The Space Pirate Block Mystery

Grade 2 math · Addition, Subtraction, Place value, Word problems, Missing addends · Reading level grades 1-2

Detective: _____ **Date:** _____

Someone snuck onto Starship Blockbeard and hid the master brick blueprint! A sneaky Space Pirate Bot was spotted near the control room. Use your math skills to decode the clues and find out who did it.

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 Pirate Bot is _____

Possible suspects

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

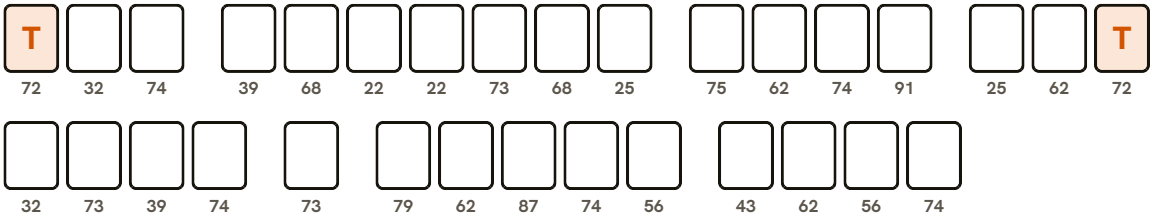
NAME	MAIN GADGET	EXTRA GEAR	HANDEDNESS	HEADWEAR	WEAKNESS
Goofy	warp drive	turbo drill	left handed	red bandanna	redstone dust
Mahomes	warp drive	cyber parrot	left handed	neon visor	water bucket
Mario	plasma shield	mega magnet	right handed	silver helmet	gold coins
Woody	rocket boots	pixel map	right handed	silver helmet	gold coins
Peyton	rocket boots	turbo drill	left handed	silver helmet	redstone dust
Alex	block blaster	mega magnet	left handed	neon visor	redstone dust
Rex	rocket boots	mega magnet	right handed	silver helmet	water bucket
Eve	rocket boots	mega magnet	right handed	red bandanna	water bucket
Kelce	warp drive	turbo drill	right handed	silver helmet	gold coins
Luigi	warp drive	turbo drill	right handed	red bandanna	water bucket
Smee	plasma shield	mega magnet	right handed	red bandanna	gold coins
Patrick	warp drive	mega magnet	left handed	red bandanna	redstone dust
Steve	plasma shield	pixel map	right handed	silver helmet	gold coins
Donald	plasma shield	power core	right handed	neon visor	gold coins
Sonic	warp drive	power core	right handed	red bandanna	gold coins
Buzz	warp drive	pixel map	right handed	silver helmet	gold coins
Stitch	plasma shield	turbo drill	right handed	red bandanna	gold coins
Hook	laser sword	cyber parrot	left handed	red bandanna	gold coins
Baymax	laser sword	pixel map	right handed	red bandanna	gold coins
Mickey	block blaster	turbo drill	right handed	red bandanna	gold coins
WallE	laser sword	cyber parrot	right handed	red bandanna	redstone dust

make your own at mathcrackers.com

CLUE 1 Addition

Count all the energy bricks to reveal the first secret code.

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



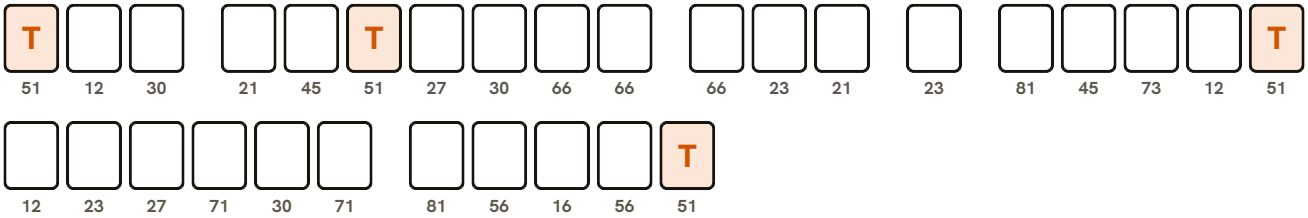
28 + 44 = ☐ → T	43 + 44 = ☐ → W	6 + 16 = ☐ → L
42 + 37 = ☐ → P	17 + 26 = ☐ → C	38 + 24 = ☐ → O
52 + 23 = ☐ → D	52 + 21 = ☐ → A	19 + 13 = ☐ → H
22 + 17 = ☐ → V	12 + 13 = ☐ → N	26 + 48 = ☐ → E
36 + 20 = ☐ → R	24 + 44 = ☐ → I	42 + 49 = ☐ → S

Scratch space:

CLUE 2 Subtraction

Take away the damaged pirate blocks to read the signal.

