The Super-Decoder Heist

Grade 4 math · Multiplication, Multi-step word problems, Word problems, Rounding, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

An alarm has sounded! A rogue agent has slipped into the agency vault and stolen the prototype Super-Decoder. Solve the clues and track down the culprit before they escape the grid!

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 rogue agent is _____

Possible suspects

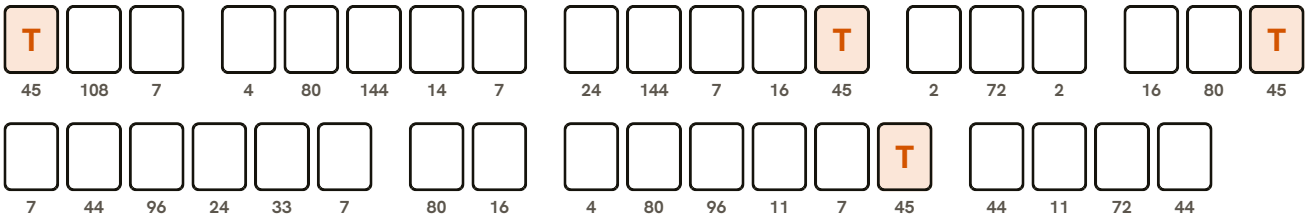
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	SPECIAL GADGET	ESCAPE VEHICLE	DOMINANT HAND	WIG COLOR	SECURITY SENSOR
John Steed	grappling hook	hover bike	right handed	silver gray wig	motion detector
Alex Rider	spy camera glasses	hover bike	right handed	silver gray wig	motion detector
Walter Beckett	smoke bomb	armored car	left handed	neon blue wig	motion detector
Emma Peel	jetpack boots	rocket skis	left handed	silver gray wig	motion detector
James Bond	smoke bomb	armored car	right handed	silver gray wig	motion detector
Yor Forger	laser watch	stealth submarine	left handed	neon blue wig	magnet sensor
Lance Sterling	laser watch	micro copter	right handed	bright red wig	motion detector
Kim Possible	smoke bomb	hover bike	right handed	neon blue wig	laser beam sensor
Mata Hari	jetpack boots	micro copter	left handed	bright red wig	motion detector
Jason Bourne	laser watch	rocket skis	right handed	silver gray wig	motion detector
Carmen Sandiego	spy camera glasses	micro copter	right handed	neon blue wig	laser beam sensor
Perry Platypus	laser watch	armored car	right handed	bright red wig	laser beam sensor
Ethan Hunt	laser watch	stealth submarine	right handed	silver gray wig	motion detector
Agent Classified	laser watch	rocket skis	left handed	silver gray wig	magnet sensor
Maxwell Smart	spy camera glasses	stealth submarine	left handed	bright red wig	magnet sensor
Austin Powers	smoke bomb	micro copter	left handed	silver gray wig	motion detector
George Smiley	jetpack boots	stealth submarine	right handed	silver gray wig	magnet sensor
Loid Forger	smoke bomb	micro copter	right handed	bright red wig	motion detector
Agent Oso	grappling hook	micro copter	right handed	bright red wig	motion detector
Natasha Romanoff	jetpack boots	hover bike	left handed	silver gray wig	magnet sensor
Inspector Gadget	laser watch	stealth submarine	right handed	neon blue wig	motion detector

CLUE 1 Multiplication facts (1-12)

> We found a crate of decoy gadget cases organized in equal rows. Let us multiply the rows and columns to count how many the thief left behind!

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



5 × 9 = ☐ → T

12 × 2 = ☐ → A

7 × 2 = ☐ → U

2 × 1 = ☐ → D

8 × 2 = ☐ → N

7 × 1 = ☐ → E

9 × 12 = ☐ → H

4 × 11 = ☐ → S

12 × 12 = ☐ → G

8 × 10 = ☐ → O

11 × 3 = ☐ → P

4 × 1 = ☐ → R

12 × 6 = ☐ → I

11 × 1 = ☐ → K

12 × 8 = ☐ → C

Scratch space:

CLUE 2 Multi-step word problems

> The thief bought several spy kits with a large bill and received some change. Follow the steps of their purchase to see how much they spent!

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

A witness saw the villain was

R								D	E	D
49	64	51	82	76	82	22	47			

.

Agent Falcon filled 9 boxes with 4 GPS trackers each, then found 13 more GPS trackers. How many GPS trackers are there in all?

Answer: ☐ → **R**

There were 299 decoder rings in all. 4 The Stealth Network used 11 decoder rings each. The other 5 The Stealth Network shared the rest equally. How many decoder rings did each of the other The Stealth Network get?

Answer: ☐ → **G**

Agent Falcon earned 2 laser pens in each of 6 rounds, plus 72 bonus laser pens. Then 8 laser pens were lost. How many laser pens are left?

