Grade 6

Your first case starts here.

The Missing Magic Sword

A complete mystery to print, solve and enjoy.

By Roberta Spring

1. Read the case briefing and meet the suspects.

2. Work through all five clues. Cross suspects off as the evidence rules them out.

3. Complete your case report, then check the worked answers.

You will need: a pencil, an eraser and some paper for working out. An adult can help with reading the instructions.

This sample is one complete case from the supplied Grade 6 book. The bonus letter for the full-book final mystery is optional; you do not need it to solve this case.

Print at actual size (100%) on US Letter paper. On A4, choose Fit. Print only the case pages if you want to save paper; the answers begin after the STOP page.

Explore the Grade 6 books at BrainBoxBooks.shop

CASE #01 · CASTLE QUEST

THE MISSING MAGIC SWORD

Uncap your pencil, clue hunter, because the case is officially open! The search began as soon as the magic sword vanished from the armory. A trail of tiny paper stars led toward the door. Follow each math answer, cross off the suspects, and discover who borrowed it!

MISSING: MAGIC SWORD
LAST SEEN: ARMORY

DIFFICULTY	MISSION TIME	MATH SKILLS
★★☆☆	~50 min	4

THE SUSPECTS



SUSPECT 1
RUFUS · the Wizard
Method: A ROPE



SUSPECT 5
BORIS · the Jester
Method: A DISGUISE



SUSPECT 2
HAL · the Stable hand
Method: A DISGUISE



SUSPECT 6
INES · the Royal baker
Method: A SPARE KEY



SUSPECT 3
ODESSA · the Falconer
Method: A ROPE



SUSPECT 7
FLORA · the Blacksmith
Method: A TROLLEY



SUSPECT 4
EDWIN · the Herald
Method: A GRABBER



SUSPECT 8
CEDRIC · the Gatekeeper
Method: A ROPE

YOUR CLUES

CLUE 1 · WORD PROBLEMS | CLUE 2 · PERCENTAGES | CLUE 3 · MAPS & SCALE
CLUE 4 · WORD PROBLEMS | CLUE 5 · ORDER OF OPERATIONS

Solve each clue sheet and cross suspects off. The last name standing is your culprit!

CASE #01 · CASTLE QUEST

CLUE 1 OF 5

WORD PROBLEMS

THE MAGIC CHASE

Rule: the culprit went 525 km or less — cross off the long-distance suspects.

HOW FAR DID EACH SUSPECT GO?

Rufus covered 50% of a 402 km trail, then 183 more. Total: ___ _____

Hal covered 20% of a 1310 km trail, then 198 more. Total: ___ _____

Odessa covered 25% of a 588 km trail, then 335 more. Total: ___ _____

Edwin covered 20% of a 390 km trail, then 116 more. Total: ___ _____

Boris covered 25% of a 984 km trail, then 433 more. Total: ___ _____

Ines covered 10% of a 4090 km trail, then 65 more. Total: ___ _____

Flora covered 50% of a 654 km trail, then 27 more. Total: ___ _____

Cedric covered 50% of a 112 km trail, then 125 more. Total: ___ _____

Do the math, then cross off every suspect the rule catches!

CASE #01 · CASTLE QUEST

CLUE 2 OF 5

PERCENTAGES

ADD THE MAGIC STARS

Detectives cleared everyone with MORE than 525 magic points — cross them off!

