

TEACHER NOTES

Welcome to Escape the Curse of the Multiplication Mummy! This is a culminating activity for fourth grade multiplication standards. This is an activity where students must work together using multiplication to escape from a pyramid in which they are lost. To escape, students must unlock a series of clues to discover a map that will allow them to escape from the pyramid.

I have included multiple versions of this activity to meet your classroom needs. One version is for a physical set-up of the activity, and the second version is for a hybrid digital version of the activity. In both versions, break students into small groups, approximately four per group.

Physical Version Materials

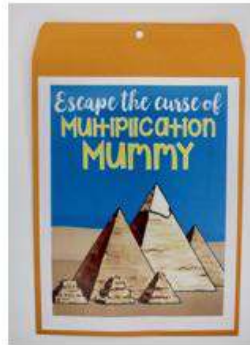
- 3-digit lock
- 4 digit lock
- 5-letter lock
- 5-color lock
- multi-lock
- sandwich bag
- large envelope
- large escape card
- small escape card

- 5-letter lock-1
- 4-digit lock-1
- 3-digit lock-2
- 5-color lock-2

- Clue 1-Either print 1 copy for each student or 1 copy for each group. Store these in the large envelope.
- Clue 2-Either print 1 copy for each student or 1 copy for each group. Store these in the large envelope.
- Clue 3-You may either print 1 copy for each student or 1 copy for each group. Store these in the large envelope.
- Clue 4-Either print 1 copy for each student or 1 copy for each group. Store these in the large envelope. If you have a hybrid version, you may also print 1 copy for each student or 1 copy for each group. Store these in the large envelope.
- In this version, you may also include a You Escaped card. Print 1 copy for each student or 1 copy for each group. Store these in the large envelope. This will be used to track student progress. <http://www.breakout-edu.com>

PHYSICAL VERSION DIRECTIONS

- Use one large manila envelope for each group. You may print the cover page and glue that page to the envelope. I like to laminate my envelopes for additional durability. I cut a slit in the opening after laminating.



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- Clue 2-You may either print 1 copy for each student or 1 copy for each group. Store these in the large envelope.
- Clue 3-You may either print 1 copy for each student or 1 copy for each group. Store these in the large envelope.
- Clue 4-Either print 1 copy for each student or 1 copy for each group. Store these in the large envelope.
- Place a You Escaped card in the small box. I may add tiny cell phone erasers to the box for a little prize.
- Lock the small box with the 5-color lock.
- Place the small box in the large box.
- Place the multi-lock on the large box.
- Place the other three locks on the multi lock.



Escape the Curse of the MULTIPLICATION MUMMY

Oh no! You've been exploring pyramids in Egypt, and you've stumbled upon the curse of the Multiplication Mummy. You and your group are trapped in the pyramid with no way out! Fortunately, your group is full of amazing mathematicians, and if you apply what you have learned about multiplication, you will be able to escape from the maze inside the pyramid. You must solve a series of clues that will allow you to access a map that will allow you to find your way around the maze in the pyramid. Follow the directions below to get started.

- Clue 1-Match the comparison statements. Use a ruler to draw a line from the dots on the left to the corresponding dots on the right. The letters in the center of the page that are NOT crossed out give you the code for the first lock.
- Clue 2-Find the factors of the four numbers on your recording sheet. Look closely at the factors and find the four factors that each number has in common. That number combination will unlock your next clue.
- Clue 3-Solve each of the multiplication problems. As you multiply find the product on the bottom of the recording sheet. Use your hieroglyphic decoder to determine the mystery message. You will use that message to unlock the next box.
- Clue 4-Follow the directions on the Clue 4 recording sheet. It is important to remember that a number can be crossed out more than once. Once you solve this clue, you've escaped!

