.
6. Move on to the challenge #3.



1. The stamp collector has 128 stamps in a basket and 6 stamps on the table. If an album holds 45 stamps, how many albums does the stamp collector need to organize all his stamps?

Show your Work

- a. 1 album
- b. 2 albums
- c. 3 albums
- d. 4 albums

2. Based on your answer from problem 1, will there be any extra spaces in the 3rd album? If so, how many extra spaces will there be?

Show your Work

- a. 1 space
- b. 2 spaces
- c. 3 spaces
- d. 0 spaces

3. The stamp collector has space for 16 books on each of his shelves. He had 98 books collected and just got 12 new books for his birthday. How many shelves will he need to hold all his book?

Scan the QR code or click [here](#) to view the video.



Top Secret

Learn more!



4 Mathematics Challenges

- Themed videos integrated throughout the Escape Room to keep kids engaged.
- Students work in groups, partners, or independently.

Learn more!



Challenge #3

1. Solve each fraction word problem.
2. Record answers on your brochure.
3. Check your answers in the Detective Decoder.
4. Add the key to your library.
5. Scan the QR code in the corner of the next page.
6. Move on to the challenge #4.

2. The rival stamp collector has an album divided into eighths, but the missing stamp collector has an album divided into sixths. The rival stamp collector puts 3 new stamps on one page and the missing stamp collector puts 4 new stamps on one of his new pages. Both stamp collectors think they still have half of their page left to fill. Is this true?

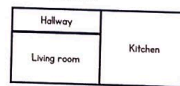
Show your Work

- a. Not enough information to tell
- b. No, it is not true
- c. Yes, it is true

Challenge #4

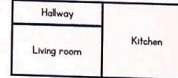
1. Solve each measurement word problem.
2. Record answers on your brochure.
3. Check your answers in the Detective Decoder.
4. Add the letter to your library.
5. Scan the QR code in the corner of the next page.
6. Collect the letter and solve the case!

1. The kitchen is 22 feet long by 20 feet wide. What is the perimeter of the kitchen?



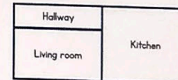
Show your Work

2. The hallway is the same length as the kitchen. If the width of the hallway is 4 feet, what is the area of the hallway?



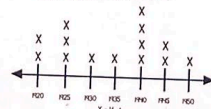
Show your Work

3. Use the information from the previous slide to find the dimensions of the living room.



Show your Work

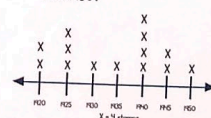
4. The stamp collector created a line plot using the dates of his stamps. Based on the data on the line plot, how many stamps does he have from 1925 and 1945 combined?



Show your Work

- a. 20 stamps
- b. 16 stamps
- c. 22 stamps
- d. 24 stamps

5. The stamp collector created a line plot using the dates of his stamps. Based on the data on the line plot, how many more stamps does he have from 1940 than 1930?



Show your Work

- a. 20 stamps
- b. 18 stamps
- c. 12 stamps
- d. 16 stamps

6. In the living room, Sherlock Holmes measured the distance between the coffee table and the gold candelabra to be 7 feet. Next, he measured the distance between the coffee table and the silver candelabra and got 25 inches. In inches, how much further away from the coffee table is the gold candelabra than the silver candelabra?

Show your Work

- a. 64 inches
- b. 62 inches
- c. 59 inches
- d. 48 inches

Scan the QR code or click [here](#) to view the video.



and one I deduce that we were meant to find.

3 Versions

- Print
- Google Slides
- Webscape™ (Our most popular experience)

Learn more!



Challenge #1

1. Solve each multiplicative comparison word problem.
2. Record answers on your brochure.
3. Check your answers in the Detective Decoder.
4. Add the frame to your library.
5. Scan the QR code in the corner of the next page.
6. Move on to the challenge #2.



1. The stamp collector goes to the craft store and buys a hook to hang a painting for \$4.00 and a stand that costs 3 times as much as the hook to hold another painting. How much money did he spend on the stand?

Show your Work

- a. \$8
- b. \$12
- c. \$9
- d. \$10

1.

Solve the Multiplicative Comparison Word Problem

The stamp collector goes to the craft store and buys a hook to hang a painting for \$4.00 and a stand that costs 3 times as much as the hook to hold another painting. How much money did he spend on the stand?