WORK OUT EVERY SUSPECT

RUFUS
50% of 1568 + 15 = _____

BORIS
50% of 80 + 63 = _____

HAL
25% of 496 + 97 = _____

INES
20% of 2050 + 76 = _____

ODESSA
50% of 74 + 84 = _____

FLORA
25% of 1680 + 327 = _____

EDWIN
10% of 2770 + 105 = _____

CEDRIC
25% of 1168 + 32 = _____

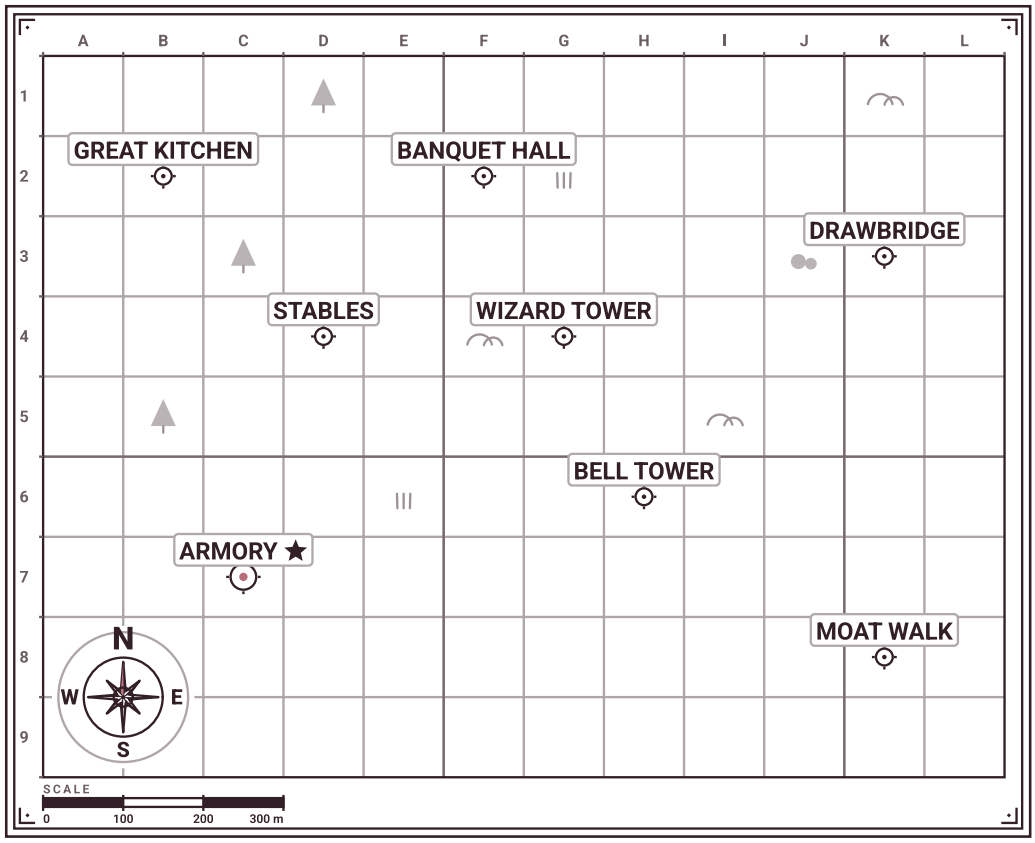
Do the math, then cross off every suspect the rule catches!

CLUE 3 OF 5

MAPS & SCALE

WANDER THE WIZARD WAY

Track the dragon trail until it ends at the culprit's hiding spot, then cross off every suspect found somewhere else.



THE TRAIL

Start at the ARMORY ★

1. Go 50% of 600 m NORTH
2. Go 25% of 400 m EAST
3. Go 25% of 800 m EAST
4. Go 10% of 3000 m EAST
5. Go 50% of 200 m WEST
6. Go 10% of 1000 m WEST

WHO WAS SEEN WHERE?

RUFUS	MOAT WALK
HAL	STABLES
ODESSA	WIZARD TOWER
EDWIN	WIZARD TOWER
BORIS	GREAT KITCHEN
INES	WIZARD TOWER
FLORA	BELL TOWER
CEDRIC	WIZARD TOWER

Trace the trail on the map, find where it ends, and cross off everyone seen elsewhere!

CASE #01 · CASTLE QUEST

CLUE 4 OF 5

WORD PROBLEMS

TRACK THE DRAGON'S DASH

The culprit stayed close by! Cross off every suspect who covered MORE than 525 km.

HOW FAR DID EACH SUSPECT GO?

Rufus covered 25% of a 668 km trail, then 167 more. Total: ___ _____

Hal covered 50% of a 188 km trail, then 75 more. Total: ___ _____

Odessa covered 50% of a 1668 km trail, then 45 more. Total: ___ _____

Edwin covered 50% of a 808 km trail, then 8 more. Total: ___ _____

Boris covered 10% of a 1140 km trail, then 93 more. Total: ___ _____

Ines covered 20% of a 1235 km trail, then 6 more. Total: ___ _____

Flora covered 20% of a 1575 km trail, then 158 more. Total: ___ _____

Cedric covered 50% of a 1756 km trail, then 60 more. Total: ___ _____

Do the math, then cross off every suspect the rule catches!

