The Great Fossil Mystery

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

Detective: _____ **Date:** _____

Someone hid the golden T-Rex tooth at Camp Dino Dig! The Head Paleontologist needs your help to catch the dino prankster before lunch. Solve the clues to 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 dino prankster is _____

Possible suspects

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

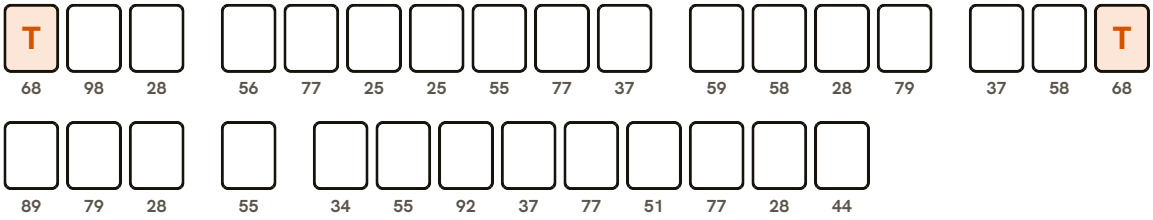
NAME	DINO MASK	DIG TOOL	DOMINANT HAND	CAP COLOR	DROPPED SNACK
Patricia Vickers	Stego Shield	Rock Hammer	Left Handed	Red Cap	Trail Mix
Cathy Forster	TRex Mask	Magnifier	Right Handed	Blue Cap	Trail Mix
Luis Chiappe	Raptor Suit	Magnifier	Right Handed	Red Cap	Cheese Sticks
Dong Zhiming	Stego Shield	Fossil Brush	Right Handed	Red Cap	Cheese Sticks
Bob Bakker	Raptor Suit	Rock Hammer	Left Handed	Red Cap	Apple Slices
David Weishampel	Trike Cloak	Tape Measure	Right Handed	Red Cap	Cheese Sticks
Barnum Brown	Ptero Wings	Magnifier	Left Handed	Blue Cap	Trail Mix
Roy Chapman	TRex Mask	Fossil Brush	Left Handed	Blue Cap	Trail Mix
Rodolfo Coria	Trike Cloak	Rock Hammer	Left Handed	Red Cap	Cheese Sticks
Mary Anning	TRex Mask	Magnifier	Right Handed	Red Cap	Cheese Sticks
Jack Horner	Raptor Suit	Magnifier	Right Handed	Blue Cap	Apple Slices
Sue Hendrickson	Ptero Wings	Plaster Kit	Right Handed	Green Cap	Cheese Sticks
Lindsay Zanno	Trike Cloak	Fossil Brush	Left Handed	Blue Cap	Trail Mix
Diego Pol	Raptor Suit	Plaster Kit	Right Handed	Blue Cap	Apple Slices
Steve Brusatte	Trike Cloak	Plaster Kit	Left Handed	Green Cap	Apple Slices
Kristina Curry	TRex Mask	Magnifier	Right Handed	Red Cap	Trail Mix
Jingmai OConnor	Trike Cloak	Magnifier	Left Handed	Green Cap	Apple Slices
Paul Barrett	Raptor Suit	Plaster Kit	Right Handed	Red Cap	Apple Slices
Xu Xing	Ptero Wings	Tape Measure	Right Handed	Red Cap	Cheese Sticks
Karen Chin	Stego Shield	Tape Measure	Left Handed	Red Cap	Trail Mix
Phil Currie	Stego Shield	Rock Hammer	Right Handed	Red Cap	Cheese Sticks

CLUE 1

Addition

Dr. Bone adds up all the dino footprints in the mud to find a clue.