CLUE 1

3 TIMES BIGGER THAN 17 ●

● $8 \times 9 = 72$

HOW MANY TIMES BIGGER IS
21 THAN 7? ●

● 9

EIGHT TIMES AS MANY AS 9 IS ●

● 3

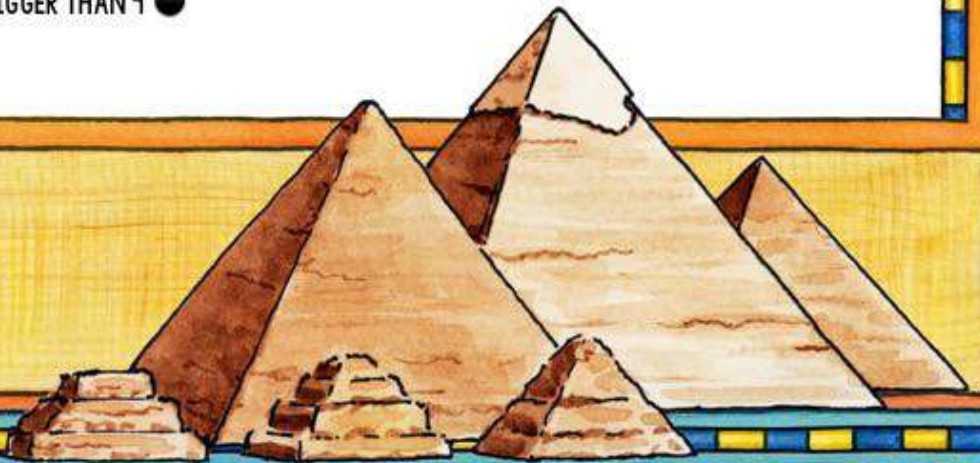
FOUR sets of CLUES

HOW MANY TIMES BIGGER IS
48 THAN 8? ●

● 76

36 IS NINE TIMES BIGGER THAN 4 ●

● $12 \times 5 = 60$



CLUE 2

WHAT ARE THE COMMON FACTORS OF 42, 54, 72, AND 84?

42

54

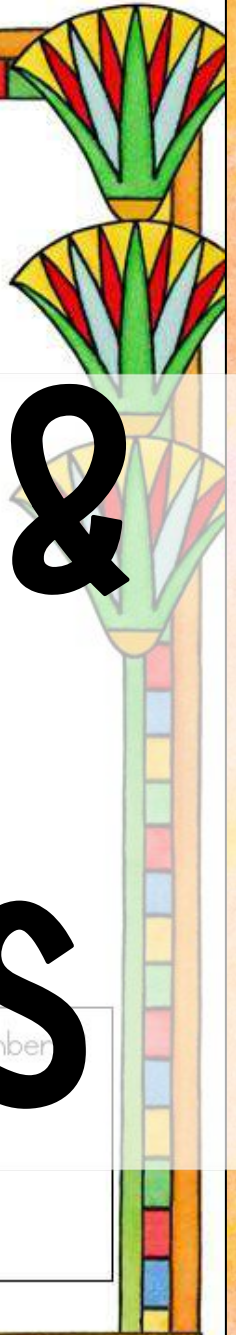
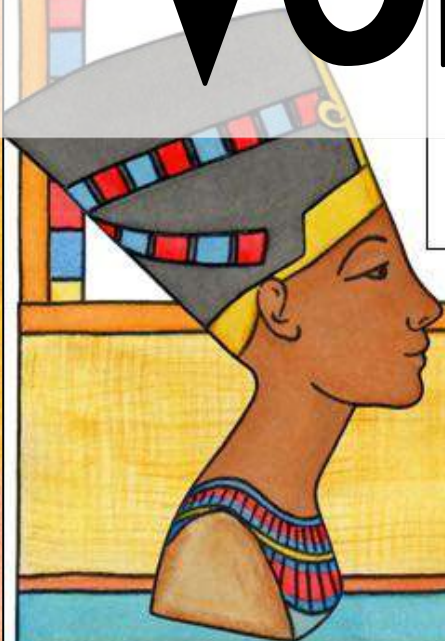
72

84

PHYSICAL & Digital versions

What are the common factors of a four number

Use those numbers for your next clue!