Show your Work

The answer is:

- a. \$8
- b. \$12

- ☐ Circle the #s.
- ☐ Underline the question.
- ☐ Box the words that are important.
- ☐ Eliminate info you do not need.
- ☐ Solve by showing your work.



1. The stamp collector goes to the craft store and buys a hook to hang a painting for \$4.00. He also buys a stand that costs 3 times as much as the hook to hold another painting. How much money did he spend on the stand?

\$8

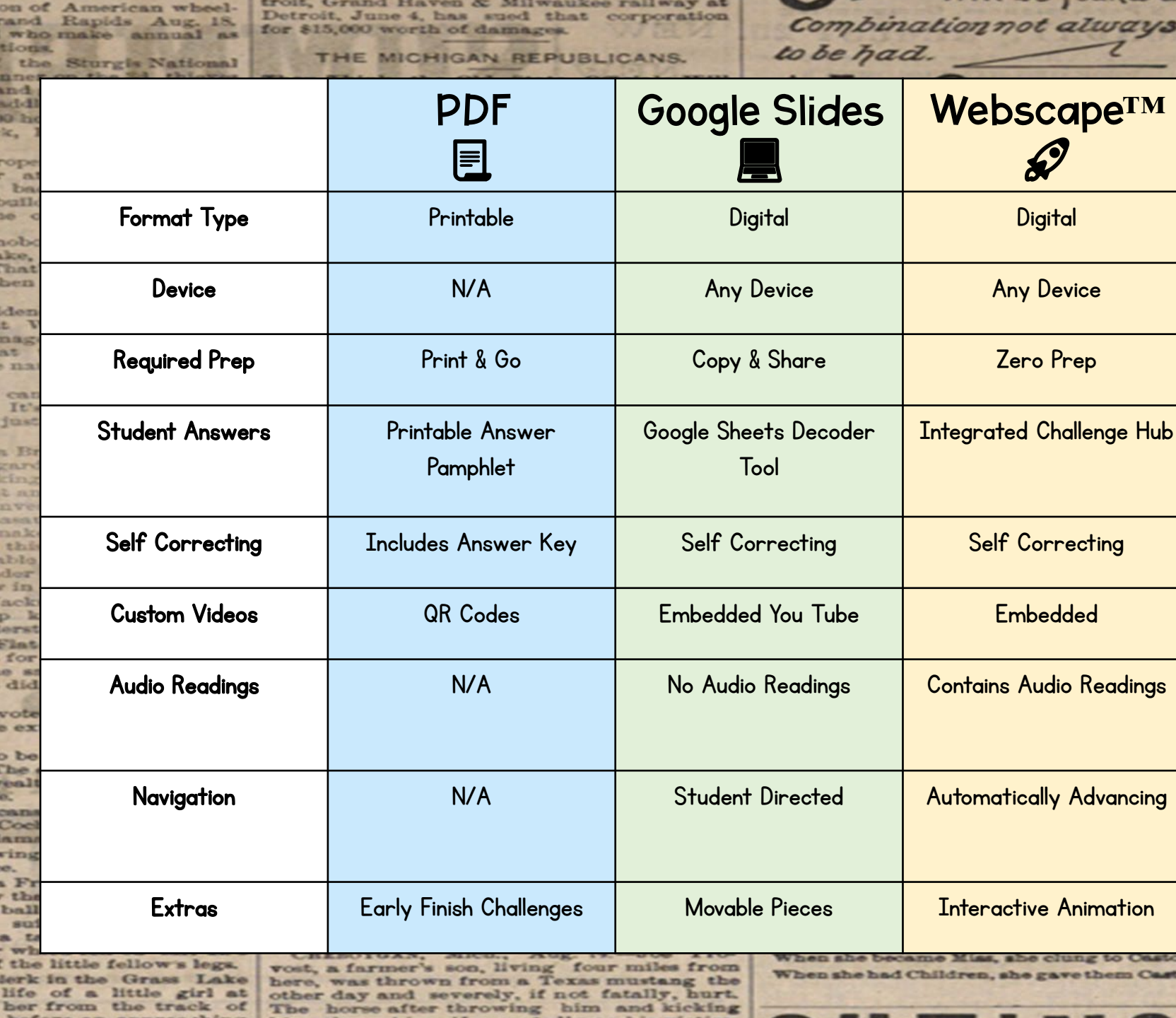
\$12




\$9

\$10



Hover for problem-solving steps



	PDF 	Google Slides 	Webscape™ 
Format Type	Printable	Digital	Digital
Device	N/A	Any Device	Any Device
Required Prep	Print & Go	Copy & Share	Zero Prep
Student Answers	Printable Answer Pamphlet	Google Sheets Decoder Tool	Integrated Challenge Hub
Self Correcting	Includes Answer Key	Self Correcting	Self Correcting
Custom Videos	QR Codes	Embedded You Tube	Embedded
Audio Readings	N/A	No Audio Readings	Contains Audio Readings
Navigation	N/A	Student Directed	Automatically Advancing
Extras	Early Finish Challenges	Movable Pieces	Interactive Animation

3 Versions

- Print
- Google Slides
- Webscape™ (Our most popular experience)

Learn more!

Print

- Cut and paste stamps for each challenge
- Easy to follow
- Optimal for group or partner work
- Recording brochure for answers
- Self-checking decoder
- Certificate of completion

Learn more!



Detective Decoder

Use the following codes for each challenge to solve the clues and move to the next challenge

Challenge 1

question 1	question 2	question 3	question 4	question 5	question 6
a = Near b = In c = On d = Close to	a = the b = a c = an d = a	a = closet b = bathroom c = hallway d = kitchen	a = in the b = under the c = on the d = next to the	a = left b = right c = wooden d = big	a = table b = cabinet c = corner d = side

Challenge 2

question 1	question 2	question 3	question 4	question 5	question 6