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



89 - 38 = ☐ → T

35 - 14 = ☐ → W

71 - 5 = ☐ → S

49 - 37 = ☐ → H

79 - 8 = ☐ → D

46 - 1 = ☐ → I

90 - 17 = ☐ → G

84 - 3 = ☐ → R

40 - 13 = ☐ → N

26 - 3 = ☐ → A

47 - 31 = ☐ → B

34 - 4 = ☐ → E

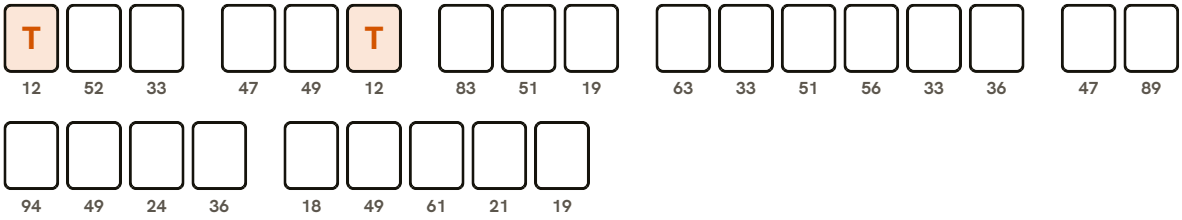
68 - 12 = ☐ → O

Scratch space:

CLUE 3 Place value

Look at the tens and ones on the star radar.

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



What number has 1 ten and 2 ones? ☐ → T

What number has 6 tens and 3 ones? ☐ → F

What number has 8 tens and 3 ones? ☐ → W

What number has 9 tens and 4 ones? ☐ → G

What number has 8 tens and 9 ones? ☐ → Y

What number has 5 tens and 6 ones? ☐ → R

What number has 1 ten and 9 ones? ☐ → S

What number has 5 tens and 2 ones? ☐ → H

What number has 4 tens and 7 ones? ☐ → B

What number has 6 tens and 1 one? ☐ → I

What number has 5 tens and 1 one? ☐ → A

What number has 4 tens and 9 ones? ☐ → O

What number has 2 tens and 4 ones? ☐ → L

What number has 2 tens and 1 one? ☐ → N

What number has 3 tens and 6 ones? ☐ → D

What number has 3 tens and 3 ones? ☐ → E

What number has 1 ten and 8 ones? ☐ → C

Scratch space:

CLUE 4 Word problems

Solve this space story to uncover a clue.

Solve each problem, then write its letter in the boxes to fill in the missing word.

A strand of

R											
40	28	13	12	16	29	13	16	29	29	16	

hair turned up at the scene.

There were 49 plastic bricks. 9 were used up. How many plastic bricks are left?

Answer: ☐ → **R**

Astro Pirate found 9 redstone blocks yesterday and 3 more today. How many redstone blocks in all?

Answer: ☐ → **B**

Astro Pirate found 27 plastic bricks yesterday and 2 more today. How many plastic bricks in all?

Answer: ☐ → **N**

Astro Pirate lined up 4 rows of 7 space helmets. How many space helmets in all?

Answer: ☐ → **E**

There were 17 redstone blocks. 4 were used up. How many redstone blocks are left?

Answer: ☐ → **D**

Astro Pirate lined up 2 rows of 8 plastic bricks. How many plastic bricks in all?

Answer: ☐ → **A**

Scratch space:

CLUE 5 Missing addends - the last clue

Find the missing power cell number on the ship console.