CLUE 3

THE LARGEST PARTIAL PRODUCT OF
138X7 700 

THE SMALLEST PARTIAL PRODUCT OF
45X92 10 

THE LARGEST PARTIAL PRODUCT OF
23X89 1,600 

$346 \times 7 = 2,422$



$232 \times 5 = 1,160$



$572 \times 9 = 5,148$



4-digit by 1-digit 2-digit by 2-digit factors & multiples comparison

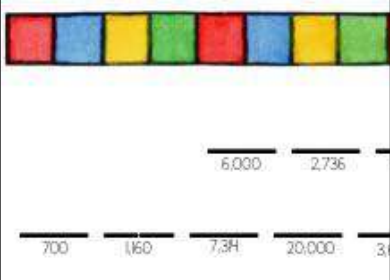
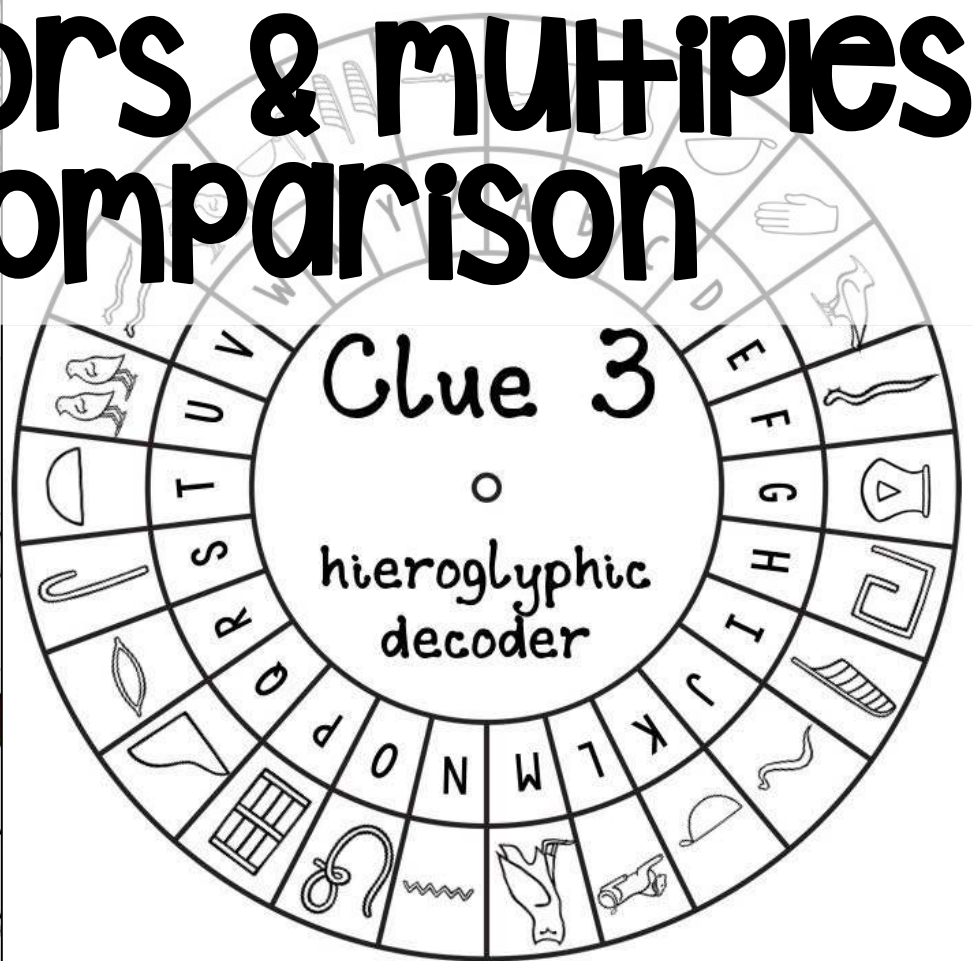
$400 \times 50 = 20,000$



$54 \times 89 = 4,806$



$34 \times 23 = 782$



CLUE 4

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

easy to follow
directions

1. Place a square around the number 1. It is neither prime or composite.
2. Draw a line through every multiple of 2 with green.
3. Draw a line through every multiple of 3 with blue.
4. Draw a line through every multiple of 4 with orange.
5. Draw a line through every multiple of 5 with yellow.
6. Draw a line through every multiple of 6 with purple.
7. Draw a line through every multiple of 7 with red.
8. Draw a line through every multiple of 8 with pink.
9. Draw a line through every multiple of 9 with black.

Use the completed table for your next clue.

How many prime numbers are shown on the chart?
What is the sum of the prime numbers through 50?