The Sky Island Treasure Caper

Grade 6 math · Percentages, Exponents, Order of operations, Multiplication, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

A sneaky intruder snuck into Cloudtop Citadel and took off with precious airship gear! Work with the Sky Scouts to gather clues and catch the thief.

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 Pirate is _____

Possible suspects

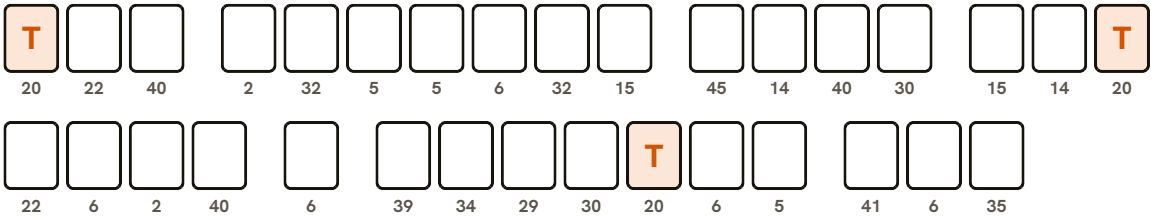
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	AIR GADGET	TREASURE GEAR	GLOVE HAND	CAP COLOR	DISTRACTION
Airborne Ava	Glider Pack	Silver Coin	Left Handed	Green Cap	Sweet Treats
Winged Wendy	Glider Pack	Golden Compass	Left Handed	Green Cap	Sweet Treats
Flight Leo	Wind Cannon	Crystal Map	Left Handed	Green Cap	Sweet Treats
Pilot Pam	Glider Pack	Golden Compass	Right Handed	Green Cap	Loud Whistles
Vortex Vi	Cloud Blower	Golden Compass	Right Handed	Blue Cap	Shiny Objects
Thermal Tim	Wind Cannon	Silver Coin	Right Handed	Red Cap	Sweet Treats
Cloudy Claire	Hover Boots	Spyglass	Right Handed	Blue Cap	Loud Whistles
Gale Grace	Glider Pack	Golden Compass	Right Handed	Blue Cap	Loud Whistles
Puff Penny	Grapple Hook	Golden Compass	Right Handed	Blue Cap	Loud Whistles
Zephyr Zach	Cloud Blower	Golden Compass	Right Handed	Red Cap	Shiny Objects
Whirl Will	Hover Boots	Spyglass	Left Handed	Blue Cap	Loud Whistles
Soar Sara	Glider Pack	Golden Compass	Left Handed	Green Cap	Shiny Objects
Salty Sam	Cloud Blower	Golden Compass	Right Handed	Blue Cap	Sweet Treats
Draft Dan	Grapple Hook	Crystal Map	Right Handed	Blue Cap	Loud Whistles
Aero Andy	Glider Pack	Crystal Map	Right Handed	Green Cap	Loud Whistles
Mist Maya	Hover Boots	Silver Coin	Left Handed	Green Cap	Shiny Objects
Gusty Gabe	Grapple Hook	Spyglass	Right Handed	Blue Cap	Loud Whistles
Sky Tyler	Wind Cannon	Golden Compass	Left Handed	Red Cap	Loud Whistles
Breeze Bella	Hover Boots	Bronze Key	Left Handed	Green Cap	Loud Whistles
Breezy Bob	Wind Cannon	Crystal Map	Left Handed	Blue Cap	Loud Whistles
Stormy Stan	Hover Boots	Bronze Key	Right Handed	Blue Cap	Shiny Objects

CLUE 1 Percentages

The sky fort alarm shows the percentage of energy drained by the intruder.

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



40% of 50 = ☐ → T

10% of 350 = ☐ → P

20% of 170 = ☐ → R

40% of 5 = ☐ → V

20% of 70 = ☐ → O

60% of 75 = ☐ → D

50% of 12 = ☐ → A

10% of 410 = ☐ → M

25% of 120 = ☐ → S

50% of 80 = ☐ → E

10% of 390 = ☐ → C

5% of 300 = ☐ → N

20% of 110 = ☐ → H

50% of 10 = ☐ → L

50% of 58 = ☐ → Y

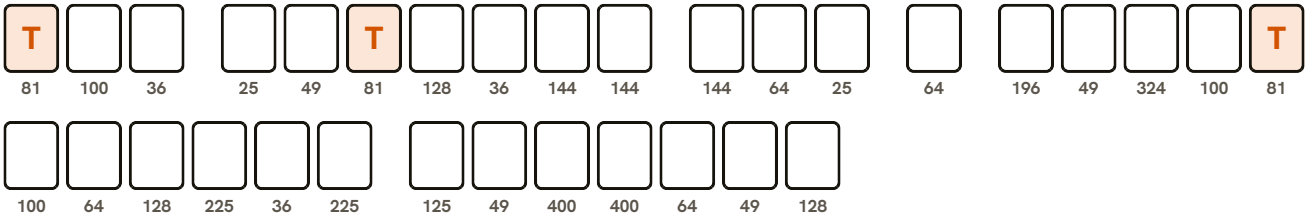
20% of 160 = ☐ → I

Scratch space:

