



The Robo-Dino Cup Mystery

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

Detective: _____ Date: _____

The big game is about to start! But oh no! Someone stole the Shiny Golden Cup. The referee needs your help to find the culprit!

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 trophy swiper is _____

Possible suspects

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

NAME	MAIN POWER	SPECIAL SKILL	KICKING FOOT	COAT TYPE	HOW TO STOP THEM
Steggy	Fire Breath	Speed Sprint	Kicks with right foot	Green scales	Loud whistles
Claw	Pixel Shield	Block Wall	Kicks with left foot	Green scales	Catnip toys
Purr-fect	Laser Tail	Speed Sprint	Kicks with right foot	Pink mane	Loud whistles
Striker	Turbo Booster	Block Wall	Kicks with left foot	Pink mane	Shiny lasers
Rainbow Kick	Magic Horn	Speed Sprint	Kicks with left foot	Pink mane	Loud whistles
Mittens	Magic Horn	Yarn Toss	Kicks with left foot	Silver metal fur	Loud whistles
Tricera-Bot	Turbo Booster	Sparkle Dash	Kicks with left foot	Green scales	Catnip toys
Fang	Magic Horn	Robo Kick	Kicks with left foot	Silver metal fur	Loud whistles
Robo Ronaldo	Magic Horn	Block Wall	Kicks with right foot	Pink mane	Loud whistles
Robo Messi	Turbo Booster	Sparkle Dash	Kicks with left foot	Pink mane	Loud whistles
Pixel Rover	Pixel Shield	Block Wall	Kicks with right foot	Pink mane	Catnip toys
Shiny Tail	Fire Breath	Speed Sprint	Kicks with right foot	Silver metal fur	Shiny lasers
Laser Cat	Magic Horn	Sparkle Dash	Kicks with right foot	Pink mane	Loud whistles
Turbo Kitty	Magic Horn	Yarn Toss	Kicks with right foot	Pink mane	Loud whistles
Bolt	Pixel Shield	Speed Sprint	Kicks with left foot	Pink mane	Loud whistles
Pixel Alex	Laser Tail	Yarn Toss	Kicks with right foot	Pink mane	Catnip toys
Rusty	Turbo Booster	Block Wall	Kicks with left foot	Silver metal fur	Catnip toys
Sparky	Turbo Booster	Yarn Toss	Kicks with left foot	Pink mane	Loud whistles
Ziggy	Fire Breath	Yarn Toss	Kicks with right foot	Pink mane	Loud whistles
Rex	Pixel Shield	Block Wall	Kicks with left foot	Green scales	Loud whistles
Uni-Pup	Turbo Booster	Robo Kick	Kicks with right foot	Green scales	Catnip toys

CLUE 1 Place value

We check the stadium scoreboard. The flashing screen shows the digits of a mystery code. Help us find the tens value!

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

T			T											T			
21	58	80	21	58	30	80	96	37	55	80	31	36	55	21	41	31	80
T																	
21	58	80	43	28	55	71	69	27	77	28	28						

What number has 2 tens and 1 one? → **T**

What number has 9 tens and 6 ones? → **F**

What number has 3 tens and 0 ones? → **I**

What number has 5 tens and 8 ones? → **H**

What number has 4 tens and 1 one? → **U**

What number has 7 tens and 7 ones? → **A**

What number has 3 tens and 6 ones? → **N**

What number has 3 tens and 7 ones? → **D**

What number has 6 tens and 9 ones? → **K**

What number has 3 tens and 1 one? → **S**

What number has 8 tens and 0 ones? → **E**

What number has 5 tens and 5 ones? → **O**

What number has 7 tens and 1 one? → **C**

What number has 4 tens and 3 ones? → **B**

What number has 2 tens and 7 ones? → **W**

What number has 2 tens and 8 ones? → **L**

Scratch space:

CLUE 2

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

Diagram illustrating the sequence of boxes and their associated values:

- Row 1: 35 (T), 29, 22, 65, 12, 22, 50, 23, 46, 50, 45, 88, 23, 35 (T), 29, 35 (T), 29, 22
- Row 2: 16, 23, 52, 29, 35 (T), 65, 12, 12, 35 (T)

$37 - 2 = \square \rightarrow \boxed{\text{T}}$

$68 - 3 = \square \rightarrow \boxed{\text{F}}$

33 - 10 = →

90 - 2 = → **W**

27 - 5 = → **E**

$71 - 19 = \square \rightarrow \boxed{\text{G}}$

$66 - 20 = \boxed{} \rightarrow \boxed{\text{C}}$

$38 - 22 = \boxed{} \rightarrow \boxed{\text{R}}$

$$67 - 38 = \boxed{} \rightarrow \boxed{\text{H}}$$

$32 - 20 = \square \rightarrow \boxed{\text{O}}$

$73 - 28 = \boxed{} \rightarrow \boxed{\text{S}}$

$62 - 12 = \square \rightarrow \boxed{\text{K}}$

Scratch space:

CLUE 3 **Addition**

The kitty robots need power cubes to run. We collect yellow cubes and pink cubes. Add them up to find the total!

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

T							T									T			
59	87	89	22	87	74	59	89	44	26	34	68	41	87	62	76	59	44	89	76

$24 + 35 = \square \rightarrow \text{T}$

$13 + 9 = \square \rightarrow \text{Y}$

$38 + 24 = \square \rightarrow \text{I}$

$62 + 27 = \square \rightarrow \text{E}$

$50 + 26 = \square \rightarrow \text{S}$

$59 + 28 = \square \rightarrow \text{H}$

$24 + 44 = \square \rightarrow \text{D}$

$34 + 40 = \square \rightarrow \text{A}$

$17 + 9 = \square \rightarrow \text{O}$

$29 + 15 = \square \rightarrow \text{L}$

$12 + 29 = \square \rightarrow \text{W}$

$24 + 10 = \square \rightarrow \text{U}$

Scratch space:

CLUE 4 Skip counting

Look at the grassy field! We see a trail of shiny dino tracks. Count by twos to follow the path!