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



24 + 44 = ☐ → T

18 + 7 = ☐ → L

17 + 20 = ☐ → N

23 + 21 = ☐ → R

17 + 42 = ☐ → D

49 + 40 = ☐ → U

65 + 27 = ☐ → G

25 + 26 = ☐ → F

35 + 20 = ☐ → A

50 + 29 = ☐ → S

49 + 49 = ☐ → H

32 + 26 = ☐ → O

16 + 12 = ☐ → E

46 + 31 = ☐ → I

21 + 35 = ☐ → V

13 + 21 = ☐ → M

Scratch space:

CLUE 2 Subtraction

The dig crew subtracts broken tools from the supply bin to uncover a note.

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

F															
18	78	78	61	39	11	59	14	61	56	39	11	78	34	49	69

11	59	44	19	61	19	69	14	46	49	46	56	22	56	39	49	76	61

42 - 24 = ☐ → F

59 - 37 = ☐ → U

81 - 22 = ☐ → I

57 - 11 = ☐ → D

58 - 19 = ☐ → P

107 - 38 = ☐ → A

26 - 15 = ☐ → R

70 - 26 = ☐ → G

45 - 26 = ☐ → H

22 - 8 = ☐ → N

101 - 23 = ☐ → O

38 - 4 = ☐ → V

77 - 21 = ☐ → S

50 - 1 = ☐ → E

72 - 11 = ☐ → T

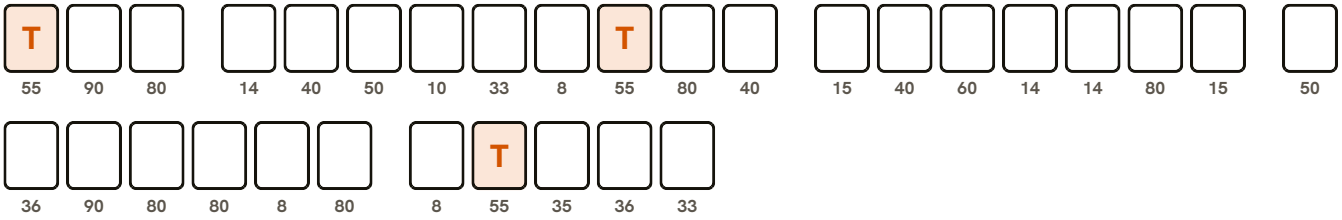
91 - 15 = ☐ → C

Scratch space:

CLUE 3 Skip counting

The ranger skip counts dino teeth along the sandy trail.

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



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

Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 ☐ → S

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, ___, 16, 18 ☐ → P

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 ☐ → A

Skip-count by 10s. Fill the blank: 10, 20, 30, ___, 50, 60 ☐ → R

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 ☐ → H

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

Skip-count by 5s. Fill the blank: 5, 10, ___, 20, 25 ☐ → D

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, ___, 90, 100 ☐ → E

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 ☐ → N

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

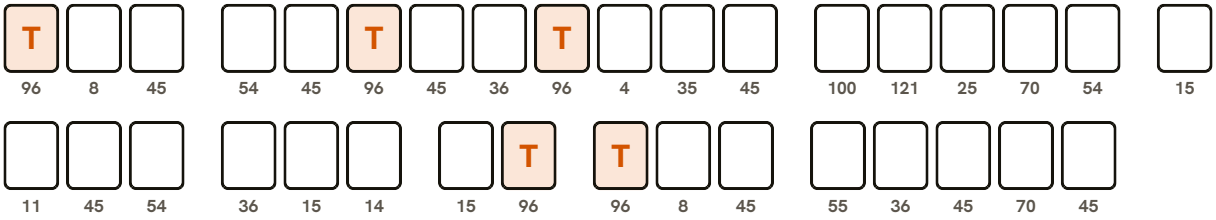
Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, ___, 40, 45 ☐ → I

Scratch space:

CLUE 4 Multiplication facts (1-12)

> The camp leader counts crates of fossil rocks set out in equal rows.

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



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

Scratch space:

CLUE 5 Missing addends - the last clue

The team finds missing bone counts to unlock the final message.

