The Case of the Missing Golden Puck

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

Detective: _____ **Date:** _____

Someone swiped the Golden Puck right before the Frosty Pines Outdoor Tournament! Check the clues and help Coach Maya 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 Puck Snatcher is _____

Possible suspects

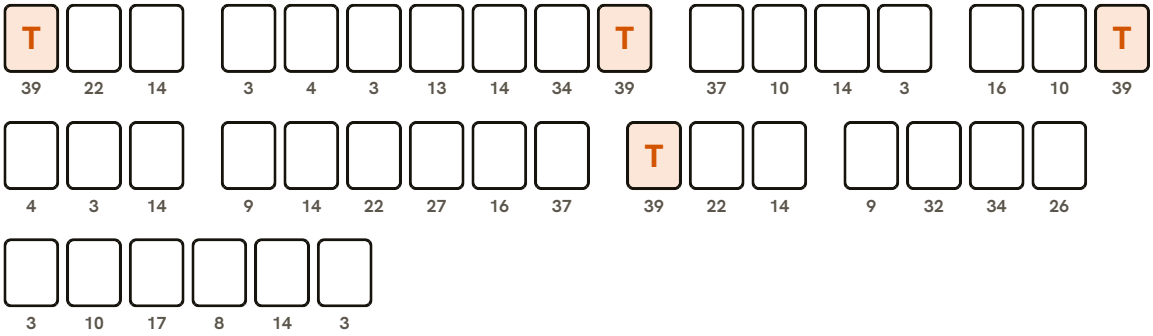
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	HOCKEY SKILL	CUBE TRICK	GRIP STYLE	BEANIE COLOR	DISTRACTION
Tymon Kolasinski	Spin Move	Speed Cubing	Right Handed Grip	Red Beanie	Slippery Ice
Kendall Coyne	Goalie Block	One Handed Solve	Right Handed Grip	Red Beanie	Lost Speed Cube
Matty Beniers	Speed Skating	One Handed Solve	Right Handed Grip	Black Beanie	Lost Speed Cube
Sidney Crosby	Slap Shot	Behind The Back	Left Handed Grip	Black Beanie	Bright Sunlight
Wayne Gretzky	Puck Juggling	One Handed Solve	Left Handed Grip	Red Beanie	Bright Sunlight
Leo Borromeo	Spin Move	Behind The Back	Right Handed Grip	Red Beanie	Slippery Ice
Connor McDavid	Speed Skating	Speed Cubing	Left Handed Grip	Blue Beanie	Lost Speed Cube
Hilary Knight	Slap Shot	One Handed Solve	Right Handed Grip	Black Beanie	Bright Sunlight
Trevor Zegras	Puck Juggling	Blindfold Solve	Right Handed Grip	Red Beanie	Slippery Ice
Nathan MacKinnon	Spin Move	Pattern Matching	Left Handed Grip	Black Beanie	Slippery Ice
Tommy Cherry	Goalie Block	One Handed Solve	Left Handed Grip	Red Beanie	Bright Sunlight
Yiheng Wang	Spin Move	One Handed Solve	Left Handed Grip	Black Beanie	Bright Sunlight
Jack Hughes	Goalie Block	Pattern Matching	Right Handed Grip	Black Beanie	Lost Speed Cube
Sarah Nurse	Slap Shot	Pattern Matching	Left Handed Grip	Black Beanie	Lost Speed Cube
Mitchell Marner	Puck Juggling	Blindfold Solve	Left Handed Grip	Black Beanie	Bright Sunlight
Auston Matthews	Spin Move	Blindfold Solve	Left Handed Grip	Black Beanie	Bright Sunlight
Alex Ovechkin	Goalie Block	Speed Cubing	Left Handed Grip	Black Beanie	Bright Sunlight
Feliks Zemdegs	Puck Juggling	Speed Cubing	Left Handed Grip	Red Beanie	Slippery Ice
Megan Keller	Puck Juggling	Blindfold Solve	Right Handed Grip	Blue Beanie	Lost Speed Cube
Cale Makar	Puck Juggling	Speed Cubing	Right Handed Grip	Red Beanie	Bright Sunlight
Max Park	Puck Juggling	Pattern Matching	Right Handed Grip	Red Beanie	Lost Speed Cube

CLUE 1 Fractions of a number

> Coach Maya checked the equipment rack. Only a fraction of the fresh practice pucks remained on the shelf.