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

W														
18	36	30	55	20	12	120	110	140	60	24	110	12	120	55 30

39	45	12	25	50	110	12	36

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, __, 20, 22 → **W**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 → **E**

Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 → **U**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 → **O**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 → **R**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 → **K**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 → **I**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 → **T**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 → **D**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 → **A**

Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 → **N**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 → **S**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, __, 33, 36 → **F**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, __, 60, 70 → **M**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 → **P**

Scratch space:

CLUE 5**Missing addends - the last clue**

We have ten gears to fix our unicorn robot, but some are missing. How many more do we need to make ten?

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:

$4 + \underline{\quad} = 6$

$5 + \underline{\quad} = 6$

$8 + \underline{\quad} = 14$

$3 + \underline{\quad} = 7$

$8 + \underline{\quad} = 19$

$1 + \underline{\quad} = 9$

$4 + \underline{\quad} = 13$

$10 + \underline{\quad} = 13$

$5 + \underline{\quad} = 10$

$8 + \underline{\quad} = 15$

$4 + \underline{\quad} = 14$

Step 2 - cross out the sentence with each answer:

1. The villain glows with a magic horn, then throws a colorful yarn toss.
2. The villain glows with a magic horn, then escapes with a sparkle dash.
3. The villain blows a puff of fire breath, then starts a quick speed sprint.
4. The villain activates a pixel shield, then performs a heavy robo kick.
5. The villain turns on a turbo booster, then performs a heavy robo kick.
6. The villain zaps with a laser tail, then starts a quick speed sprint.
7. The villain glows with a magic horn, then performs a heavy robo kick.
8. The villain turns on a turbo booster, then starts a quick speed sprint.
9. The villain activates a pixel shield, then builds a high block wall.
10. The villain blows a puff of fire breath, then builds a high block wall.
11. The villain zaps with a laser tail, then builds a high block wall.
12. The villain blows a puff of fire breath, then throws a colorful yarn toss.

Answer Key

The Robo-Dino Cup Mystery

Culprit: Ziggy

Fire Breath · Yarn Toss · Kicks with right foot · Pink mane · Loud whistles

Trail: Start 21 → Clue 1 15 → Clue 2 8 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE THIEF DOES NOT USE THE BLOCK WALL"

What number has 2 tens and 1 one? = 21 (T) · What number has 9 tens and 6 ones? = 96 (F) · What number has 3 tens and 0 ones? = 30 (I) · What number has 5 tens and 8 ones? = 58 (H) · What number has 4 tens and 1 one? = 41 (U) · What number has 7 tens and 7 ones? = 77 (A) · What number has 3 tens and 6 ones? = 36 (N) · What number has 3 tens and 7 ones? = 37 (D) · What number has 6 tens and 9 ones? = 69 (K) · What number has 3 tens and 1 one? = 31 (S) · What number has 8 tens and 0 ones? = 80 (E) · What number has 5 tens and 5 ones? = 55 (O) · What number has 7 tens and 1 one? = 71 (C) · What number has 4 tens and 3 ones? = 43 (B) · What number has 2 tens and 7 ones? = 27 (W) · What number has 2 tens and 8 ones? = 28 (L)

Clue 2 (Subtraction): "THE FOE KICKS WITH THE RIGHT FOOT"

$37 - 2 = 35$ (T) · $68 - 3 = 65$ (F) · $33 - 10 = 23$ (I) · $90 - 2 = 88$ (W) · $27 - 5 = 22$ (E) · $71 - 19 = 52$ (G) · $66 - 20 = 46$ (C) · $38 - 22 = 16$ (R) · $67 - 38 = 29$ (H) · $32 - 20 = 12$ (O) · $73 - 28 = 45$ (S) · $62 - 12 = 50$ (K)

Clue 3 (Addition): "THEY HATE LOUD WHISTLES"

$24 + 35 = 59$ (T) · $13 + 9 = 22$ (Y) · $38 + 24 = 62$ (I) · $62 + 27 = 89$ (E) · $50 + 26 = 76$ (S) · $59 + 28 = 87$ (H) · $24 + 44 = 68$ (D) · $34 + 40 = 74$ (A) · $17 + 9 = 26$ (O) · $29 + 15 = 44$ (L) · $12 + 29 = 41$ (W) · $24 + 10 = 34$ (U)

Clue 4 (Skip counting): "WE FOUND A STRAND OF PINK MANE"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, __, 20, 22 = 18 (W) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 = 20 (U) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (O) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 = 24 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (K) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 = 45 (I) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 = 60 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 = 120 (D) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 = 12 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, __, 33, 36 = 30 (F) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, __, 60, 70 = 50 (M) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (P)

Clue 5 (Missing addends): surviving statement is box 12 → Ziggy

$4 + \underline{\quad} = 6 = 2$ · $5 + \underline{\quad} = 6 = 1$ · $8 + \underline{\quad} = 14 = 6$ · $3 + \underline{\quad} = 7 = 4$ · $8 + \underline{\quad} = 19 = 11$ · $1 + \underline{\quad} = 9 = 8$ · $4 + \underline{\quad} = 13 = 9$ · $10 + \underline{\quad} = 13 = 3$ · $5 + \underline{\quad} = 10 = 5$ · $8 + \underline{\quad} = 15 = 7$ · $4 + \underline{\quad} = 14 = 10$