



The Great Pumpkin Patch Mystery

Grade 5 math · Multiplication, Subtraction, Multi-step word problems, Fractions of a number, Division · Reading level
grades 3-4

Detective: _____ Date: _____

The prize-winning Golden Pumpkin has vanished from the festival stage! The judging starts in one hour. We must search the farm and find which farmhand is the Pumpkin Pilferer before the festival is ruined.

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 Pumpkin Pilferer is _____

Possible suspects

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

NAME	HARVEST SKILL	FESTIVAL CRAFT	DOMINANT HAND	HEADWEAR	FAVORITE FEAST TREAT
Gideon Fletcher	tractor driving	corn husking	right-handed shears	wheat yellow straw hat	warm maple syrup
Zeke Butterfield	apple picking speed	cider pressing	left-handed shears	clover green wool cap	apple cider donuts
Prudence Acre	corn maze navigation	pumpkin carving	left-handed shears	clover green wool cap	apple cider donuts
Mabel Bramble	tractor driving	wheelbarrow racing	right-handed shears	clover green wool cap	warm maple syrup
Rufus Barley	apple picking speed	pie baking	right-handed shears	clover green wool cap	warm maple syrup
Enoch Sower	tractor driving	cider pressing	right-handed shears	clover green wool cap	roasted sweet corn
Emmeline Vance	hay bale stacking	wheelbarrow racing	left-handed shears	pumpkin orange bandana	apple cider donuts
Silas Grist	tractor driving	cider pressing	right-handed shears	wheat yellow straw hat	roasted sweet corn
Grover Till	corn maze navigation	corn husking	left-handed shears	clover green wool cap	warm maple syrup
Maude Sweetwater	hay bale stacking	corn husking	left-handed shears	clover green wool cap	warm maple syrup
Gus Plowman	hay bale stacking	pie baking	left-handed shears	pumpkin orange bandana	warm maple syrup
Abigail Thorne	tractor driving	pumpkin carving	left-handed shears	clover green wool cap	roasted sweet corn
Tobias Clover	scarecrow building	corn husking	right-handed shears	pumpkin orange bandana	warm maple syrup
Amos Gardner	scarecrow building	cider pressing	right-handed shears	pumpkin orange bandana	apple cider donuts
Jasper Pippin	corn maze navigation	pie baking	left-handed shears	wheat yellow straw hat	warm maple syrup
Jebediah Corn	apple picking speed	cider pressing	left-handed shears	clover green wool cap	warm maple syrup
Nellie Shearer	scarecrow building	pumpkin carving	right-handed shears	wheat yellow straw hat	apple cider donuts
Clara Pumpkin	tractor driving	wheelbarrow racing	left-handed shears	clover green wool cap	warm maple syrup
Hazel Orchard	tractor driving	wheelbarrow racing	right-handed shears	clover green wool cap	roasted sweet corn
Clementine Moss	scarecrow building	pumpkin carving	left-handed shears	clover green wool cap	warm maple syrup
Otis Wheatley	apple picking speed	pie baking	left-handed shears	pumpkin orange bandana	roasted sweet corn

Multiplication facts (1-12)

The culprit left tracks in the cornfield. We found equal rows of squashed corn stalks. Let us multiply the rows to find the total ruined crop and unlock the first clue.

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

77 88 36 77 88 25 36 100 42 16 36 132 24 16 77 144 132 36 70 88 36 36 5 40 120 28 28 16 70 28 120 27 25 24 56

$$11 \times 7 = \boxed{} \rightarrow \boxed{\text{T}}$$

$5 \times 8 = \boxed{} \rightarrow \boxed{\mathbf{B}}$

$$2 \times 12 = \boxed{} \rightarrow \boxed{\text{N}}$$

$4 \times 9 = \boxed{} \rightarrow \boxed{\mathbf{E}}$

$12 \times 11 = \boxed{} \rightarrow \boxed{\mathbf{S}}$

$10 \times 7 = \boxed{} \rightarrow \boxed{\mathbf{W}}$

$8 \times 7 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

$6 \times 7 = \boxed{} \rightarrow \boxed{\mathbf{D}}$

$$4 \times 4 = \boxed{} \rightarrow \boxed{0}$$

$$4 \times 7 = \boxed{} \rightarrow \boxed{\mathbf{R}}$$

$5 \times 5 =$ $\rightarrow$

$12 \times 10 = \boxed{} \rightarrow \boxed{\mathbf{A}}$

$12 \times 12 = \boxed{} \rightarrow \boxed{\text{U}}$

$10 \times 10 = \square \rightarrow \boxed{\mathbf{F}}$

$1 \times 5 = \square \rightarrow \boxed{\text{L}}$

$8 \times 11 = \square \rightarrow \boxed{\text{H}}$

$$3 \times 9 = \boxed{} \rightarrow \boxed{\text{C}}$$

Scratch space:

CLUE 2

Subtraction

We had a giant pile of prize apples, but some are missing. Subtract the remaining apples from the original count to see how many the thief took.