a = On b = Under c = In d = Inside	a = the b = a c = an d = a	a = coffee b = bathroom c = office d = library	a = table b = cabinet c = bookcase d = next	a = by the b = to the c = under a d = to a	a = bathtub b = right c = candle d = stamp

Challenge 3

question 1	question 2	question 3	question 4	question 5	question 6
a = On b = In c = Near d = Under	a = a b = an c = the d = a	a = bookcase b = envelope c = fireplace d = candle	a = under b = on top c = to the right d = to the left	a = the b = of a c = of the d = to the	a = album b = to the c = of the d = to the

Top Secret



DETECTIVE RECORDING BROCHURE

Record your
challenge answers
along your
journey.

CHALLENGE 3



	Answer	Code
1.	b	In
2.	c	the
3.		
4.		
5.		
6.		

Where is the key?

TOP SECRET

Top Secret

The Case of the Missing Stamp Collector

Harper Wilson
(name)



has successfully completed the challenges and solved the Case of the Missing Stamp Collector.

7/02

(Date)

Scan the QR code or click [here](#) to view the video.



Sherlock Holmes



Ooops!

You slipped in the mop water and bumped your head.



YOU MUST STAY QUIET FOR 5 MINUTES. NO SPEAKING!

©2018 Betsy

Print

- OOPS! Cards for differentiation

Learn more!



Webscape TM

- Most interactive experience
- Self correcting
- Embedded videos
- Embedded audio
- Animation
- Simple navigation

Learn more!



Webscape TM

- No log ins or sign ups
- Works with any device that has an internet connection and web browser
- Zero prep! Just share the link with your students.

Learn more!



Google Slides

- One problem per slide
- Students drag to circle their answers

Learn more!



1. Solve the Measurement Problem

The kitchen is 22 feet long by 20 feet wide. What is the perimeter of the kitchen?

Hallway	Kitchen
Living room	

Show your Work

The answer is:

- a. 440 feet
- b. 88 feet
- c. 84 feet
- d. 144 feet

☐ Circle the #s.
☐ Underline the question.
☐ Box the words that are important.
☐ Eliminate info you do not need.
☐ Solve by showing your work.

