The Mystery of the Flying Sun Disc

Grade 6 math · Addition, Subtraction, Multiplication, Percentages, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

The Golden Sun Disc has been stolen from the Cloud Temple of Zephyra! A cunning sky bandit slipped past the wind guards under cover of fog. Help the Cloud Rangers analyze the evidence, track down the thief, and return the priceless relic!

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 sky bandit is _____

Possible suspects

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

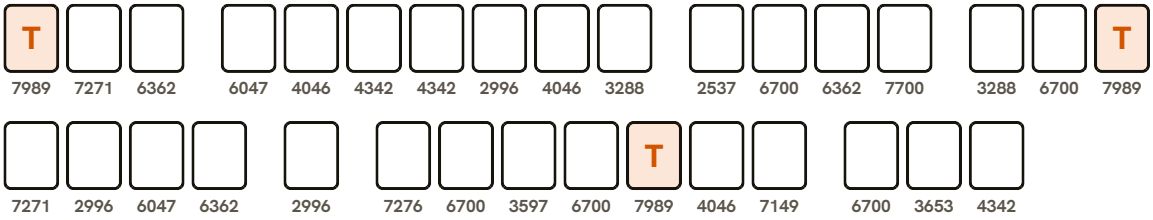
NAME	SPECIAL GEAR	ANIMAL HELPER	GOGGLES TYPE	HEADWEAR	DEFENSIVE TRAP
Agent Rex	Jet Boots	Robotic Owl	Wears Gold Goggles	Brass Goggles Hood	Whistle Alarm
Captain Ruby	Grapple Gun	Falcon	Wears Gold Goggles	Brass Goggles Hood	Whistle Alarm
Ranger Chloe	Magnetic Gloves	Falcon	Wears Gold Goggles	Brass Goggles Hood	Whistle Alarm
Officer Mason	Grapple Gun	Fruit Bat	Wears Gold Goggles	Leather Aviator Helmet	Mirror Shield
Explorer Max	Grapple Gun	Robotic Owl	Wears Gold Goggles	Brass Goggles Hood	Mirror Shield
Scout Amber	Magnetic Gloves	Mechanical Beetle	Wears Gold Goggles	Brass Goggles Hood	Whistle Alarm
Pilot Leo	Magnetic Gloves	Flying Squirrel	Wears Silver Goggles	Brass Goggles Hood	Whistle Alarm
Detective Nina	Magnetic Gloves	Mechanical Beetle	Wears Gold Goggles	Feathered Cap	Mirror Shield
Cadet Ava	Smoke Bombs	Fruit Bat	Wears Gold Goggles	Brass Goggles Hood	Whistle Alarm
Navigator Ivy	Jet Boots	Robotic Owl	Wears Silver Goggles	Leather Aviator Helmet	Mirror Shield
Aviator Ella	Magnetic Gloves	Fruit Bat	Wears Silver Goggles	Brass Goggles Hood	Net Trap
Ranger Luke	Jet Boots	Flying Squirrel	Wears Silver Goggles	Brass Goggles Hood	Whistle Alarm
Detective Finn	Magnetic Gloves	Robotic Owl	Wears Gold Goggles	Leather Aviator Helmet	Whistle Alarm
Aviator Ben	Magnetic Gloves	Flying Squirrel	Wears Gold Goggles	Brass Goggles Hood	Mirror Shield
Tracker Lily	Jet Boots	Robotic Owl	Wears Gold Goggles	Brass Goggles Hood	Net Trap
Tracker Eli	Smoke Bombs	Fruit Bat	Wears Gold Goggles	Leather Aviator Helmet	Whistle Alarm
Captain Sam	Glider Wings	Robotic Owl	Wears Gold Goggles	Brass Goggles Hood	Mirror Shield
Navigator Jack	Smoke Bombs	Fruit Bat	Wears Gold Goggles	Brass Goggles Hood	Mirror Shield
Agent Clara	Jet Boots	Mechanical Beetle	Wears Silver Goggles	Feathered Cap	Net Trap
Pilot Nora	Smoke Bombs	Flying Squirrel	Wears Silver Goggles	Feathered Cap	Mirror Shield
Explorer Maya	Jet Boots	Falcon	Wears Silver Goggles	Brass Goggles Hood	Whistle Alarm

make your own at mathcrackers.com

CLUE 1 Addition

We added up all the golden feathers left along the temple bridge to build our first clue.

