



The Mystery of the Missing Browns Playbook

Grade 10 math · Place value, Skip counting, Addition, Fractions of a number · Reading level grades 7-9

Detective: _____ **Date:** _____

The stadium is packed, the Dawg Pound is barking, but disaster has struck! A sneaky thief has snatched the Cleveland Browns master playbook right out of the coach's office. If we don't recover it before kickoff, the big game is lost. Put on your detective badge and help us find out who took 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 Playbook Thief is _____

Possible suspects

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

NAME	SIGNATURE PLAY	LUCKY MASCOT ITEM	SCRIBBLE STYLE	HELMET HAIR	PRE-GAME SNACK DEFEAT
Rodney McLeod	Play-Action Bootleg	Orange Helmet Keychain	Right-Handed Diagram	Brown Curls	Stadium Mustard
Martin Emerson	Dawg Pound Post Route	Brown Jersey Badge	Right-Handed Diagram	Orange Buzz	Stadium Mustard
Jeremiah Owusu	Dawg Pound Post Route	Dawg Pound Bone	Left-Handed Diagram	Brown Curls	Stadium Mustard
Amari Cooper	Power Counter Run	Mascot Chomps Sticker	Left-Handed Diagram	Brown Curls	Stadium Mustard
Z'Darius Smith	Hail Mary Pass	Dawg Pound Bone	Right-Handed Diagram	Brown Curls	Stadium Mustard
Dawand Jones	Play-Action Bootleg	Mascot Chomps Sticker	Right-Handed Diagram	Blonde Waves	Cold Chili Dog
Jerry Jeudy	Power Counter Run	Orange Helmet Keychain	Left-Handed Diagram	Orange Buzz	Cold Chili Dog
Bernie Kosar	Blitz Package Zero	Brown Jersey Badge	Right-Handed Diagram	Orange Buzz	Cold Chili Dog
Grant Delpit	Dawg Pound Post Route	Orange Helmet Keychain	Right-Handed Diagram	Brown Curls	Stadium Mustard
Ogbo Okoronkwo	Blitz Package Zero	Cleat Lace Lock	Right-Handed Diagram	Brown Curls	Stadium Mustard
Otto Graham	Blitz Package Zero	Dawg Pound Bone	Left-Handed Diagram	Orange Buzz	Soggy Stadium Pretzel
Dustin Hopkins	Hail Mary Pass	Cleat Lace Lock	Right-Handed Diagram	Brown Curls	Soggy Stadium Pretzel
Greg Newsome	Dawg Pound Post Route	Orange Helmet Keychain	Left-Handed Diagram	Brown Curls	Stadium Mustard
Nick Chubb	Dawg Pound Post Route	Orange Helmet Keychain	Left-Handed Diagram	Orange Buzz	Stadium Mustard
Charley Hughlett	Blitz Package Zero	Mascot Chomps Sticker	Right-Handed Diagram	Brown Curls	Stadium Mustard
Joel Bitonio	Hail Mary Pass	Mascot Chomps Sticker	Right-Handed Diagram	Brown Curls	Stadium Mustard
Wyatt Teller	Hail Mary Pass	Brown Jersey Badge	Left-Handed Diagram	Blonde Waves	Soggy Stadium Pretzel
Juan Thornhill	Blitz Package Zero	Brown Jersey Badge	Right-Handed Diagram	Blonde Waves	Cold Chili Dog
David Njoku	Power Counter Run	Mascot Chomps Sticker	Right-Handed Diagram	Orange Buzz	Soggy Stadium Pretzel
Maurice Hurst	Power Counter Run	Dawg Pound Bone	Left-Handed Diagram	Brown Curls	Cold Chili Dog
Denzel Ward	Dawg Pound Post Route	Mascot Chomps Sticker	Left-Handed Diagram	Orange Buzz	Cold Chili Dog

CLUE 1 Place value

A locked drawer in the coach's desk requires checking the digit in the tens place of our total franchise wins.

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

T			T										T		
3000	5000	900	3000	5000	7000	900	4000	700	8000	6000	800	90	3000	5000	900

							T					
6000	5000	1000	70	400	90	90	3000	7000	6000	800	900	200

What is the value of the 3 in 723,454? → **T**

What is the value of the 5 in 695,117? → **H**

What is the value of the 8 in 48,105? → **A**

What is the value of the 9 in 33,396? → **S**

What is the value of the 8 in 43,862? → **K**

What is the value of the 2 in 983,245? → **R**

What is the value of the 9 in 46,961? → **E**

What is the value of the 6 in 756,383? → **C**

What is the value of the 4 in 109,400? → **P**

What is the value of the 7 in 67,596? → **I**

What is the value of the 7 in 103,573? → **M**

What is the value of the 7 in 19,732? → **L**

What is the value of the 4 in 34,163? → **F**

What is the value of the 1 in 551,284? → **O**

Scratch space:

CLUE 2 Skip counting

To find the next clue on the practice field, we have to count the orange yard markers by skips of five.