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



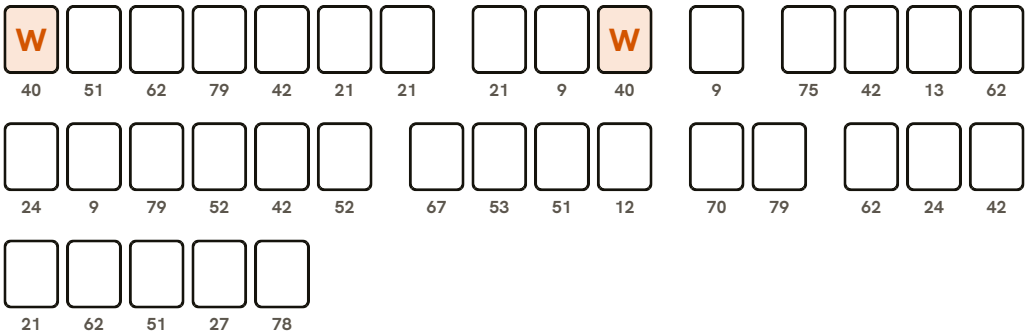
2/10 of 195 = ☐ → T	2/10 of 20 = ☐ → U	1/2 of 6 = ☐ → S
5/10 of 44 = ☐ → H	4/6 of 48 = ☐ → A	2/8 of 136 = ☐ → C
2/10 of 80 = ☐ → N	5/10 of 52 = ☐ → K	1/6 of 54 = ☐ → B
6/10 of 45 = ☐ → I	3/6 of 74 = ☐ → D	1/8 of 136 = ☐ → L
3/6 of 26 = ☐ → P	1/4 of 40 = ☐ → O	7/10 of 20 = ☐ → E
1/10 of 80 = ☐ → V		

Scratch space:

CLUE 2 Order of operations

> The outdoor scoreboard calculate button jammed, so the referee had to follow the order of steps to solve the point total.

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



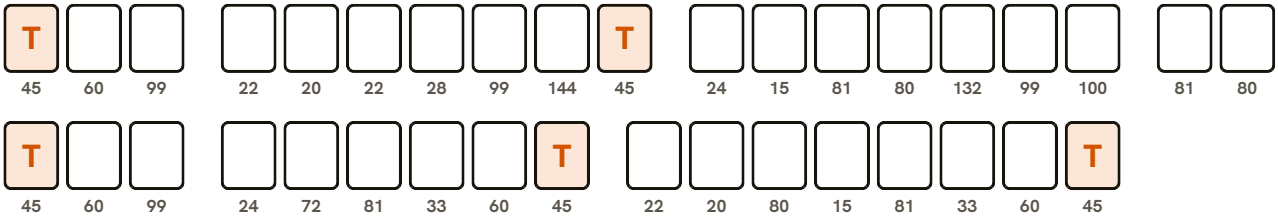
9 × 5 - 5 = ☐ → W	42 + 5 × 5 = ☐ → G	33 + 3 × 6 = ☐ → I
7 × 8 - 4 = ☐ → D	49 + 6 × 5 = ☐ → N	5 × 10 - 26 = ☐ → H
43 + 7 × 5 = ☐ → K	8 × 12 - 26 = ☐ → O	37 + 4 × 4 = ☐ → R
3 + 2 × 5 = ☐ → F	3 + 8 × 9 = ☐ → L	46 + 8 × 2 = ☐ → T
6 + 3 × 2 = ☐ → P	6 × 4 - 15 = ☐ → A	6 + 5 × 3 = ☐ → S
14 + 4 × 7 = ☐ → E	17 + 5 × 2 = ☐ → C	

Scratch space:

CLUE 3 Multiplication facts (1-12)

> The ice crew arranged boxes of speed cubes into equal rows and columns outside the warming hut.

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



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

Scratch space:

CLUE 4 Rounding

The digital outdoor temperature sensor displays rounded numbers to give approximate rink conditions.

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

E				E			E																	
5000	130	50	9000	5000	70	170	5000	1700	30	430	300	1700	4300	230	7000	4300	170	900						
	E				E																			
230	5000	4300	70	50	5000	300	4300	1700	300	430	2000	70												

Round 5,354 to the nearest thousand ☐ → **E**

Round 860 to the nearest hundred ☐ → **K**

Round 7,242 to the nearest thousand ☐ → **L**

Round 66 to the nearest ten ☐ → **N**

Round 4,286 to the nearest hundred ☐ → **A**

Round 233 to the nearest ten ☐ → **B**

Round 29 to the nearest ten ☐ → **H**

Round 167 to the nearest ten ☐ → **C**

Round 259 to the nearest hundred ☐ → **W**

Round 9,463 to the nearest thousand ☐ → **D**

Round 1,663 to the nearest hundred ☐ → **S**

Round 128 to the nearest ten ☐ → **V**

Round 2,307 to the nearest thousand ☐ → **R**

Round 54 to the nearest ten ☐ → **I**

Round 433 to the nearest ten ☐ → **O**

Scratch space:

CLUE 5 Fractions of a number - the last clue

The outdoor team shared fraction parts of their hot chocolate thermos batch after practice.

