The Great Space Dino Heist

Grade 5 math · Addition, Multiplication, Fractions of a number, Order of operations, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

The shiny Cosmic Diamond has been stolen from Starbase Raptor! A sneaky space dino pirate broke into the display room and zoomed off with the loot. Detective, analyze the clues to catch the robber!

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 space dino pirate is _____

Possible suspects

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

NAME	DINO GADGET	SHIP MODULE	DOMINANT HAND	CREST COLOR	GLITCHED BY
Astra Anchors	Rocket Boots	Force Field	Right-handed	Solar Gold Crest	Water Balloons
Laser Lucy	Sonic Roar	Hyper Scanner	Right-handed	Solar Gold Crest	Water Balloons
Gears Triton	Laser Cannon	Stealth Cloak	Right-handed	Neon Blue Crest	Magnet Traps
Cosmo Kraken	Sonic Roar	Force Field	Left-handed	Solar Gold Crest	Water Balloons
Siren Star	Sonic Roar	Stealth Cloak	Left-handed	Bright Green Crest	Magnet Traps
Spike Sprocket	Rocket Boots	Force Field	Right-handed	Bright Green Crest	Magnet Traps
Rusty Rover	Sonic Roar	Stealth Cloak	Left-handed	Bright Green Crest	Cosmic Dust
Circuit Sam	Tractor Beam	Solar Sails	Right-handed	Solar Gold Crest	Water Balloons
Nova Nibbles	Sonic Roar	Force Field	Left-handed	Solar Gold Crest	Magnet Traps
Gizmo Gator	Sonic Roar	Force Field	Right-handed	Bright Green Crest	Magnet Traps
Titan Tread	Plasma Shield	Force Field	Right-handed	Bright Green Crest	Magnet Traps
Robby Raptor	Plasma Shield	Stealth Cloak	Right-handed	Solar Gold Crest	Water Balloons
Volt Velma	Sonic Roar	Turbo Thrusters	Left-handed	Bright Green Crest	Water Balloons
TRex Byte	Tractor Beam	Hyper Scanner	Left-handed	Neon Blue Crest	Magnet Traps
Scrap Bot	Laser Cannon	Stealth Cloak	Left-handed	Neon Blue Crest	Magnet Traps
Ziggy Zircon	Tractor Beam	Force Field	Left-handed	Solar Gold Crest	Cosmic Dust
Sparky Fang	Laser Cannon	Hyper Scanner	Right-handed	Bright Green Crest	Water Balloons
Comet Claw	Rocket Boots	Solar Sails	Right-handed	Neon Blue Crest	Magnet Traps
Pixel Pete	Laser Cannon	Hyper Scanner	Right-handed	Solar Gold Crest	Cosmic Dust
Captain Rex	Rocket Boots	Solar Sails	Left-handed	Neon Blue Crest	Magnet Traps
Orbit Orbit	Sonic Roar	Stealth Cloak	Right-handed	Solar Gold Crest	Water Balloons

CLUE 1 Addition

To tally up the total fuel canisters left in the dock, add these amounts together.

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



4569 + 2215 = ☐ → T

2531 + 3741 = ☐ → Y

2123 + 3140 = ☐ → S

3397 + 1496 = ☐ → H

4488 + 4111 = ☐ → N

3719 + 1896 = ☐ → A

5322 + 4399 = ☐ → I

2859 + 6048 = ☐ → D

4749 + 4341 = ☐ → C

4960 + 4674 = ☐ → O

6275 + 3425 = ☐ → K

2660 + 3375 = ☐ → U

2586 + 3002 = ☐ → L

2484 + 1821 = ☐ → R

1388 + 682 = ☐ → E

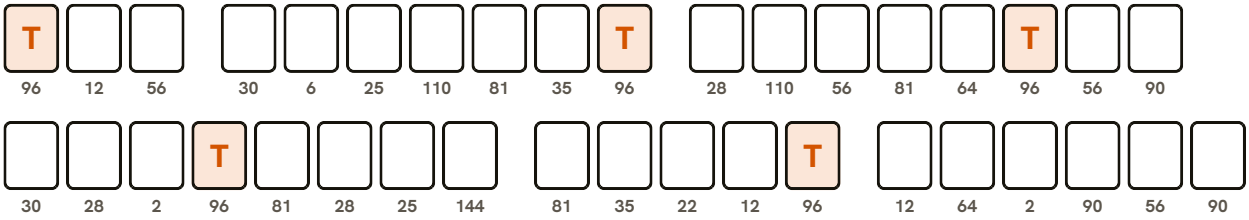
752 + 1403 = ☐ → P

Scratch space:

CLUE 2 Multiplication facts (1-12)

The pirate ship left rows of supply crates behind. Multiply the rows to count them all.

