The Dragon Crown Caper

Grade 4 math · Addition, Multiplication, Rounding, Subtraction, Division · Reading level grades 7-9

Detective: _____ **Date:** _____

Someone tamed a wild shadow dragon and snuck into the High-Aerie Dragon Sanctuary, snatching the ancient Dragon Crown. You must decode the clues left behind to identify the rogue tamer.

1. Solve each math problem. The answer is a number, and the letter beside it is what that number stands for.
2. In the clue boxes, write that letter in every box showing the same number, then read the secret clue.
3. Use each clue to cross suspects off the list. The one suspect left at the end is the culprit!

My answer: the rogue dragon tamer is _____

Possible suspects

Cross off a row as each clue rules it out. The one left at the end is the culprit.

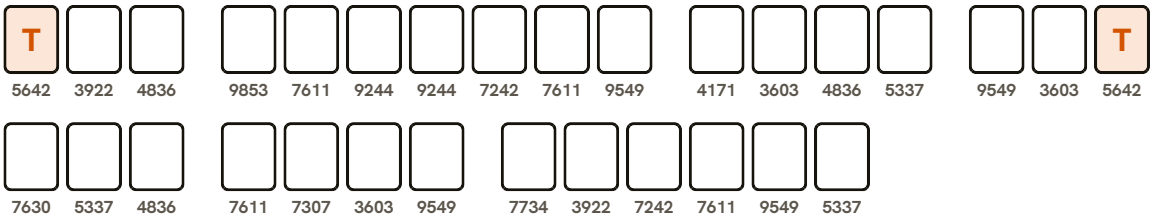
NAME	PRIMARY BREATH	SADDLE GEAR	RIDING HAND	CREST STYLE	MAGIC BAIT
Rider Talon	Lightning Sparks	Gold Stirrups	Left-handed	Braided Mane	Star Crystal
Lady Cinder	Lightning Sparks	Ruby Bridle	Right-handed	Spiky Horns	Firefruit
Baron Vapour	Frost Breath	Iron Chains	Right-handed	Spiky Horns	Firefruit
Warden Drake	Frost Breath	Silk Reins	Left-handed	Braided Mane	Firefruit
Ranger Gale	Sonic Roar	Gold Stirrups	Right-handed	Spiky Horns	Star Crystal
Rider Scorpios	Frost Breath	Gold Stirrups	Right-handed	Feathered Crest	Star Crystal
Commander Sparks	Frost Breath	Ruby Bridle	Right-handed	Braided Mane	Star Crystal
Baron Flint	Frost Breath	Gold Stirrups	Right-handed	Feathered Crest	Firefruit
Captain Ignis	Emerald Flame	Gold Stirrups	Right-handed	Feathered Crest	Firefruit
Warden Frost	Lightning Sparks	Ruby Bridle	Left-handed	Spiky Horns	Firefruit
Commander Ember	Magma Blast	Silk Reins	Right-handed	Spiky Horns	Firefruit
Master Onyx	Lightning Sparks	Leather Harness	Right-handed	Braided Mane	Moonbell Herb
Commander Char	Magma Blast	Gold Stirrups	Right-handed	Spiky Horns	Firefruit
Ranger Sol	Sonic Roar	Ruby Bridle	Right-handed	Feathered Crest	Firefruit
Lady Obsidian	Magma Blast	Leather Harness	Left-handed	Spiky Horns	Star Crystal
Master Smokey	Magma Blast	Leather Harness	Right-handed	Spiky Horns	Moonbell Herb
Rider Storm	Frost Breath	Leather Harness	Left-handed	Feathered Crest	Star Crystal
Baron Wyvern	Magma Blast	Leather Harness	Right-handed	Spiky Horns	Firefruit
Master Pyro	Frost Breath	Leather Harness	Left-handed	Feathered Crest	Moonbell Herb
Lady Flare	Frost Breath	Leather Harness	Right-handed	Braided Mane	Firefruit
Ranger Ash	Frost Breath	Ruby Bridle	Right-handed	Feathered Crest	Firefruit

make your own at mathcrackers.com

CLUE 1 Addition

> To calculate the total weight of missing dragon scales found near the vault entrance, the keep wardens tallied up two separate batches of evidence.