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

T			T							T				T	
5001	6543	7819	5001	6543	6657	7819	7017	3182	5768	5001	5725	6977	6657	5001	6543
			T												
4748	7819	7017	5001	6543	1843	2473	2856	7819	2856	5725	6543	7819	1843	4952	5725

$5414 - 413 = \square \rightarrow \boxed{\text{T}}$

$4501 - 2028 = \square \rightarrow \boxed{\text{N}}$

$5161 - 3318 = \square \rightarrow \boxed{\text{A}}$

$8366 - 547 = \square \rightarrow \boxed{\text{E}}$

$10628 - 4085 = \square \rightarrow \boxed{\text{H}}$

$10060 - 3083 = \square \rightarrow \boxed{\text{W}}$

$6534 - 3352 = \square \rightarrow \boxed{\text{C}}$

$8629 - 1972 = \square \rightarrow \boxed{\text{I}}$

$10020 - 4295 = \square \rightarrow \boxed{\text{S}}$

$8317 - 3569 = \square \rightarrow \boxed{\text{L}}$

$3613 - 757 = \square \rightarrow \boxed{\text{D}}$

$9942 - 2925 = \square \rightarrow \boxed{\text{F}}$

$10273 - 4505 = \square \rightarrow \boxed{\text{U}}$

$6150 - 1198 = \square \rightarrow \boxed{\text{R}}$

Scratch space:

CLUE 3

Multi-step word problems

The thief bought heavy rope at the farm stand. They paid with a big bill, bought several jars of jam too, and got some change back. Solve this multi-step problem to find the clue.

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

Someone scared the villain off with

W

S
Y

U

83 46 61 88 88 46 19 34 67 61 19

There were 527 apples in all. 29 apples were set aside. The rest were shared equally among 6 The Harvesters. How many apples did each get?

Answer: → W

There were 400 pumpkins in all. 2 The Harvesters used 17 pumpkins each. The other 6 The Harvesters shared the rest equally. How many pumpkins did each of the other The Harvesters get?

Answer: → R

Farmhand filled 3 boxes with 6 pumpkins each, then found 1 more pumpkins. How many pumpkins are there in all?

Answer: → P

Farmhand collected 143 cider jugs in the morning and 192 cider jugs in the afternoon, then split them equally among 5 The Harvesters. How many cider jugs did each get?

Answer: → E

There were 114 apples in all. 12 apples were set aside. The rest were shared equally among 3 The Harvesters. How many apples did each get?

Answer: → L

There were 219 pumpkins in all. 3 The Harvesters used 27 pumpkins each. The other 3 The Harvesters shared the rest equally. How many pumpkins did each of the other The Harvesters get?

Answer: → A

Farmhand earned 7 corn ears in each of 4 rounds, plus 62 bonus corn ears. Then 2 corn ears were lost. How many corn ears are left?

Answer: → M

Scratch space:

CLUE 4

Fractions of a number

A flock of crows flew over the pumpkin patch. Only a small fraction of them landed near the stolen prize. Find that fraction of the flock to get the next clue.

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

W																		
22	25	36	34	16	30	3	18	33	40	34	19	25	8	13	8	25	25	30

W						
22	34	34	40	33	18	4

$2/4$ of 44 = → W	$2/4$ of 80 = → L	$1/3$ of 57 = → V
$1/8$ of 200 = → E	$2/6$ of 99 = → C	$1/5$ of 150 = → N
$1/6$ of 78 = → G	$1/8$ of 64 = → R	$1/4$ of 136 = → O
$4/10$ of 40 = → U	$3/6$ of 8 = → P	$1/3$ of 108 = → F
$1/3$ of 54 = → A	$2/10$ of 15 = → D	

Scratch space:

CLUE 5**Division facts (1-12) - the last clue**

We need to split the heavy hay bales into equal groups to clear the path to the barn. Sharing them equally will reveal the final clue.

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:

$100 \div 10 = \boxed{}$

$11 \div 11 = \boxed{}$

$8 \div 1 = \boxed{}$

$9 \div 1 = \boxed{}$

$5 \div 1 = \boxed{}$

$99 \div 9 = \boxed{}$

$36 \div 6 = \boxed{}$

$20 \div 10 = \boxed{}$

$60 \div 5 = \boxed{}$

$84 \div 12 = \boxed{}$

$27 \div 9 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain builds a spooky scarecrow, then carves a spooky face.
2. The villain stacks hay bales super high, then squeezes fresh sweet cider.
3. The villain runs through the corn maze, then bakes a giant pumpkin pie.
4. The villain stacks hay bales super high, then husks ten ears of corn.
5. The villain runs through the corn maze, then carves a spooky face.
6. The villain picks apples faster than anyone, then carves a spooky face.
7. The villain builds a spooky scarecrow, then husks ten ears of corn.
8. The villain picks apples faster than anyone, then squeezes fresh sweet cider.
9. The villain drives the old red tractor, then carves a spooky face.
10. The villain runs through the corn maze, then husks ten ears of corn.
11. The villain picks apples faster than anyone, then husks ten ears of corn.
12. The villain runs through the corn maze, then squeezes fresh sweet cider.