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:

9 + ___ = 11 ☐	2 + ___ = 11 ☐	1 + ___ = 7 ☐	10 + ___ = 14 ☐
6 + ___ = 9 ☐	4 + ___ = 11 ☐	9 + ___ = 19 ☐	6 + ___ = 7 ☐
1 + ___ = 13 ☐	9 + ___ = 20 ☐	4 + ___ = 12 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain zapped a warp drive, then scanned with a cyber parrot.
2. The villain raised a plasma shield, then spun a turbo drill.
3. The villain zapped a warp drive, then spun a turbo drill.
4. The villain zoomed on rocket boots, then scanned with a cyber parrot.
5. The villain swung a laser sword, then read a pixel map.
6. The villain fired a block blaster, then spun a turbo drill.
7. The villain zoomed on rocket boots, then charged a power core.
8. The villain zapped a warp drive, then pulled a mega magnet.
9. The villain raised a plasma shield, then pulled a mega magnet.
10. The villain fired a block blaster, then charged a power core.
11. The villain fired a block blaster, then read a pixel map.
12. The villain zoomed on rocket boots, then spun a turbo drill.

TEACHER / PARENT

Answer Key

The Space Pirate Block Mystery

Culprit: Baymax

laser sword · pixel map · right handed · red bandanna · gold coins

Trail: Start 21 → Clue 1 19 → Clue 2 13 → Clue 3 9 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT HAVE A POWER CORE"

28 + 44 = 72 (T) · 43 + 44 = 87 (W) · 6 + 16 = 22 (L) · 42 + 37 = 79 (P) · 17 + 26 = 43 (C) · 38 + 24 = 62 (O) · 52 + 23 = 75 (D) · 52 + 21 = 73 (A) · 19 + 13 = 32 (H) · 22 + 17 = 39 (V) · 12 + 13 = 25 (N) · 26 + 48 = 74 (E) · 36 + 20 = 56 (R) · 24 + 44 = 68 (I) · 42 + 49 = 91 (S)

Clue 2 (Subtraction): "THE WITNESS SAW A RIGHT HANDED ROBOT"

89 - 38 = 51 (T) · 35 - 14 = 21 (W) · 71 - 5 = 66 (S) · 49 - 37 = 12 (H) · 79 - 8 = 71 (D) · 46 - 1 = 45 (I) · 90 - 17 = 73 (G) · 84 - 3 = 81 (R) · 40 - 13 = 27 (N) · 26 - 3 = 23 (A) · 47 - 31 = 16 (B) · 34 - 4 = 30 (E) · 68 - 12 = 56 (O)

Clue 3 (Place value): "THE BOT WAS FEARED BY GOLD COINS"

What number has 1 ten and 2 ones? = 12 (T) · What number has 6 tens and 3 ones? = 63 (F) · What number has 8 tens and 3 ones? = 83 (W) · What number has 9 tens and 4 ones? = 94 (G) · What number has 8 tens and 9 ones? = 89 (Y) · What number has 5 tens and 6 ones? = 56 (R) · What number has 1 ten and 9 ones? = 19 (S) · What number has 5 tens and 2 ones? = 52 (H) · What number has 4 tens and 7 ones? = 47 (B) · What number has 6 tens and 1 one? = 61 (I) · What number has 5 tens and 1 one? = 51 (A) · What number has 4 tens and 9 ones? = 49 (O) · What number has 2 tens and 4 ones? = 24 (L) · What number has 2 tens and 1 one? = 21 (N) · What number has 3 tens and 6 ones? = 36 (D) · What number has 3 tens and 3 ones? = 33 (E) · What number has 1 ten and 8 ones? = 18 (C)

Clue 4 (Word problems): "RED BANDANNA"

There were 49 plastic bricks. 9 were used up. How many plastic bricks are left? = 40 (R) · Astro Pirate found 9 redstone blocks yesterday and 3 more today. How many redstone blocks in all? = 12 (B) · Astro Pirate found 27 plastic bricks yesterday and 2 more today. How many plastic bricks in all? = 29 (N) · Astro Pirate lined up 4 rows of 7 space helmets. How many space helmets in all? = 28 (E) · There were 17 redstone blocks. 4 were used up. How many redstone blocks are left? = 13 (D) · Astro Pirate lined up 2 rows of 8 plastic bricks. How many plastic bricks in all? = 16 (A)

Clue 5 (Missing addends): surviving statement is box 5 → Baymax

9 + ___ = 11 = 2 · 2 + ___ = 11 = 9 · 1 + ___ = 7 = 6 · 10 + ___ = 14 = 4 · 6 + ___ = 9 = 3 · 4 + ___ = 11 = 7 · 9 + ___ = 19 = 10 · 6 + ___ = 7 = 1 · 1 + ___ = 13 = 12 · 9 + ___ = 20 = 11 · 4 + ___ = 12 = 8