Answer: ☐ → **T**

There were 96 laser pens in all. 1 The Stealth Network used 30 laser pens each. The other 3 The Stealth Network shared the rest equally. How many laser pens did each of the other The Stealth Network get?

Answer: ☐ → **A**

Agent Falcon collected 108 laser pens in the morning and 33 laser pens in the afternoon, then split them equally among 3 The Stealth Network. How many laser pens did each get?

Answer: ☐ → **N**

Agent Falcon collected 474 decoder rings in the morning and 18 decoder rings in the afternoon, then split them equally among 6 The Stealth Network. How many decoder rings did each get?

Answer: ☐ → **H**

Agent Falcon filled 4 boxes with 5 laser pens each, then found 44 more laser pens. How many laser pens are there in all?

Answer: ☐ → **I**

Scratch space:

CLUE 3 Word problems

> The security team compared the weights of the stolen tool bags. Help us solve this word problem to find the weight of the heaviest bag!

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

Someone scared the villain off with

M										C			R
15	13	46	30	13	40	34	65	46	65		46	13	

.

Agent Falcon lined up 3 rows of 5 disguise kits. How many disguise kits in all?

Answer: ☐ → **M**

Agent Falcon lined up 10 rows of 3 disguise kits. How many disguise kits in all?

Answer: ☐ → **I**

There were 41 decoder rings. 28 were used up. How many decoder rings are left?

Answer: ☐ → **O**

Agent Falcon lined up 4 rows of 10 GPS trackers. How many GPS trackers in all?

Answer: ☐ → **N**

There were 49 decoder rings. 15 were used up. How many decoder rings are left?

Answer: ☐ → **D**

Agent Falcon found 12 spy cams yesterday and 34 more today. How many spy cams in all?

Answer: ☐ → **T**

Agent Falcon found 61 decoder rings yesterday and 4 more today. How many decoder rings in all?

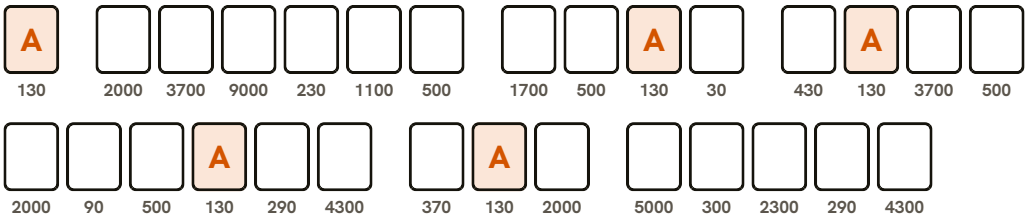
Answer: ☐ → **E**

Scratch space:

CLUE 4 Rounding

> Our tracking radar is fuzzy, so the distance to the getaway vehicle is rounded to the nearest ten. Round the numbers to pinpoint the location!

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



Round 134 to the nearest ten ☐ → A

Round 2,324 to the nearest hundred ☐ → U

Round 5,338 to the nearest thousand ☐ → F

Round 1,069 to the nearest hundred ☐ → E

Round 8,789 to the nearest thousand ☐ → L

Round 290 to the nearest ten ☐ → N

Round 369 to the nearest ten ☐ → W

Round 93 to the nearest ten ☐ → T

Round 427 to the nearest ten ☐ → H

Round 1,745 to the nearest hundred ☐ → G

Round 4,313 to the nearest hundred ☐ → D

Round 1,708 to the nearest thousand ☐ → S

Round 339 to the nearest hundred ☐ → O

Round 230 to the nearest ten ☐ → V

Round 515 to the nearest hundred ☐ → R

Round 28 to the nearest ten ☐ → Y

Round 3,748 to the nearest hundred ☐ → I

Scratch space:

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

> We intercepted a bundle of coded microchips. If we share them equally among our five agents, how many does each spy get to analyze?

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:

66 ÷ 6 = ☐ | 108 ÷ 9 = ☐ | 8 ÷ 2 = ☐ | 88 ÷ 11 = ☐ | 28 ÷ 4 = ☐

14 ÷ 7 = ☐ | 12 ÷ 2 = ☐ | 40 ÷ 4 = ☐ | 99 ÷ 11 = ☐ | 60 ÷ 12 = ☐

24 ÷ 8 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain tosses a smoke bomb to blind the guards, then crashes through the security gate in an armored car.
2. The villain swings through the skylight with a grappling hook, then flies into the clouds with a micro copter.
3. The villain snaps photos of secret files using spy camera glasses, then speeds down the snowy mountain on rocket skis.
4. The villain zaps the vault lock with a laser watch, then dives into the river in a stealth submarine.
5. The villain zaps the vault lock with a laser watch, then crashes through the security gate in an armored car.
6. The villain snaps photos of secret files using spy camera glasses, then flies into the clouds with a micro copter.
7. The villain blasts over the fence with jetpack boots, then zooms away on a fast hover bike.
8. The villain swings through the skylight with a grappling hook, then speeds down the snowy mountain on rocket skis.
9. The villain swings through the skylight with a grappling hook, then dives into the river in a stealth submarine.
10. The villain zaps the vault lock with a laser watch, then zooms away on a fast hover bike.
11. The villain swings through the skylight with a grappling hook, then zooms away on a fast hover bike.
12. The villain snaps photos of secret files using spy camera glasses, then zooms away on a fast hover bike.