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

T																	
27	35	28	110	18	90	80	30	90	24	12	90	33	110	30	90	12	25

				T						
30	18	80	35	27	35	90	25	110	28	110

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

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

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

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

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 → **E**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 → **S**

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 → **H**

Scratch space:

CLUE 3 Addition

The equipment manager needs us to tally up all the broken helmets and game footballs to unlock the film room.

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

V								V									
8503	2250	5848	5848	9461	2250	5348	9461	8503	6485	2250	8337	3855	4815	8674	5017		

3855	8229	2250	2773	3289	2061	9688	3855	4815	9461	7257	8337			

$$3110 + 5393 = \boxed{} \rightarrow \boxed{\text{V}}$$

$$4544 + 4130 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$2376 + 2439 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$5441 + 2788 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$4081 + 5607 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$4488 + 1997 = \boxed{} \rightarrow \boxed{\text{O}}$$

$$2532 + 2816 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$1500 + 750 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$5739 + 2598 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$1887 + 3130 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$2204 + 3644 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$1649 + 2206 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$1317 + 1972 = \boxed{} \rightarrow \boxed{\text{Y}}$$

$$3781 + 5680 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$1407 + 654 = \boxed{} \rightarrow \boxed{\text{M}}$$

$$2446 + 4811 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$1224 + 1549 = \boxed{} \rightarrow \boxed{\text{C}}$$

Scratch space:

CLUE 4
Fractions of a number

Only a fraction of the stadium lights are turned on, and solving that fraction gives us the master security code.

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

B																		
8	7	21	6	50	36	60	7	11	47	22	30	7	48	50	23	22	21	50

30	4	15	4	15	11	5

$2/4 \text{ of } 16 = \square \rightarrow \text{B}$

$2/8 \text{ of } 84 = \square \rightarrow \text{O}$

$1/5 \text{ of } 180 = \square \rightarrow \text{C}$

$3/6 \text{ of } 8 = \square \rightarrow \text{H}$

$1/6 \text{ of } 42 = \square \rightarrow \text{R}$

$2/6 \text{ of } 141 = \square \rightarrow \text{Y}$

$4/6 \text{ of } 75 = \square \rightarrow \text{N}$

$3/10 \text{ of } 50 = \square \rightarrow \text{E}$

$1/6 \text{ of } 66 = \square \rightarrow \text{L}$

$6/10 \text{ of } 100 = \square \rightarrow \text{U}$

$2/8 \text{ of } 20 = \square \rightarrow \text{M}$

$1/4 \text{ of } 92 = \square \rightarrow \text{D}$

$1/5 \text{ of } 150 = \square \rightarrow \text{T}$

$1/4 \text{ of } 192 = \square \rightarrow \text{A}$

$2/10 \text{ of } 30 = \square \rightarrow \text{W}$

$4/10 \text{ of } 55 = \square \rightarrow \text{S}$

Scratch space:

CLUE 5**Fractions of a number - the last clue**

We need to calculate what fraction of the team jerseys are clean before we can analyze the locker room floor.

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:

$1/8 \text{ of } 16 = \boxed{}$

$1/3 \text{ of } 36 = \boxed{}$

$2/4 \text{ of } 18 = \boxed{}$

$1/3 \text{ of } 15 = \boxed{}$

$2/4 \text{ of } 22 = \boxed{}$

$8/10 \text{ of } 5 = \boxed{}$

$1/8 \text{ of } 8 = \boxed{}$

$7/8 \text{ of } 8 = \boxed{}$

$8/10 \text{ of } 10 = \boxed{}$

$6/8 \text{ of } 4 = \boxed{}$

$4/8 \text{ of } 12 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain ordered the Blitz Package Zero, then dropped a Brown Jersey Badge.
2. The villain ran the Play-Action Bootleg, then lost an Orange Helmet Keychain.
3. The villain ran the Play-Action Bootleg, then dropped a Brown Jersey Badge.
4. The villain ordered the Blitz Package Zero, then snapped a Dawg Pound Bone.
5. The villain heaved a Hail Mary Pass, then scratched a Mascot Chomps Sticker.
6. The villain ordered the Blitz Package Zero, then scratched a Mascot Chomps Sticker.
7. The villain executed the Dawg Pound Post Route, then untied a Cleat Lace Lock.
8. The villain executed the Dawg Pound Post Route, then scratched a Mascot Chomps Sticker.
9. The villain heaved a Hail Mary Pass, then snapped a Dawg Pound Bone.
10. The villain ordered the Blitz Package Zero, then untied a Cleat Lace Lock.
11. The villain rushed a Power Counter Run, then lost an Orange Helmet Keychain.
12. The villain executed the Dawg Pound Post Route, then lost an Orange Helmet Keychain.