Hand-drawn purple squiggles



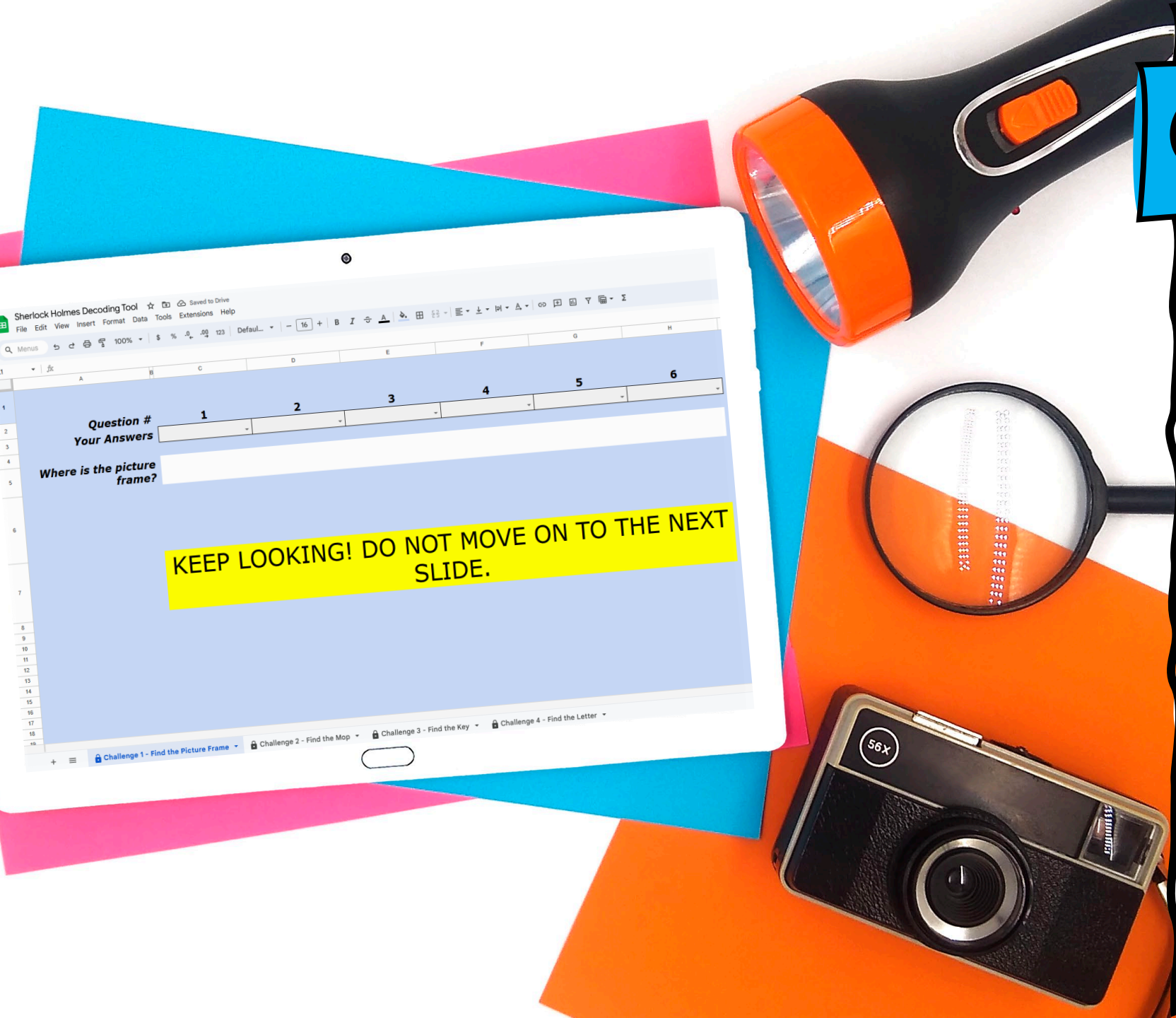
Secret



Google Slides

- Toggle to self-checking decoder
- Decoder will prompt at the end of each challenge whether students are correct or need to check their work.

Learn more!



Looking for More?

