

**BACK TO
SCHOOL**

WHODUNNIT?

SPECIAL EVENT



Order of Operations
Advanced



Whodunnit?

Order of Operations (Advanced)

Ideal Unit:	Operations & Expressions	Time Range: 20-40 Minutes	Supplies: Pencil & Paper
--------------------	--------------------------	----------------------------------	---------------------------------

Common Core Alignment:

This particular activity was mapped to these common core standards. *Whodunnit* activities are ideal as a small group skill practice.

6.EE.2d	Perform arithmetic operations, including those involving whole number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).
---------	---

General Procedures:

A.) Give students a *Whodunnit Jr. Worksheet*. Students will need to solve the 10 problems about the topic. Each correct answer will result in a clue. Students will check off the Animal, the Location and the Problem depending on what they are given. The one remaining from each column is the correct solution. In this case it should be:

"Isla B. Organized had a wrong password in math."

B.) Print out the "Clues" and cut them out. I suggest you laminate them for future use. Spread them in different locations in the classroom and turn the students loose. Have teams of 2-3 circulate and attempt to figure out the clues. Once they think they have all the pieces, they can come to you to check their answer. If they are wrong, let them figure it out 😊



Whodunnit



Name : _____

The Back to School season has triggered some last minute snafus in our student population! The question is *Whodunnit*? You have to figure out who is the culprit, where they were, and what happened. Use the clues to rule out possibilities.

1.	2.
3.	4.
5.	6.
7.	8.
9.	10.









???



Whodunnit?



What is the problem? After you get a clue, cross out any suspects you can rule out.

Person	Location	Problem
Crispy Newfolder <input type="checkbox"/> 	Language Arts <input type="checkbox"/>	Bookbag Zipper Stuck <input type="checkbox"/>
Isla B. Organized <input type="checkbox"/> 	Math <input type="checkbox"/>	Called Teacher Mom <input type="checkbox"/>
Noah Lurns <input type="checkbox"/> 	Music <input type="checkbox"/>	Jammed the Pencil Sharpener <input type="checkbox"/>
Algebra Dabra <input type="checkbox"/> 	Science <input type="checkbox"/>	Not Enough Desks <input type="checkbox"/>
Seymour Notez <input type="checkbox"/> 	Social Studies <input type="checkbox"/>	Wrong Password <input type="checkbox"/>
Witty McLaughington <input type="checkbox"/> 	<p>Write about what happened...</p> <hr/> <hr/> <hr/> <hr/>	
Anna Scholar <input type="checkbox"/> 		
Will B. Learner <input type="checkbox"/> 		

???

???

Clue #1

WEDDUNNIT?

$$3 + 2^3 =$$

- 9 → They did not jam the pencil sharpener.
- 11 → It was not Witty McLaughington or Noah Lurns.
- 15 → It was not Crispy Newfolder.
- 125 → Their bookbag zipper did not get stuck.

WEDDUNNIT?

Clue #2

$$5^3 - 3^2 =$$

- 2 → Their bookbag zipper did not get stuck.
- 6 → Not in math
- 34 → It was not Will B. Learner or Isla B. Organized.
- 116 → They did not call their teacher "Mom."

???

???

Clue #3

WEDDUNNIT?

$$(7 + 2)^2 =$$

- 18 → Not in math.
- 21 → There were enough desks.
- 81 → It was not Crispy Newfolder or Algebra Dabra.
- 344 → They did not have the wrong password.

WEDDUNNIT?

Clue #4

$$7 + (4 - 9)^2 =$$

- 2 → It was not Algebra Dabra or Witty McLaughington.
- 2 → It was not in science.
- 3 → It was not Noah Lurns or Witty McLaughington.
- 32 → There were enough desks.

???

???

Clue #5

WEODUNNI??

$$(2 + 2 \times 2)^2 =$$

- 16 → It was not Isla B. Organized.
- 36 → Not in social studies or language arts.
- 64 → They did not call their teacher "Mom."
- 88 → It was not Algebra Dabra.

WEODUNNI??

Clue #6

$$23 + (8 + 4 \div 2)^3 =$$

- 53 → Not in music.
- 132 → Not language arts.
- 239 → It was not Anna Scholar or Isla B. Organized.
- 1023 → Not in science.

???

???

Clue #7

WEDDUNNIT?

$$(12 - 4 \times 5)^2 + 7 =$$

- 16 → There were enough desks.
- 52 → Not in language arts.
- 71 → They did not jam the pencil sharpener.
- 84 → It was not Witty McLaughington.

WEDDUNNIT?

Clue #8

$$5^3 - (8 - 4 \div 4)^2 =$$

- 13 → They did not have the wrong password.
- 76 → It was not Seymour Notez or Anna Scholar.
- 111 → Not in music or math.
- 174 → Not in language arts or music.

???

???

Clue #9

WEDDUNNIT?

$$\left(\frac{1}{6}\right)^2 \times 6^2 =$$

$\frac{1}{6}$



It was not Isla B. Organized or a stuck bookbag zipper.

1



Not in music.

6



It was not Will B. Learner or a wrong password.

36



Not in math.

WEDDUNNIT?

Clue #10

$$\left(\frac{1}{6} - \frac{1}{3}\right)^3 =$$

$-\frac{1}{6}$



Not in math.

$-\frac{1}{216}$



It was not Will B. Learner or a stuck bookbag zipper.

$\frac{1}{36}$



Not in music.

$\frac{1}{216}$



It was not Isla B. Organized or a wrong password.

???

???

Alternate Ending

WBOONNNN??

"Will B. Learner had a stuck bookbag zipper in math."

WBOONNNN??

Clue #10

$$\left(\frac{1}{6} - \frac{1}{3}\right)^3 =$$

$$-\frac{1}{6}$$



Not in math.

$$-\frac{1}{216}$$



It was not Isla B. Organized or a wrong password.

$$\frac{1}{36}$$



Not in music.

$$\frac{1}{216}$$



It was not Will B. Learner or a stuck bookbag zipper.

???