CLUE 2 Exponents

> The navigator calculates the power levels multiplying in squared charges.

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



9^2 = ☐ → T

20^2 = ☐ → L

7^2 = ☐ → I

18^2 = ☐ → G

5^2 = ☐ → W

5^3 = ☐ → V

2^6 = ☐ → A

14^2 = ☐ → R

15^2 = ☐ → D

10^2 = ☐ → H

6^2 = ☐ → E

12^2 = ☐ → S

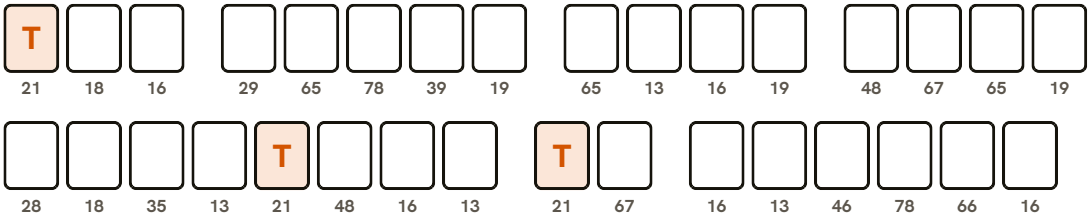
2^7 = ☐ → N

Scratch space:

CLUE 3 Order of operations

To decode the flight log, the team follows the step by step order of operations.

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



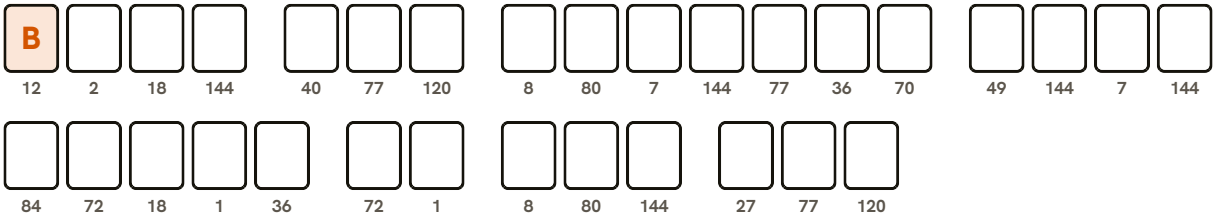
6 × 8 - 27 = ☐ → T	7 × 10 - 24 = ☐ → C	43 + 4 × 6 = ☐ → O
10 × 6 - 12 = ☐ → L	2 + 2 × 7 = ☐ → E	5 × 7 - 6 = ☐ → G
6 × 12 - 7 = ☐ → U	2 × 10 - 1 = ☐ → D	70 + 2 × 4 = ☐ → A
17 + 6 × 3 = ☐ → I	4 × 9 - 8 = ☐ → W	8 × 10 - 14 = ☐ → P
12 × 3 - 18 = ☐ → H	5 × 5 - 12 = ☐ → S	21 + 9 × 2 = ☐ → R

Scratch space:

CLUE 4 Multiplication facts (1-12)

The airship crew counts rows of supply crates stored in the cargo bay.

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



4 × 3 = ☐ → B	9 × 8 = ☐ → O	7 × 10 = ☐ → S	1 × 8 = ☐ → T
7 × 12 = ☐ → F	7 × 1 = ☐ → R	4 × 10 = ☐ → C	
1 × 1 = ☐ → N	7 × 11 = ☐ → A	8 × 10 = ☐ → H	
12 × 3 = ☐ → D	10 × 12 = ☐ → P	6 × 3 = ☐ → U	
7 × 7 = ☐ → W	9 × 3 = ☐ → M	12 × 12 = ☐ → E	
1 × 2 = ☐ → L			

Scratch space:

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

> The scouts split the sky maps equally into storage lockers across the deck.