Solve each problem, then write its letter in every clue box that shows the same number.



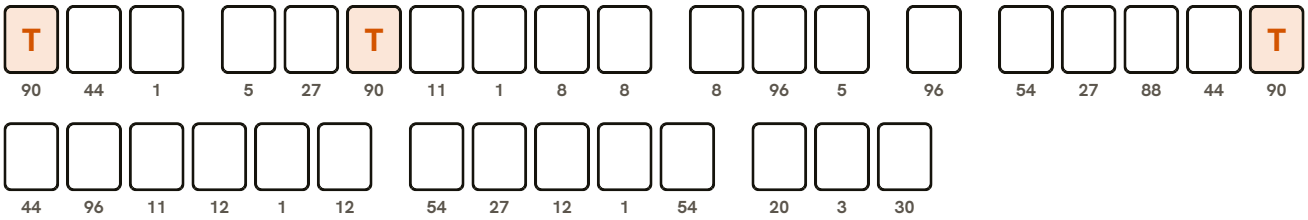
2146 + 3496 = ☐ → T	1406 + 2765 = ☐ → D	3588 + 1749 = ☐ → S
1753 + 1850 = ☐ → O	3291 + 1545 = ☐ → E	3094 + 4640 = ☐ → C
5486 + 3758 = ☐ → L	1754 + 2168 = ☐ → H	4871 + 2371 = ☐ → A
4341 + 3289 = ☐ → U	6367 + 3486 = ☐ → V	5549 + 4000 = ☐ → N
4872 + 2739 = ☐ → I	3784 + 3523 = ☐ → R	

Scratch space:

CLUE 2 Multiplication facts (1-12)

> The flight master examined the roosting towers, calculating the total dragon perches by counting identical rows across all five eastern parapets.

Solve each problem, then write its letter in every clue box that shows the same number.



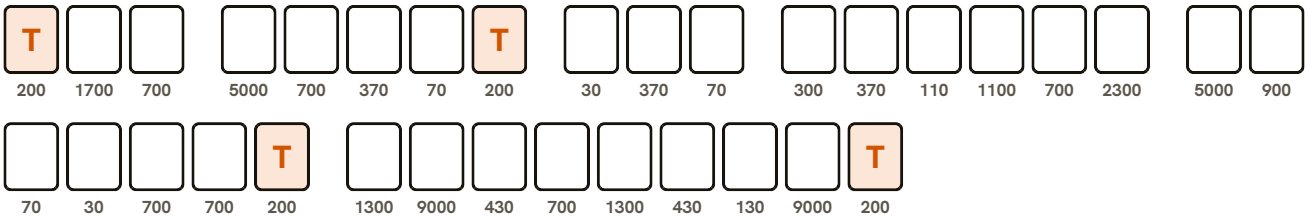
10 × 9 = ☐ → T	9 × 6 = ☐ → R	10 × 2 = ☐ → F
8 × 11 = ☐ → G	6 × 2 = ☐ → D	1 × 11 = ☐ → N
10 × 3 = ☐ → Y	12 × 8 = ☐ → A	3 × 9 = ☐ → I
3 × 1 = ☐ → L	1 × 8 = ☐ → S	1 × 1 = ☐ → E
11 × 4 = ☐ → H	5 × 1 = ☐ → W	

Scratch space:

CLUE 3 Rounding

> An ancient scrying orb registered the dragon flyer altitude, displaying a rough rounded estimate on the sanctuary defensive crystal.

Solve each problem, then write its letter in every clue box that shows the same number.