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



5017 + 2972 = ☐ → T	2502 + 1151 = ☐ → W	1944 + 2398 = ☐ → L
4291 + 2409 = ☐ → O	2358 + 4004 = ☐ → E	2466 + 5234 = ☐ → S
4358 + 2791 = ☐ → C	4209 + 3062 = ☐ → H	1833 + 1764 = ☐ → B
1017 + 1979 = ☐ → A	4126 + 1921 = ☐ → V	2732 + 1314 = ☐ → I
1119 + 2169 = ☐ → N	4441 + 2835 = ☐ → R	1128 + 1409 = ☐ → D

Scratch space:

CLUE 2 Subtraction

> After taking away the broken compasses from the gear pile, we got our second lead.

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



6876 - 417 = ☐ → G

12059 - 3857 = ☐ → I

7905 - 315 = ☐ → F

7247 - 4104 = ☐ → A

5438 - 1942 = ☐ → O

12862 - 4490 = ☐ → S

5843 - 698 = ☐ → T

3700 - 726 = ☐ → D

9646 - 2537 = ☐ → N

8075 - 1617 = ☐ → L

9836 - 4699 = ☐ → E

4036 - 1162 = ☐ → H

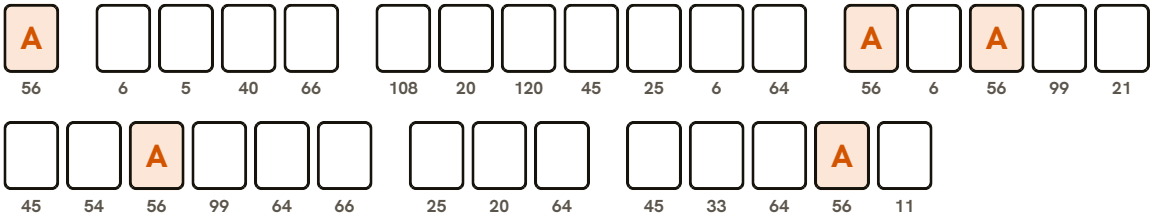
8491 - 511 = ☐ → W

Scratch space:

CLUE 3 Multiplication facts (1-12)

> By counting the rows of stone tiles in the map room, we uncovered the third hint.

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



7 × 8 = ☐ → A

6 × 11 = ☐ → D

1 × 11 = ☐ → K

12 × 9 = ☐ → W

5 × 4 = ☐ → H

8 × 5 = ☐ → U

3 × 2 = ☐ → L

5 × 5 = ☐ → T

3 × 7 = ☐ → M

9 × 11 = ☐ → R

3 × 11 = ☐ → N

6 × 9 = ☐ → C

5 × 1 = ☐ → O

8 × 8 = ☐ → E

10 × 12 = ☐ → I

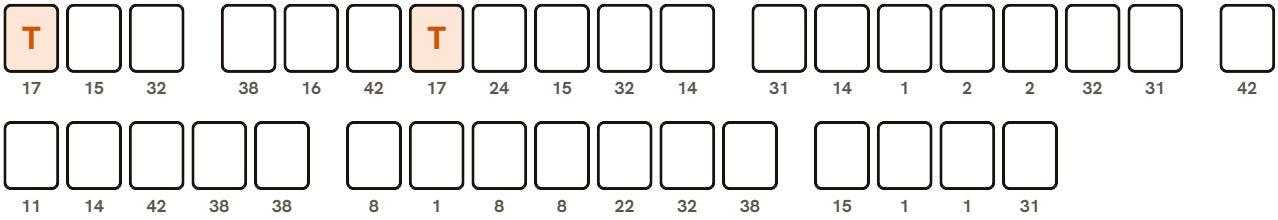
5 × 9 = ☐ → S

Scratch space:

CLUE 4 Percentages

The solar meter showed what percentage of power remained in the airship vault.

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



5% of 340 = ☐ → T

50% of 22 = ☐ → B

50% of 32 = ☐ → N

50% of 64 = ☐ → E

5% of 440 = ☐ → L

10% of 140 = ☐ → R

25% of 168 = ☐ → A

50% of 4 = ☐ → P

50% of 16 = ☐ → G

50% of 2 = ☐ → O

75% of 20 = ☐ → H

5% of 760 = ☐ → S

10% of 310 = ☐ → D

10% of 240 = ☐ → C

Scratch space:

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

> Splitting the ancient maps equally among our team gave us the final puzzle piece.