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:

10 ÷ 1 = ☐	14 ÷ 2 = ☐	6 ÷ 2 = ☐	77 ÷ 7 = ☐	48 ÷ 8 = ☐
16 ÷ 2 = ☐	4 ÷ 1 = ☐	144 ÷ 12 = ☐	10 ÷ 10 = ☐	10 ÷ 5 = ☐
18 ÷ 2 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain blasted a wind cannon, then swiped the silver coin.
2. The villain puffed a cloud blower, then grabbed the spyglass.
3. The villain swung on a grapple hook, then grabbed the spyglass.
4. The villain soared with a glider pack, then pocketed the crystal map.
5. The villain soared with a glider pack, then snatched the golden compass.
6. The villain soared with a glider pack, then swiped the silver coin.
7. The villain zipped on hover boots, then grabbed the spyglass.
8. The villain swung on a grapple hook, then stole the bronze key.
9. The villain blasted a wind cannon, then stole the bronze key.
10. The villain swung on a grapple hook, then snatched the golden compass.
11. The villain blasted a wind cannon, then pocketed the crystal map.
12. The villain puffed a cloud blower, then stole the bronze key.

TEACHER / PARENT

Answer Key

The Sky Island Treasure Caper

Culprit: Gale Grace

Glider Pack · Golden Compass · Right Handed · Blue Cap · Loud Whistles

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Percentages): "THE VILLAIN DOES NOT HAVE A CRYSTAL MAP"

40% of 50 = 20 (T) · 10% of 350 = 35 (P) · 20% of 170 = 34 (R) · 40% of 5 = 2 (V) · 20% of 70 = 14 (O) · 60% of 75 = 45 (D) · 50% of 12 = 6 (A) · 10% of 410 = 41 (M) · 25% of 120 = 30 (S) · 50% of 80 = 40 (E) · 10% of 390 = 39 (C) · 5% of 300 = 15 (N) · 20% of 110 = 22 (H) · 50% of 10 = 5 (L) · 50% of 58 = 29 (Y) · 20% of 160 = 32 (I)

Clue 2 (Exponents): "THE WITNESS SAW A RIGHT HANDED VILLAIN"

9^2 = 81 (T) · 20^2 = 400 (L) · 7^2 = 49 (I) · 18^2 = 324 (G) · 5^2 = 25 (W) · 5^3 = 125 (V) · 2^6 = 64 (A) · 14^2 = 196 (R) · 15^2 = 225 (D) · 10^2 = 100 (H) · 6^2 = 36 (E) · 12^2 = 144 (S) · 2^7 = 128 (N)

Clue 3 (Order of operations): "THE GUARD USED LOUD WHISTLES TO ESCAPE"

6 × 8 - 27 = 21 (T) · 7 × 10 - 24 = 46 (C) · 43 + 4 × 6 = 67 (O) · 10 × 6 - 12 = 48 (L) · 2 + 2 × 7 = 16 (E) · 5 × 7 - 6 = 29 (G) · 6 × 12 - 7 = 65 (U) · 2 × 10 - 1 = 19 (D) · 70 + 2 × 4 = 78 (A) · 17 + 6 × 3 = 35 (I) · 4 × 9 - 8 = 28 (W) · 8 × 10 - 14 = 66 (P) · 12 × 3 - 18 = 18 (H) · 5 × 5 - 12 = 13 (S) · 21 + 9 × 2 = 39 (R)

Clue 4 (Multiplication facts (1-12)): "BLUE CAP THREADS WERE FOUND ON THE MAP"

4 × 3 = 12 (B) · 9 × 8 = 72 (O) · 7 × 10 = 70 (S) · 1 × 8 = 8 (T) · 7 × 12 = 84 (F) · 7 × 1 = 7 (R) · 4 × 10 = 40 (C) · 1 × 1 = 1 (N) · 7 × 11 = 77 (A) · 8 × 10 = 80 (H) · 12 × 3 = 36 (D) · 10 × 12 = 120 (P) · 6 × 3 = 18 (U) · 7 × 7 = 49 (W) · 9 × 3 = 27 (M) · 12 × 12 = 144 (E) · 1 × 2 = 2 (L)

Clue 5 (Division facts (1-12)): surviving statement is box 5 → Gale Grace

10 ÷ 1 = 10 · 14 ÷ 2 = 7 · 6 ÷ 2 = 3 · 77 ÷ 7 = 11 · 48 ÷ 8 = 6 · 16 ÷ 2 = 8 · 4 ÷ 1 = 4 · 144 ÷ 12 = 12 · 10 ÷ 10 = 1 · 10 ÷ 5 = 2 · 18 ÷ 2 = 9