Round 248 to the nearest hundred ☐ → T

Round 277 to the nearest hundred ☐ → C

Round 1,345 to the nearest hundred ☐ → F

Round 1,721 to the nearest hundred ☐ → H

Round 370 to the nearest ten ☐ → A

Round 426 to the nearest ten ☐ → R

Round 680 to the nearest hundred ☐ → E

Round 871 to the nearest hundred ☐ → Y

Round 131 to the nearest ten ☐ → U

Round 1,112 to the nearest hundred ☐ → M

Round 2,270 to the nearest hundred ☐ → D

Round 67 to the nearest ten ☐ → S

Round 107 to the nearest ten ☐ → L

Round 4,666 to the nearest thousand ☐ → B

Round 32 to the nearest ten ☐ → W

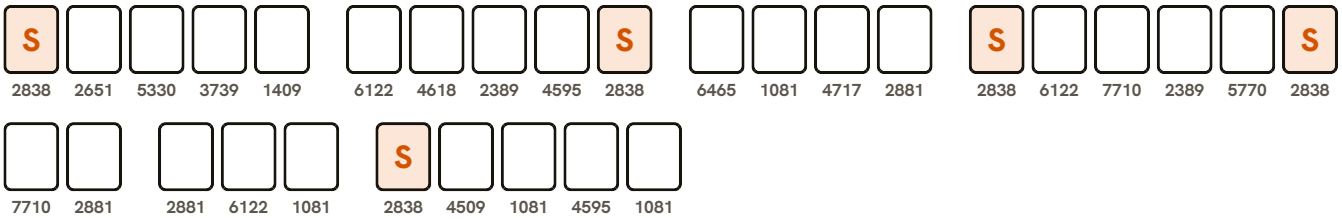
Round 9,400 to the nearest thousand ☐ → I

Scratch space:

CLUE 4 Subtraction

> By subtracting the remaining barrels of dragon feed from yesterday shipment, the vault keepers determined how much food the thief stole.

Solve each problem, then write its letter in every clue box that shows the same number.



5227 - 2389 = ☐ → S

3234 - 845 = ☐ → R

7184 - 1062 = ☐ → H

4706 - 967 = ☐ → K

6877 - 412 = ☐ → L

8723 - 4105 = ☐ → O

3050 - 1641 = ☐ → Y

6837 - 2120 = ☐ → F

8162 - 3567 = ☐ → N

9926 - 4596 = ☐ → I

6791 - 4140 = ☐ → P

6389 - 1880 = ☐ → C

7918 - 208 = ☐ → A

3361 - 2280 = ☐ → E

5341 - 2460 = ☐ → T

6092 - 322 = ☐ → D

Scratch space:

CLUE 5 Division facts (1-12) - the last clue

> The sanctuary guards split the remaining search patrols evenly across the canyon sectors to track down the airborne getaway.

First solve each problem. Then find each answer in the numbered list below and cross that sentence out. One sentence will be left - that is exactly what the villain did!

Step 1 - solve these:

21 ÷ 7 = ☐	96 ÷ 8 = ☐	45 ÷ 9 = ☐	2 ÷ 1 = ☐	55 ÷ 5 = ☐
14 ÷ 2 = ☐	88 ÷ 11 = ☐	11 ÷ 11 = ☐	24 ÷ 4 = ☐	70 ÷ 7 = ☐
44 ÷ 11 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain stunned the watchers with a sonic roar, then secured the crown with gold stirrups.
2. The villain stunned the watchers with a sonic roar, then strapped the crate using a leather harness.
3. The villain melted the vault floor with a magma blast, then flew off silently with silk reins.
4. The villain stunned the watchers with a sonic roar, then bound the treasure in iron chains.
5. The villain melted the vault floor with a magma blast, then strapped the crate using a leather harness.
6. The villain blasted through the gates with frost breath, then secured the crown with gold stirrups.
7. The villain shocked the guards with lightning sparks, then bound the treasure in iron chains.
8. The villain stunned the watchers with a sonic roar, then flew off silently with silk reins.
9. The villain melted the vault floor with a magma blast, then secured the crown with gold stirrups.
10. The villain shocked the guards with lightning sparks, then strapped the crate using a leather harness.
11. The villain burned the lock with emerald flame, then flew off silently with silk reins.
12. The villain shocked the guards with lightning sparks, then steered the beast with a ruby bridle.