Answer Key

The Great Pumpkin Patch Mystery

Culprit: Maude Sweetwater

hay bale stacking · corn husking · left-handed shears · clover green wool cap · warm maple syrup

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE THIEF DOES NOT USE WHEELBARROW RACING"

$11 \times 7 = 77$ (T) · $5 \times 8 = 40$ (B) · $2 \times 12 = 24$ (N) · $4 \times 9 = 36$ (E) · $12 \times 11 = 132$ (S) · $10 \times 7 = 70$ (W) · $8 \times 7 = 56$ (G) · $6 \times 7 = 42$ (D) · $4 \times 4 = 16$ (O) · $4 \times 7 = 28$ (R) · $5 \times 5 = 25$ (I) · $12 \times 10 = 120$ (A) · $12 \times 12 = 144$ (U) · $10 \times 10 = 100$ (F) · $1 \times 5 = 5$ (L) · $8 \times 11 = 88$ (H) · $3 \times 9 = 27$ (C)

Clue 2 (Subtraction): "THE THIEF CUTS WITH LEFT HANDED SHEARS"

$5414 - 413 = 5001$ (T) · $4501 - 2028 = 2473$ (N) · $5161 - 3318 = 1843$ (A) · $8366 - 547 = 7819$ (E) · $10628 - 4085 = 6543$ (H) · $10060 - 3083 = 6977$ (W) · $6534 - 3352 = 3182$ (C) · $8629 - 1972 = 6657$ (I) · $10020 - 4295 = 5725$ (S) · $8317 - 3569 = 4748$ (L) · $3613 - 757 = 2856$ (D) · $9942 - 2925 = 7017$ (F) · $10273 - 4505 = 5768$ (U) · $6150 - 1198 = 4952$ (R)

Clue 3 (Multi-step word problems): "WARM MAPLE SYRUP"

There were 527 apples in all. 29 apples were set aside. The rest were shared equally among 6 The Harvesters. How many apples did each get? = 83 (W) · There were 400 pumpkins in all. 2 The Harvesters used 17 pumpkins each. The other 6 The Harvesters shared the rest equally. How many pumpkins did each of the other The Harvesters get? = 61 (R) · Farmhand filled 3 boxes with 6 pumpkins each, then found 1 more pumpkins. How many pumpkins are there in all? = 19 (P) · Farmhand collected 143 cider jugs in the morning and 192 cider jugs in the afternoon, then split them equally among 5 The Harvesters. How many cider jugs did each get? = 67 (E) · There were 114 apples in all. 12 apples were set aside. The rest were shared equally among 3 The Harvesters. How many apples did each get? = 34 (L) · There were 219 pumpkins in all. 3 The Harvesters used 27 pumpkins each. The other 3 The Harvesters shared the rest equally. How many pumpkins did each of the other The Harvesters get? = 46 (A) · Farmhand earned 7 corn ears in each of 4 rounds, plus 62 bonus corn ears. Then 2 corn ears were lost. How many corn ears are left? = 88 (M)

Clue 4 (Fractions of a number): "WE FOUND A CLOVER GREEN WOOL CAP"

$\frac{2}{4}$ of 44 = 22 (W) · $\frac{2}{4}$ of 80 = 40 (L) · $\frac{1}{3}$ of 57 = 19 (V) · $\frac{1}{8}$ of 200 = 25 (E) · $\frac{2}{6}$ of 99 = 33 (C) · $\frac{1}{5}$ of 150 = 30 (N) · $\frac{1}{6}$ of 78 = 13 (G) · $\frac{1}{8}$ of 64 = 8 (R) · $\frac{1}{4}$ of 136 = 34 (O) · $\frac{4}{10}$ of 40 = 16 (U) · $\frac{3}{6}$ of 8 = 4 (P) · $\frac{1}{3}$ of 108 = 36 (F) · $\frac{1}{3}$ of 54 = 18 (A) · $\frac{2}{10}$ of 15 = 3 (D)

Clue 5 (Division facts (1-12)): surviving statement is box 4 → Maude Sweetwater

$100 \div 10 = 10$ · $11 \div 11 = 1$ · $8 \div 1 = 8$ · $9 \div 1 = 9$ · $5 \div 1 = 5$ · $99 \div 9 = 11$ · $36 \div 6 = 6$ · $20 \div 10 = 2$ · $60 \div 5 = 12$ · $84 \div 12 = 7$ · $27 \div 9 = 3$