CASE #01 · CASTLE QUEST

CLUE 5 OF 5

ORDER OF OPERATIONS

READ THE MYSTERY SYMBOLS

SOLVE THE PROBLEMS

Y. 28 − 4 × 6 = _____

C. 37 − 6 × 5 = _____

R. (24 − 6) ÷ 6 = _____

E. 8 + 6 × 4 = _____

A. 9 − 2 × 2 = _____

P. (9 + 6) × 3 = _____

S. (4 + 2) × 9 = _____

L. (56 − 8) ÷ 8 = _____

D. (5 + 6) × 9 = _____

K. 9 + 8 × 7 = _____

I. 7 + 9 × 5 = _____

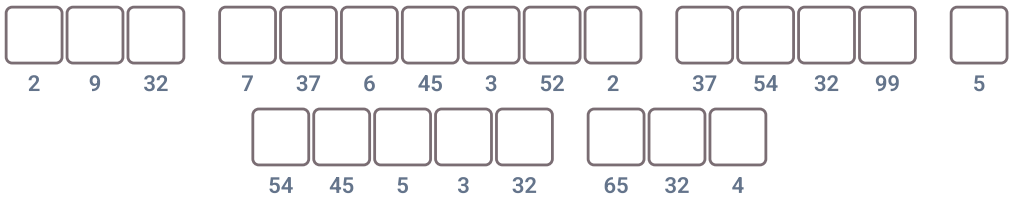
T. 74 − 8 × 9 = _____

U. 2 + 5 × 7 = _____

H. (40 − 4) ÷ 4 = _____

CRACK THE CODE

Write each problem's letter in every box that shows its answer.
Self-check: if the boxes spell a real clue sentence, your math is correct!



Now cross off every suspect this clue rules out!

CASE #01 · CASTLE QUEST

CASE REPORT

The magic sword vanished from the armory. You worked the clues, detective — time to name the culprit.

FINAL CHECK

- [ ] RUFUS · the Wizard
- [ ] HAL · the Stable hand
- [ ] ODESSA · the Falconer
- [ ] EDWIN · the Herald
- [ ] BORIS · the Jester
- [ ] INES · the Royal baker
- [ ] FLORA · the Blacksmith
- [ ] CEDRIC · the Gatekeeper

THE CULPRIT IS: _____

HIDDEN AT: _____

GOT AWAY USING: _____

SHOW YOUR REASONING

Which clue ruled out the most suspects? Clue ____

Name one suspect it cleared — and why the rule caught them:

- [ ] My culprit is the ONLY suspect still standing after all 5 clues.

SECRET LETTER for The Final Mystery → T

CASE CLOSED

CASE #01 · CASTLE QUEST

THE WARRANT TEST

A real detective proves every part of the case before the arrest. Show that your evidence pins WHO, WHERE and HOW — then decide: is it enough?

WHO **the CULPRIT — which clues leave only one suspect standing?**

Proved with Clue _____ , because

WHERE **the HIDEOUT — where does the map trail end?**

Proved with Clue _____ , because

HOW **the METHOD — what does the final decode reveal?**

Proved with Clue _____ , because

☐ **My case is airtight — I can prove WHO, WHERE and HOW. Make the arrest!**

STOP, DETECTIVE!

The worked answers begin on the next page.

Finish your case report before turning over. The following pages reveal the culprit and show the completed clues.

Parents and grandparents: keep these pages separate if your young detective would like to solve the case independently.

CLUE 1 OF 5

WORD PROBLEMS

THE MAGIC CHASE

Rule: the culprit went 525 km or less — cross off the long-distance suspects.

HOW FAR DID EACH SUSPECT GO?

Rufus covered 50% of a 402 km trail, then 183 more. Total: ___ **384 km**

✓ *50% × 402 + 183 = 201 + 183 = 384 km*

Hal covered 20% of a 1310 km trail, then 198 more. Total: ___ **460 km**

✓ *20% × 1310 + 198 = 262 + 198 = 460 km*

Odessa covered 25% of a 588 km trail, then 335 more. Total: ___ **482 km**

✓ *25% × 588 + 335 = 147 + 335 = 482 km*

Edwin covered 20% of a 390 km trail, then 116 more. Total: ___ **194 km**

✓ *20% × 390 + 116 = 78 + 116 = 194 km*

~~Boris covered 25% of a 984 km trail, then 433 more. Total: ___~~ **679 km**

✓ *25% × 984 + 433 = 246 + 433 = 679 km*

Ines covered 10% of a 4090 km trail, then 65 more. Total: ___ **474 km**

✓ *10% × 4090 + 65 = 409 + 65 = 474 km*

Flora covered 50% of a 654 km trail, then 27 more. Total: ___ **354 km**

✓ *50% × 654 + 27 = 327 + 27 = 354 km*

Cedric covered 50% of a 112 km trail, then 125 more. Total: ___ **181 km**

✓ *50% × 112 + 125 = 56 + 125 = 181 km*

Rules out: BORIS

CLUE 2 OF 5

PERCENTAGES

ADD THE MAGIC STARS

Detectives cleared everyone with MORE than 525 magic points — cross them off!