TEACHER / PARENT

Answer Key

The Dragon Crown Caper

Culprit: Commander Char

Magma Blast · Gold Stirrups · Right-handed · Spiky Horns · Firefruit

Trail: Start 21 → Clue 1 20 → Clue 2 14 → Clue 3 9 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT USE IRON CHAINS"

2146 + 3496 = 5642 (T) · 1406 + 2765 = 4171 (D) · 3588 + 1749 = 5337 (S) · 1753 + 1850 = 3603 (O) · 3291 + 1545 = 4836 (E) · 3094 + 4640 = 7734 (C) · 5486 + 3758 = 9244 (L) · 1754 + 2168 = 3922 (H) · 4871 + 2371 = 7242 (A) · 4341 + 3289 = 7630 (U) · 6367 + 3486 = 9853 (V) · 5549 + 4000 = 9549 (N) · 4872 + 2739 = 7611 (I) · 3784 + 3523 = 7307 (R)

Clue 2 (Multiplication facts (1-12)): "THE WITNESS SAW A RIGHT HANDED RIDER FLY"

10 × 9 = 90 (T) · 9 × 6 = 54 (R) · 10 × 2 = 20 (F) · 8 × 11 = 88 (G) · 6 × 2 = 12 (D) · 1 × 11 = 11 (N) · 10 × 3 = 30 (Y) · 12 × 8 = 96 (A) · 3 × 9 = 27 (I) · 3 × 1 = 3 (L) · 1 × 8 = 8 (S) · 1 × 1 = 1 (E) · 5 × 1 = 5 (W) · 11 × 4 = 44 (H)

Clue 3 (Rounding): "THE BEAST WAS CALMED BY SWEET FIREFRUIT"

Round 248 to the nearest hundred = 200 (T) · Round 277 to the nearest hundred = 300 (C) · Round 1,345 to the nearest hundred = 1300 (F) · Round 1,721 to the nearest hundred = 1700 (H) · Round 370 to the nearest ten = 370 (A) · Round 426 to the nearest ten = 430 (R) · Round 680 to the nearest hundred = 700 (E) · Round 871 to the nearest hundred = 900 (Y) · Round 131 to the nearest ten = 130 (U) · Round 1,112 to the nearest hundred = 1100 (M) · Round 2,270 to the nearest hundred = 2300 (D) · Round 67 to the nearest ten = 70 (S) · Round 107 to the nearest ten = 110 (L) · Round 4,666 to the nearest thousand = 5000 (B) · Round 32 to the nearest ten = 30 (W) · Round 9,400 to the nearest thousand = 9000 (I)

Clue 4 (Subtraction): "SPIKY HORNS LEFT SHARDS AT THE SCENE"

5227 - 2389 = 2838 (S) · 3234 - 845 = 2389 (R) · 7184 - 1062 = 6122 (H) · 4706 - 967 = 3739 (K) · 6877 - 412 = 6465 (L) · 8723 - 4105 = 4618 (O) · 3050 - 1641 = 1409 (Y) · 6837 - 2120 = 4717 (F) · 8162 - 3567 = 4595 (N) · 9926 - 4596 = 5330 (I) · 6791 - 4140 = 2651 (P) · 6389 - 1880 = 4509 (C) · 7918 - 208 = 7710 (A) · 3361 - 2280 = 1081 (E) · 5341 - 2460 = 2881 (T) · 6092 - 322 = 5770 (D)

Clue 5 (Division facts (1-12)): surviving statement is box 9 → Commander Char

21 ÷ 7 = 3 · 96 ÷ 8 = 12 · 45 ÷ 9 = 5 · 2 ÷ 1 = 2 · 55 ÷ 5 = 11 · 14 ÷ 2 = 7 · 88 ÷ 11 = 8 · 11 ÷ 11 = 1 · 24 ÷ 4 = 6 · 70 ÷ 7 = 10 · 44 ÷ 11 = 4