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



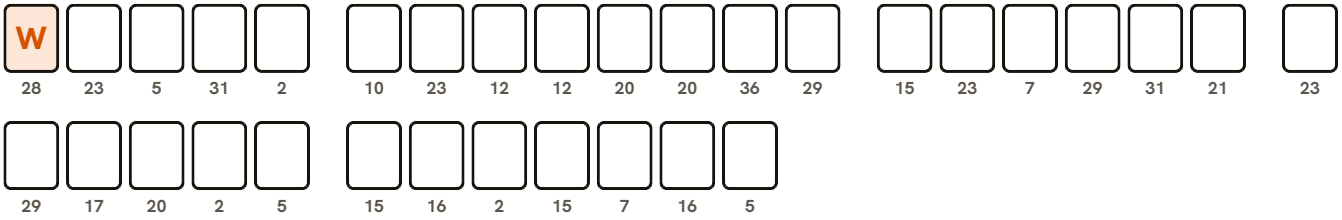
12 × 8 = ☐ → T	5 × 5 = ☐ → L	3 × 10 = ☐ → C
2 × 6 = ☐ → H	1 × 6 = ☐ → U	5 × 7 = ☐ → I
12 × 12 = ☐ → S	9 × 10 = ☐ → D	7 × 4 = ☐ → O
1 × 2 = ☐ → N	11 × 10 = ☐ → P	9 × 9 = ☐ → R
8 × 7 = ☐ → E	2 × 11 = ☐ → G	8 × 8 = ☐ → A

Scratch space:

CLUE 3 Fractions of a number

Only a fraction of the power grid is working. Calculate this fraction of the total battery.

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



1/2 of 56 = ☐ → W

2/3 of 15 = ☐ → B

4/8 of 40 = ☐ → O

4/8 of 42 = ☐ → D

2/8 of 64 = ☐ → I

2/4 of 46 = ☐ → A

3/6 of 62 = ☐ → E

1/8 of 120 = ☐ → C

1/6 of 72 = ☐ → L

1/10 of 50 = ☐ → T

2/10 of 145 = ☐ → S

4/8 of 14 = ☐ → U

1/10 of 20 = ☐ → R

1/5 of 85 = ☐ → H

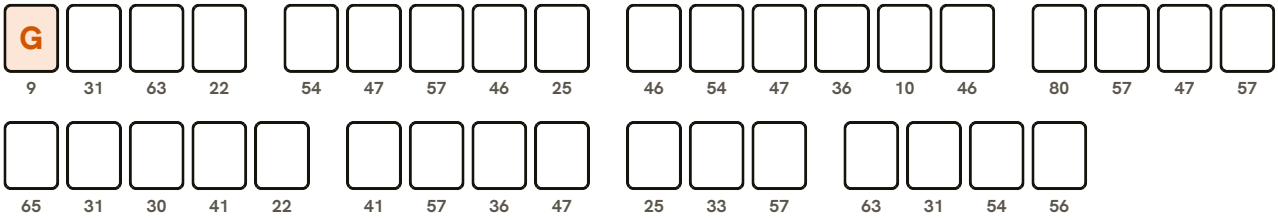
8/10 of 45 = ☐ → N

Scratch space:

CLUE 4 Order of operations

Follow the step by step security passcode formula to unlock the computer log.

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



5 + 2 × 2 = ☐ → G

4 × 11 - 19 = ☐ → T

12 + 6 × 3 = ☐ → U

12 + 6 × 7 = ☐ → C

4 + 3 × 2 = ☐ → P

5 × 7 - 2 = ☐ → H

4 × 10 - 9 = ☐ → O

10 × 10 - 20 = ☐ → W

4 + 3 × 6 = ☐ → D

21 + 4 × 9 = ☐ → E

7 × 12 - 21 = ☐ → L

11 × 8 - 23 = ☐ → F

4 + 8 × 4 = ☐ → A

11 × 7 - 21 = ☐ → K

7 × 8 - 10 = ☐ → S

6 × 11 - 19 = ☐ → R

14 + 9 × 3 = ☐ → N

Scratch space:

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

Divide the remaining energy cells equally among the guard bots to reset the alarm.