TEACHER / PARENT

Answer Key

The Super-Decoder Heist

Culprit: James Bond

smoke bomb · armored car · right handed · silver gray wig · motion detector

Trail: Start 21 → Clue 1 18 → Clue 2 12 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE ROGUE AGENT DID NOT ESCAPE ON ROCKET SKIS"

5 × 9 = 45 (T) · 12 × 2 = 24 (A) · 7 × 2 = 14 (U) · 2 × 1 = 2 (D) · 8 × 2 = 16 (N) · 7 × 1 = 7 (E) · 9 × 12 = 108 (H) · 4 × 11 = 44 (S) · 12 × 12 = 144 (G) · 8 × 10 = 80 (O) · 11 × 3 = 33 (P) · 4 × 1 = 4 (R) · 12 × 6 = 72 (I) · 11 × 1 = 11 (K) · 12 × 8 = 96 (C)

Clue 2 (Multi-step word problems): "RIGHT HANDED"

Agent Falcon filled 9 boxes with 4 GPS trackers each, then found 13 more GPS trackers. How many GPS trackers are there in all? = 49 (R) · There were 299 decoder rings in all. 4 The Stealth Network used 11 decoder rings each. The other 5 The Stealth Network shared the rest equally. How many decoder rings did each of the other The Stealth Network get? = 51 (G) · Agent Falcon earned 2 laser pens in each of 6 rounds, plus 72 bonus laser pens. Then 8 laser pens were lost. How many laser pens are left? = 76 (T) · There were 96 laser pens in all. 1 The Stealth Network used 30 laser pens each. The other 3 The Stealth Network shared the rest equally. How many laser pens did each of the other The Stealth Network get? = 22 (A) · Agent Falcon collected 108 laser pens in the morning and 33 laser pens in the afternoon, then split them equally among 3 The Stealth Network. How many laser pens did each get? = 47 (N) · Agent Falcon collected 474 decoder rings in the morning and 18 decoder rings in the afternoon, then split them equally among 6 The Stealth Network. How many decoder rings did each get? = 82 (H) · Agent Falcon filled 4 boxes with 5 laser pens each, then found 44 more laser pens. How many laser pens are there in all? = 64 (I)

Clue 3 (Word problems): "MOTION DETECTOR"

Agent Falcon lined up 3 rows of 5 disguise kits. How many disguise kits in all? = 15 (M) · Agent Falcon lined up 10 rows of 3 disguise kits. How many disguise kits in all? = 30 (I) · There were 41 decoder rings. 28 were used up. How many decoder rings are left? = 13 (O) · Agent Falcon lined up 4 rows of 10 GPS trackers. How many GPS trackers in all? = 40 (N) · There were 49 decoder rings. 15 were used up. How many decoder rings are left? = 34 (D) · Agent Falcon found 12 spy cams yesterday and 34 more today. How many spy cams in all? = 46 (T) · Agent Falcon found 61 decoder rings yesterday and 4 more today. How many decoder rings in all? = 65 (E)

Clue 4 (Rounding): "A SILVER GRAY HAIR STRAND WAS FOUND"

Round 134 to the nearest ten = 130 (A) · Round 2,324 to the nearest hundred = 2300 (U) · Round 5,338 to the nearest thousand = 5000 (F) · Round 1,069 to the nearest hundred = 1100 (E) · Round 8,789 to the nearest thousand = 9000 (L) · Round 290 to the nearest ten = 290 (N) · Round 369 to the nearest ten = 370 (W) · Round 93 to the nearest ten = 90 (T) · Round 427 to the nearest ten = 430 (H) · Round 1,745 to the nearest hundred = 1700 (G) · Round 4,313 to the nearest hundred = 4300 (D) · Round 1,708 to the nearest thousand = 2000 (S) · Round 339 to the nearest hundred = 300 (O) · Round 230 to the nearest ten = 230 (V) · Round 515 to the nearest hundred = 500 (R) · Round 28 to the nearest ten = 30 (Y) · Round 3,748 to the nearest hundred = 3700 (I)

Clue 5 (Division facts (1-12)): surviving statement is box 1 → James Bond

66 ÷ 6 = 11 · 108 ÷ 9 = 12 · 8 ÷ 2 = 4 · 88 ÷ 11 = 8 · 28 ÷ 4 = 7 · 14 ÷ 7 = 2 · 12 ÷ 2 = 6 · 40 ÷ 4 = 10 · 99 ÷ 11 = 9 · 60 ÷ 12 = 5 · 24 ÷ 8 = 3