ESCAPE ROOM BUNDLE Math Skills

4th Grade



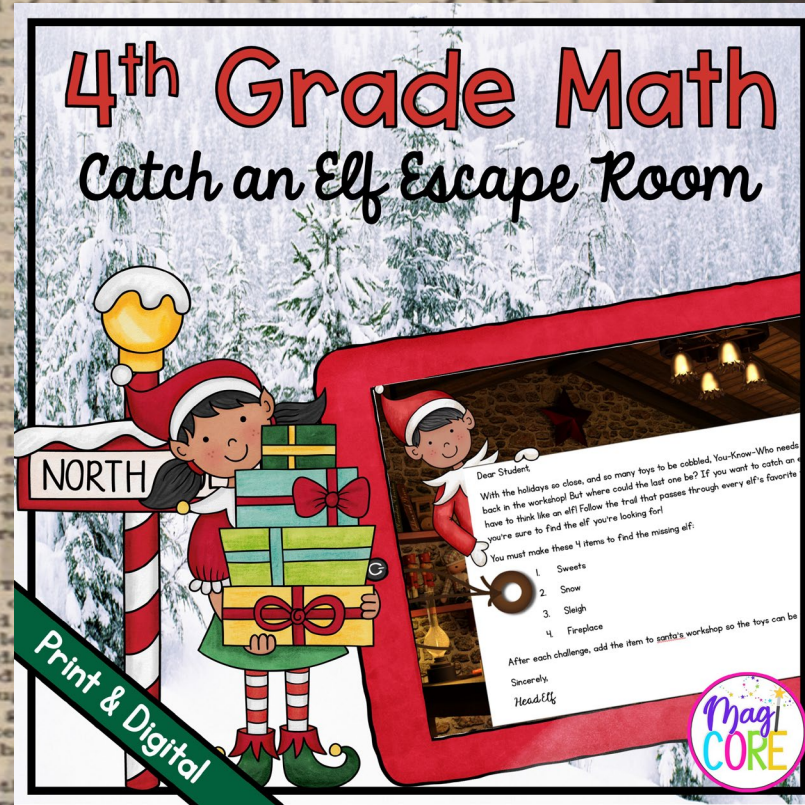
Math Escape Rooms

- 2nd Grade
- 3rd Grade
- 4th Grade
- 5th Grade

Telling Time: Time Machine Escape Room

Print and Digital

4th Grade Math Catch an Elf Escape Room

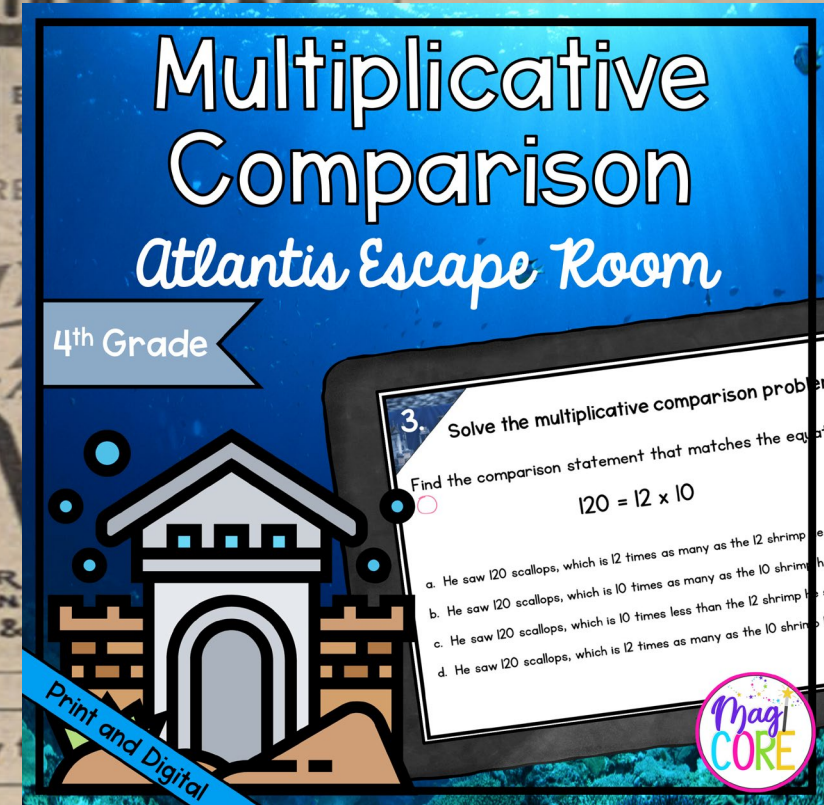


Print & Digital

MagiCORE

Multiplicative Comparison Atlantis Escape Room

4th Grade



Print and Digital

MagiCORE

3. Solve the multiplicative comparison problem.

Find the comparison statement that matches the equation.

$$120 = 12 \times 10$$

- a. He saw 120 scallops, which is 12 times as many as the 12 shrimp he saw.
- b. He saw 120 scallops, which is 10 times as many as the 10 shrimp he saw.
- c. He saw 120 scallops, which is 10 times less than the 12 shrimp he saw.
- d. He saw 120 scallops, which is 12 times as many as the 10 shrimp he saw.