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:

25 ÷ 5 = ☐	27 ÷ 9 = ☐	99 ÷ 9 = ☐	10 ÷ 5 = ☐	28 ÷ 4 = ☐
20 ÷ 5 = ☐	60 ÷ 6 = ☐	72 ÷ 8 = ☐	72 ÷ 6 = ☐	8 ÷ 1 = ☐
4 ÷ 4 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain snatched the golden prize with a tractor beam, then deflected defense lasers with a force field.
2. The villain snatched the golden prize with a tractor beam, then escaped using turbo thrusters.
3. The villain zoomed over the security fence on rocket boots, then deflected defense lasers with a force field.
4. The villain blasted open the vault with a laser cannon, then vanished behind a stealth cloak.
5. The villain shattered the glass display with a sonic roar, then scanned the escape path with a hyper scanner.
6. The villain blocked the alarm beams with a plasma shield, then vanished behind a stealth cloak.
7. The villain zoomed over the security fence on rocket boots, then escaped using turbo thrusters.
8. The villain blocked the alarm beams with a plasma shield, then deflected defense lasers with a force field.
9. The villain blasted open the vault with a laser cannon, then sailed away on solar sails.
10. The villain blasted open the vault with a laser cannon, then escaped using turbo thrusters.
11. The villain shattered the glass display with a sonic roar, then vanished behind a stealth cloak.
12. The villain snatched the golden prize with a tractor beam, then vanished behind a stealth cloak.

TEACHER / PARENT

Answer Key

The Great Space Dino Heist

Culprit: Robby Raptor

Plasma Shield · Stealth Cloak · Right-handed · Solar Gold Crest · Water Balloons

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNEAKY SUSPECT DOES NOT USE SOLAR SAILS"

4569 + 2215 = 6784 (T) · 2531 + 3741 = 6272 (Y) · 2123 + 3140 = 5263 (S) · 3397 + 1496 = 4893 (H) · 4488 + 4111 = 8599 (N) · 3719 + 1896 = 5615 (A) · 5322 + 4399 = 9721 (I) · 2859 + 6048 = 8907 (D) · 4749 + 4341 = 9090 (C) · 4960 + 4674 = 9634 (O) · 6275 + 3425 = 9700 (K) · 2660 + 3375 = 6035 (U) · 2586 + 3002 = 5588 (L) · 2484 + 1821 = 4305 (R) · 1388 + 682 = 2070 (E) · 752 + 1403 = 2155 (P)

Clue 2 (Multiplication facts (1-12)): "THE CULPRIT OPERATED CONTROLS RIGHT HANDED"

12 × 8 = 96 (T) · 5 × 5 = 25 (L) · 3 × 10 = 30 (C) · 2 × 6 = 12 (H) · 1 × 6 = 6 (U) · 5 × 7 = 35 (I) · 12 × 12 = 144 (S) · 9 × 10 = 90 (D) · 7 × 4 = 28 (O) · 1 × 2 = 2 (N) · 11 × 10 = 110 (P) · 9 × 9 = 81 (R) · 8 × 7 = 56 (E) · 2 × 11 = 22 (G) · 8 × 8 = 64 (A)

Clue 3 (Fractions of a number): "WATER BALLOONS CAUSED A SHORT CIRCUIT"

1/2 of 56 = 28 (W) · 2/3 of 15 = 10 (B) · 4/8 of 40 = 20 (O) · 4/8 of 42 = 21 (D) · 2/8 of 64 = 16 (I) · 2/4 of 46 = 23 (A) · 3/6 of 62 = 31 (E) · 1/8 of 120 = 15 (C) · 1/6 of 72 = 12 (L) · 1/10 of 50 = 5 (T) · 2/10 of 145 = 29 (S) · 4/8 of 14 = 7 (U) · 1/10 of 20 = 2 (R) · 1/5 of 85 = 17 (H) · 8/10 of 45 = 36 (N)

Clue 4 (Order of operations): "GOLD CREST SCRAPS WERE FOUND NEAR THE LOCK"

5 + 2 × 2 = 9 (G) · 4 × 11 - 19 = 25 (T) · 12 + 6 × 3 = 30 (U) · 12 + 6 × 7 = 54 (C) · 4 + 3 × 2 = 10 (P) · 5 × 7 - 2 = 33 (H) · 4 × 10 - 9 = 31 (O) · 10 × 10 - 20 = 80 (W) · 4 + 3 × 6 = 22 (D) · 21 + 4 × 9 = 57 (E) · 7 × 12 - 21 = 63 (L) · 11 × 8 - 23 = 65 (F) · 4 + 8 × 4 = 36 (A) · 11 × 7 - 21 = 56 (K) · 7 × 8 - 10 = 46 (S) · 6 × 11 - 19 = 47 (R) · 14 + 9 × 3 = 41 (N)

Clue 5 (Division facts (1-12)): surviving statement is box 6 → Robby Raptor

25 ÷ 5 = 5 · 27 ÷ 9 = 3 · 99 ÷ 9 = 11 · 10 ÷ 5 = 2 · 28 ÷ 4 = 7 · 20 ÷ 5 = 4 · 60 ÷ 6 = 10 · 72 ÷ 8 = 9 · 72 ÷ 6 = 12 · 8 ÷ 1 = 8 · 4 ÷ 4 = 1