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:

7 + ___ = 15 ☐	1 + ___ = 12 ☐	1 + ___ = 13 ☐	6 + ___ = 10 ☐
5 + ___ = 6 ☐	7 + ___ = 13 ☐	8 + ___ = 10 ☐	2 + ___ = 11 ☐
10 + ___ = 13 ☐	5 + ___ = 15 ☐	10 + ___ = 17 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain wore the raptor suit, then measured bones with a tape measure.
2. The villain wrapped up in the trike cloak, then mixed up a plaster kit.
3. The villain wrapped up in the trike cloak, then tapped rocks with a rock hammer.
4. The villain wrapped up in the trike cloak, then looked close with a magnifier.
5. The villain carried the stego shield, then swept dust with a fossil brush.
6. The villain wore the rex mask, then mixed up a plaster kit.
7. The villain wore the raptor suit, then looked close with a magnifier.
8. The villain flew in with the ptero wings, then measured bones with a tape measure.
9. The villain flew in with the ptero wings, then mixed up a plaster kit.
10. The villain wore the rex mask, then looked close with a magnifier.
11. The villain carried the stego shield, then tapped rocks with a rock hammer.
12. The villain wrapped up in the trike cloak, then measured bones with a tape measure.

TEACHER / PARENT

Answer Key

The Great Fossil Mystery

Culprit: Dong Zhiming

Stego Shield · Fossil Brush · Right Handed · Red Cap · Cheese Sticks

Trail: Start 21 → Clue 1 14 → Clue 2 7 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT USE A MAGNIFIER"

24 + 44 = 68 (T) · 18 + 7 = 25 (L) · 17 + 20 = 37 (N) · 23 + 21 = 44 (R) · 17 + 42 = 59 (D) · 49 + 40 = 89 (U) · 65 + 27 = 92 (G) · 25 + 26 = 51 (F) · 35 + 20 = 55 (A) · 50 + 29 = 79 (S) · 49 + 49 = 98 (H) · 32 + 26 = 58 (O) · 16 + 12 = 28 (E) · 46 + 31 = 77 (I) · 21 + 35 = 56 (V) · 13 + 21 = 34 (M)

Clue 2 (Subtraction): "FOOTPRINTS PROVE A RIGHT HANDED SUSPECT"

42 - 24 = 18 (F) · 59 - 37 = 22 (U) · 81 - 22 = 59 (I) · 57 - 11 = 46 (D) · 58 - 19 = 39 (P) · 107 - 38 = 69 (A) · 26 - 15 = 11 (R) · 70 - 26 = 44 (G) · 45 - 26 = 19 (H) · 22 - 8 = 14 (N) · 101 - 23 = 78 (O) · 38 - 4 = 34 (V) · 77 - 21 = 56 (S) · 50 - 1 = 49 (E) · 72 - 11 = 61 (T) · 91 - 15 = 76 (C)

Clue 3 (Skip counting): "THE PRANKSTER DROPPED A CHEESE STICK"

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

Clue 4 (Multiplication facts (1-12)): "THE DETECTIVE FOUND A RED CAP AT THE SCENE"

12 × 8 = 96 (T) · 7 × 5 = 35 (V) · 11 × 11 = 121 (O) · 10 × 7 = 70 (N) · 1 × 8 = 8 (H) · 4 × 9 = 36 (C) · 5 × 5 = 25 (U) · 11 × 5 = 55 (S) · 4 × 1 = 4 (I) · 6 × 9 = 54 (D) · 10 × 10 = 100 (F) · 11 × 1 = 11 (R) · 5 × 9 = 45 (E) · 3 × 5 = 15 (A) · 2 × 7 = 14 (P)

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

7 + ___ = 15 = 8 · 1 + ___ = 12 = 11 · 1 + ___ = 13 = 12 · 6 + ___ = 10 = 4 · 5 + ___ = 6 = 1 · 7 + ___ = 13 = 6 · 8 + ___ = 10 = 2 · 2 + ___ = 11 = 9 · 10 + ___ = 13 = 3 · 5 + ___ = 15 = 10 · 10 + ___ = 17 = 7