WORK OUT EVERY SUSPECT

~~**RUFUS**~~
50% of 1568 + 15 = 799 magic points

BORIS
50% of 80 + 63 = 103 magic points

HAL
25% of 496 + 97 = 221 magic points

INES
20% of 2050 + 76 = 486 magic points

ODESSA
50% of 74 + 84 = 121 magic points

~~**FLORA**~~
25% of 1680 + 327 = 747 magic points

EDWIN
10% of 2770 + 105 = 382 magic points

CEDRIC
25% of 1168 + 32 = 324 magic points

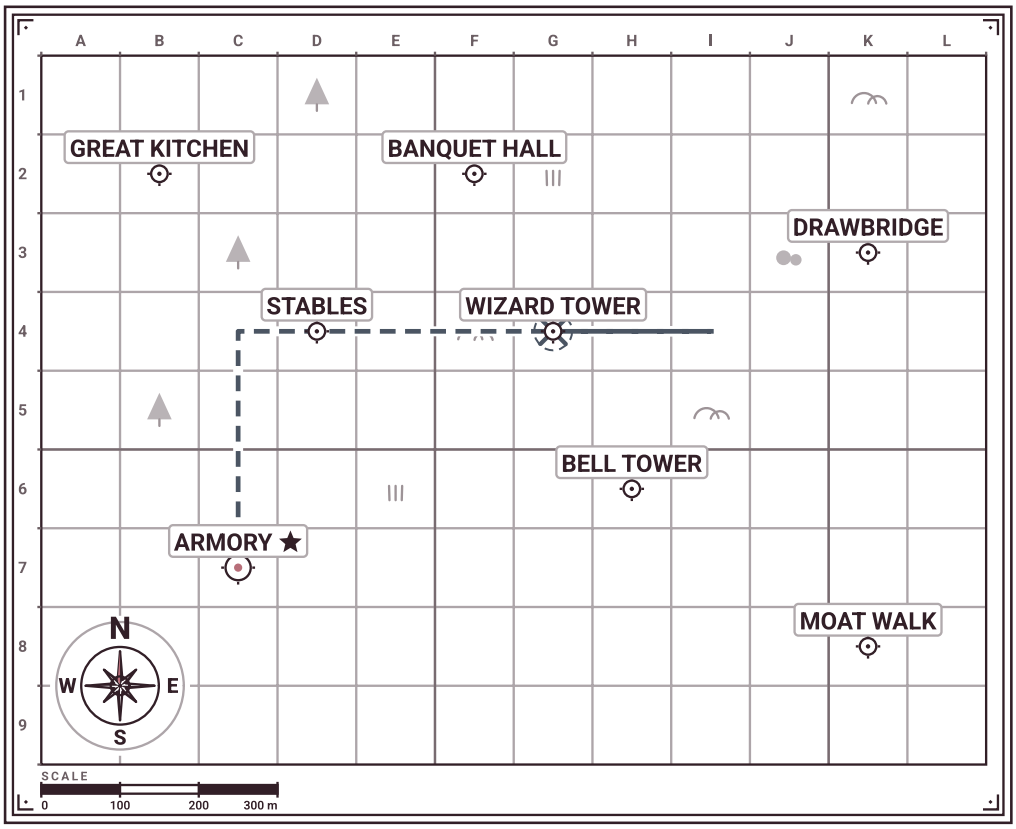
Rules out: FLORA, RUFUS

CLUE 3 OF 5

MAPS & SCALE

WANDER THE WIZARD WAY

Track the dragon trail until it ends at the culprit's hiding spot, then cross off every suspect found somewhere else.



THE TRAIL

Start at the ARMORY ★

1. Go 50% of 600 m NORTH	= 300
2. Go 25% of 400 m EAST	= 100
3. Go 25% of 800 m EAST	= 200
4. Go 10% of 3000 m EAST	= 300
5. Go 50% of 200 m WEST	= 100
6. Go 10% of 1000 m WEST	= 100

WHO WAS SEEN WHERE?

~~RUFUS~~	MOAT WALK
~~HAL~~	STABLES
ODESSA	WIZARD TOWER
EDWIN	WIZARD TOWER
~~BORIS~~	GREAT KITCHEN
INES	WIZARD TOWER
~~FLORA~~	BELL TOWER
CEDRIC	WIZARD TOWER

The trail ends at the WIZARD TOWER — rules out: HAL

CLUE 4 OF 5

WORD PROBLEMS

TRACK THE DRAGON'S DASH

The culprit stayed close by! Cross off every suspect who covered MORE than 525 km.