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:

33 ÷ 3 = ☐	15 ÷ 5 = ☐	32 ÷ 8 = ☐	90 ÷ 9 = ☐	10 ÷ 2 = ☐
18 ÷ 3 = ☐	9 ÷ 9 = ☐	14 ÷ 2 = ☐	8 ÷ 4 = ☐	108 ÷ 12 = ☐
96 ÷ 8 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain soared over the guard towers with glider wings, then dispatched a mechanical beetle to cut the ropes.
2. The villain scaled the polished stone walls with magnetic gloves, then released a flying squirrel to create a distraction.
3. The villain scaled the polished stone walls with magnetic gloves, then dispatched a mechanical beetle to cut the ropes.
4. The villain zipped across the canyon using a grapple gun, then guided a swift falcon to snag the loot.
5. The villain blasted up to the high balcony using jet boots, then used a robotic owl to unlock the vault latch.
6. The villain zipped across the canyon using a grapple gun, then dispatched a mechanical beetle to cut the ropes.
7. The villain vanished into thick cloud mist with smoke bombs, then guided a swift falcon to snag the loot.
8. The villain scaled the polished stone walls with magnetic gloves, then guided a swift falcon to snag the loot.
9. The villain vanished into thick cloud mist with smoke bombs, then released a flying squirrel to create a distraction.
10. The villain blasted up to the high balcony using jet boots, then dispatched a mechanical beetle to cut the ropes.
11. The villain vanished into thick cloud mist with smoke bombs, then sent a trained fruit bat to scout the hallway.
12. The villain blasted up to the high balcony using jet boots, then released a flying squirrel to create a distraction.

TEACHER / PARENT

Answer Key

The Mystery of the Flying Sun Disc

Culprit: Ranger Chloe

Magnetic Gloves · Falcon · Wears Gold Goggles · Brass Goggles Hood · Whistle Alarm

Trail: Start 21 → Clue 1 15 → Clue 2 9 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT HAVE A ROBOTIC OWL"

5017 + 2972 = 7989 (T) · 2502 + 1151 = 3653 (W) · 1944 + 2398 = 4342 (L) · 4291 + 2409 = 6700 (O) · 2358 + 4004 = 6362 (E) · 2466 + 5234 = 7700 (S) · 4358 + 2791 = 7149 (C) · 4209 + 3062 = 7271 (H) · 1833 + 1764 = 3597 (B) · 1017 + 1979 = 2996 (A) · 4126 + 1921 = 6047 (V) · 2732 + 1314 = 4046 (I) · 1119 + 2169 = 3288 (N) · 4441 + 2835 = 7276 (R) · 1128 + 1409 = 2537 (D)

Clue 2 (Subtraction): "GLINT OF GOLD GOGGLES WAS SEEN AT NIGHT"

6876 - 417 = 6459 (G) · 12059 - 3857 = 8202 (I) · 7905 - 315 = 7590 (F) · 7247 - 4104 = 3143 (A) · 5438 - 1942 = 3496 (O) · 12862 - 4490 = 8372 (S) · 5843 - 698 = 5145 (T) · 3700 - 726 = 2974 (D) · 9646 - 2537 = 7109 (N) · 8075 - 1617 = 6458 (L) · 9836 - 4699 = 5137 (E) · 4036 - 1162 = 2874 (H) · 8491 - 511 = 7980 (W)

Clue 3 (Multiplication facts (1-12)): "A LOUD WHISTLE ALARM SCARED THE SNEAK"

7 × 8 = 56 (A) · 6 × 11 = 66 (D) · 1 × 11 = 11 (K) · 12 × 9 = 108 (W) · 5 × 4 = 20 (H) · 8 × 5 = 40 (U) · 3 × 2 = 6 (L) · 5 × 5 = 25 (T) · 3 × 7 = 21 (M) · 9 × 11 = 99 (R) · 3 × 11 = 33 (N) · 6 × 9 = 54 (C) · 5 × 1 = 5 (O) · 8 × 8 = 64 (E) · 10 × 12 = 120 (I) · 5 × 9 = 45 (S)

Clue 4 (Percentages): "THE SNATCHER DROPPED A BRASS GOGGLES HOOD"

5% of 340 = 17 (T) · 50% of 22 = 11 (B) · 50% of 32 = 16 (N) · 50% of 64 = 32 (E) · 5% of 440 = 22 (L) · 10% of 140 = 14 (R) · 25% of 168 = 42 (A) · 50% of 4 = 2 (P) · 50% of 16 = 8 (G) · 50% of 2 = 1 (O) · 75% of 20 = 15 (H) · 5% of 760 = 38 (S) · 10% of 310 = 31 (D) · 10% of 240 = 24 (C)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Ranger Chloe

33 ÷ 3 = 11 · 15 ÷ 5 = 3 · 32 ÷ 8 = 4 · 90 ÷ 9 = 10 · 10 ÷ 2 = 5 · 18 ÷ 3 = 6 · 9 ÷ 9 = 1 · 14 ÷ 2 = 7 · 8 ÷ 4 = 2 · 108 ÷ 12 = 9 · 96 ÷ 8 = 12