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:

1/5 of 35 = ☐	2/3 of 18 = ☐	1/6 of 6 = ☐	1/3 of 33 = ☐
4/10 of 25 = ☐	3/8 of 24 = ☐	2/10 of 20 = ☐	1/8 of 24 = ☐
2/10 of 10 = ☐	3/6 of 12 = ☐	1/5 of 40 = ☐	

Step 2 - cross out the sentence with each answer:

1. The villain juggled glowing pucks, then finished a cube while blindfolded.
2. The villain executed a quick spin move, then raced through a speed solve.
3. The villain skated across the frozen lake, then finished a cube while blindfolded.
4. The villain blocked the wide shot, then twisted a puzzle behind their back.
5. The villain blocked the wide shot, then raced through a speed solve.
6. The villain blasted a heavy slap shot, then twisted a puzzle behind their back.
7. The villain executed a quick spin move, then finished a cube while blindfolded.
8. The villain blasted a heavy slap shot, then solved a puzzle with one hand.
9. The villain skated across the frozen lake, then solved a puzzle with one hand.
10. The villain skated across the frozen lake, then raced through a speed solve.
11. The villain skated across the frozen lake, then twisted a puzzle behind their back.
12. The villain executed a quick spin move, then solved a puzzle with one hand.

make your own at mathcrackers.com

TEACHER / PARENT

Answer Key

The Case of the Missing Golden Puck

Culprit: Alex Ovechkin

Goalie Block · Speed Cubing · Left Handed Grip · Black Beanie · Bright Sunlight

Trail: Start 21 → Clue 1 19 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE SUSPECT DOES NOT USE BEHIND THE BACK SOLVES"

2/10 of 195 = 39 (T) · 2/10 of 20 = 4 (U) · 1/2 of 6 = 3 (S) · 5/10 of 44 = 22 (H) · 4/6 of 48 = 32 (A) · 2/8 of 136 = 34 (C) · 2/10 of 80 = 16 (N) · 5/10 of 52 = 26 (K) · 1/6 of 54 = 9 (B) · 6/10 of 45 = 27 (I) · 3/6 of 74 = 37 (D) · 1/8 of 136 = 17 (L) · 3/6 of 26 = 13 (P) · 1/4 of 40 = 10 (O) · 7/10 of 20 = 14 (E) · 1/10 of 80 = 8 (V)

Clue 2 (Order of operations): "WITNESS SAW A LEFT HANDED GRIP ON THE STICK"

9 × 5 - 5 = 40 (W) · 42 + 5 × 5 = 67 (G) · 33 + 3 × 6 = 51 (I) · 7 × 8 - 4 = 52 (D) · 49 + 6 × 5 = 79 (N) · 5 × 10 - 26 = 24 (H) · 43 + 7 × 5 = 78 (K) · 8 × 12 - 26 = 70 (O) · 37 + 4 × 4 = 53 (R) · 3 + 2 × 5 = 13 (F) · 3 + 8 × 9 = 75 (L) · 46 + 8 × 2 = 62 (T) · 6 + 3 × 2 = 12 (P) · 6 × 4 - 15 = 9 (A) · 6 + 5 × 3 = 21 (S) · 14 + 4 × 7 = 42 (E) · 17 + 5 × 2 = 27 (C)

Clue 3 (Multiplication facts (1-12)): "THE SUSPECT BLINKED IN THE BRIGHT SUNLIGHT"

9 × 5 = 45 (T) · 9 × 9 = 81 (I) · 5 × 3 = 15 (L) · 10 × 6 = 60 (H) · 2 × 11 = 22 (S) · 6 × 12 = 72 (R) · 10 × 10 = 100 (D) · 12 × 12 = 144 (C) · 11 × 9 = 99 (E) · 10 × 8 = 80 (N) · 7 × 4 = 28 (P) · 4 × 6 = 24 (B) · 12 × 11 = 132 (K) · 3 × 11 = 33 (G) · 4 × 5 = 20 (U)

Clue 4 (Rounding): "EVIDENCE SHOWS A BLACK BEANIE WAS WORN"

Round 5,354 to the nearest thousand = 5000 (E) · Round 860 to the nearest hundred = 900 (K) · Round 7,242 to the nearest thousand = 7000 (L) · Round 66 to the nearest ten = 70 (N) · Round 4,286 to the nearest hundred = 4300 (A) · Round 233 to the nearest ten = 230 (B) · Round 29 to the nearest ten = 30 (H) · Round 167 to the nearest ten = 170 (C) · Round 259 to the nearest hundred = 300 (W) · Round 9,463 to the nearest thousand = 9000 (D) · Round 1,663 to the nearest hundred = 1700 (S) · Round 128 to the nearest ten = 130 (V) · Round 2,307 to the nearest thousand = 2000 (R) · Round 54 to the nearest ten = 50 (I) · Round 433 to the nearest ten = 430 (O)

Clue 5 (Fractions of a number): surviving statement is box 5 → Alex Ovechkin

1/5 of 35 = 7 · 2/3 of 18 = 12 · 1/6 of 6 = 1 · 1/3 of 33 = 11 · 4/10 of 25 = 10 · 3/8 of 24 = 9 · 2/10 of 20 = 4 · 1/8 of 24 = 3 · 2/10 of 10 = 2 · 3/6 of 12 = 6 · 1/5 of 40 = 8