HOW FAR DID EACH SUSPECT GO?

Rufus covered 25% of a 668 km trail, then 167 more. Total: ___ **334 km**

✓ *25% × 668 + 167 = 167 + 167 = 334 km*

Hal covered 50% of a 188 km trail, then 75 more. Total: ___ **169 km**

✓ *50% × 188 + 75 = 94 + 75 = 169 km*

~~Odessa covered 50% of a 1668 km trail, then 45 more. Total: ___~~ **879 km**

✓ *50% × 1668 + 45 = 834 + 45 = 879 km*

Edwin covered 50% of a 808 km trail, then 8 more. Total: ___ **412 km**

✓ *50% × 808 + 8 = 404 + 8 = 412 km*

Boris covered 10% of a 1140 km trail, then 93 more. Total: ___ **207 km**

✓ *10% × 1140 + 93 = 114 + 93 = 207 km*

Ines covered 20% of a 1235 km trail, then 6 more. Total: ___ **253 km**

✓ *20% × 1235 + 6 = 247 + 6 = 253 km*

Flora covered 20% of a 1575 km trail, then 158 more. Total: ___ **473 km**

✓ *20% × 1575 + 158 = 315 + 158 = 473 km*

~~Cedric covered 50% of a 1756 km trail, then 60 more. Total: ___~~ **938 km**

✓ *50% × 1756 + 60 = 878 + 60 = 938 km*

Rules out: ODESSA, CEDRIC

CLUE 5 OF 5

ORDER OF OPERATIONS

READ THE MYSTERY SYMBOLS

SOLVE THE PROBLEMS

Y. 28 − 4 × 6 = 4

C. 37 − 6 × 5 = 7

R. (24 − 6) ÷ 6 = 3

E. 8 + 6 × 4 = 32

A. 9 − 2 × 2 = 5

P. (9 + 6) × 3 = 45

S. (4 + 2) × 9 = 54

L. (56 − 8) ÷ 8 = 6

D. (5 + 6) × 9 = 99

K. 9 + 8 × 7 = 65

I. 7 + 9 × 5 = 52

T. 74 − 8 × 9 = 2

U. 2 + 5 × 7 = 37

H. (40 − 4) ÷ 4 = 9

CRACK THE CODE

Write each problem's letter in every box that shows its answer.
Self-check: if the boxes spell a real clue sentence, your math is correct!

T	H	E		C	U	L	P	R	I	T		U	S	E	D		A
2	9	32		7	37	6	45	3	52	2		37	54	32	99		5

S	P	A	R	E		K	E	Y
54	45	5	3	32		65	32	4

Rules out: EDWIN

CASE #01 · CASTLE QUEST · SOLUTION

CASE REPORT

The magic sword vanished from the armory. You worked the clues, detective — time to name the culprit.

FINAL CHECK

- ☒ RUFUS · the Wizard
- ☒ HAL · the Stable hand
- ☒ ODESSA · the Falconer
- ☒ EDWIN · the Herald
- ☒ BORIS · the Jester
- ☑ **INES · the Royal baker**
- ☒ FLORA · the Blacksmith
- ☒ CEDRIC · the Gatekeeper

THE CULPRIT IS: INES

HIDDEN AT: WIZARD TOWER

GOT AWAY USING: A SPARE KEY

SOLVED!

HOW IT WAS SOLVED

Clue 1 cleared BORIS. Clue 2 cleared FLORA & RUFUS. Clue 3 cleared HAL. Clue 4 cleared ODESSA & CEDRIC. Clue 5 cleared EDWIN. Only INES was left standing — that's the culprit!

SECRET LETTER for The Final Mystery → T

CASE CLOSED

CASE #01 · CASTLE QUEST · SOLUTION

THE WARRANT TEST

A real detective proves every part of the case before the arrest. Show that your evidence pins WHO, WHERE and HOW — then decide: is it enough?

WHO **the CULPRIT — which clues leave only one suspect standing?**

Proved with Clue _____ , because

WHERE **the HIDEOUT — where does the map trail end?**

Proved with Clue _____ , because

HOW **the METHOD — what does the final decode reveal?**

Proved with Clue _____ , because

☐ **My case is airtight — I can prove WHO, WHERE and HOW. Make the arrest!**

Airtight: the elimination clues leave only INES (WHO). The map trail in Clue 3 ends at WIZARD TOWER (WHERE). The final decode spells out A SPARE KEY (HOW).

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