Answer Key

The Mystery of the Missing Browns Playbook

Culprit: Ogbo Okoronkwo

Blitz Package Zero · Cleat Lace Lock · Right-Handed Diagram · Brown Curls · Stadium Mustard

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

Clue 1 (Place value): "THE THIEF LACKS THE CHOMPS STICKER"

What is the value of the 3 in 723,454? = 3000 (T) · What is the value of the 5 in 695,117? = 5000 (H) · What is the value of the 8 in 48,105? = 8000 (A) · What is the value of the 9 in 33,396? = 90 (S) · What is the value of the 8 in 43,862? = 800 (K) · What is the value of the 2 in 983,245? = 200 (R) · What is the value of the 9 in 46,961? = 900 (E) · What is the value of the 6 in 756,383? = 6000 (C) · What is the value of the 4 in 109,400? = 400 (P) · What is the value of the 7 in 67,596? = 7000 (I) · What is the value of the 7 in 103,573? = 70 (M) · What is the value of the 7 in 19,732? = 700 (L) · What is the value of the 4 in 34,163? = 4000 (F) · What is the value of the 1 in 551,284? = 1000 (O)

Clue 2 (Skip counting): "THE DIAGRAM WAS DRAWN RIGHT HANDED"

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (G) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 = 24 (M) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, __, 20, 22 = 18 (I) · Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 = 12 (W) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (E) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, __, 33, 36 = 30 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (N) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (H)

Clue 3 (Addition): "VILLAIN AVOIDS THE SPICY MUSTARD"

3110 + 5393 = 8503 (V) · 4544 + 4130 = 8674 (H) · 2376 + 2439 = 4815 (T) · 5441 + 2788 = 8229 (P) · 4081 + 5607 = 9688 (U) · 4488 + 1997 = 6485 (O) · 2532 + 2816 = 5348 (N) · 1500 + 750 = 2250 (I) · 5739 + 2598 = 8337 (D) · 1887 + 3130 = 5017 (E) · 2204 + 3644 = 5848 (L) · 1649 + 2206 = 3855 (S) · 1317 + 1972 = 3289 (Y) · 3781 + 5680 = 9461 (A) · 1407 + 654 = 2061 (M) · 2446 + 4811 = 7257 (R) · 1224 + 1549 = 2773 (C)

Clue 4 (Fractions of a number): "BROWN CURLY STRANDS ON THE HELMET"

$\frac{2}{4}$ of 16 = 8 (B) · $\frac{2}{8}$ of 84 = 21 (O) · $\frac{1}{5}$ of 180 = 36 (C) · $\frac{3}{6}$ of 8 = 4 (H) · $\frac{1}{6}$ of 42 = 7 (R) · $\frac{2}{6}$ of 141 = 47 (Y) · $\frac{4}{6}$ of 75 = 50 (N) · $\frac{3}{10}$ of 50 = 15 (E) · $\frac{1}{6}$ of 66 = 11 (L) · $\frac{6}{10}$ of 100 = 60 (U) · $\frac{2}{8}$ of 20 = 5 (M) · $\frac{1}{4}$ of 92 = 23 (D) · $\frac{1}{5}$ of 150 = 30 (T) · $\frac{1}{4}$ of 192 = 48 (A) · $\frac{2}{10}$ of 30 = 6 (W) · $\frac{4}{10}$ of 55 = 22 (S)

Clue 5 (Fractions of a number): surviving statement is box 10 → Ogbo Okoronkwo

$\frac{1}{8}$ of 16 = 2 · $\frac{1}{3}$ of 36 = 12 · $\frac{2}{4}$ of 18 = 9 · $\frac{1}{3}$ of 15 = 5 · $\frac{2}{4}$ of 22 = 11 · $\frac{8}{10}$ of 5 = 4 · $\frac{1}{8}$ of 8 = 1 · $\frac{7}{8}$ of 8 = 7 · $\frac{8}{10}$ of 10 = 8 · $\frac{6}{8}$ of 4 = 3 · $\frac{4}{8}$ of 12 = 6