

WHODUNNIT?

SKILL BUILDERS



**Up-and-moving
skill practice
activity!**

Order of Operations



Whodunnit?

Order of Operations

Ideal Unit:

Operations, Integers
& Rational Numbers

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

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 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 Players, Last Known Whereabouts and Methods that are accounted for. The one remaining from each column is the correct solution. In this case it should be:

“Professor Delta used chemical poisoning in the library.”

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 😊

An alternative “Clue 10” is provided in the event you want a different result for different class periods.



Whodunnit?



Name: _____

Six contestants on a reality TV show were stunned to find their lowest scoring colleague was "injured." They must figure out the crime before the bell rings. The question is *Whodunnit?* And how... The Player, Last Known Whereabouts and Method that are left unaccounted for -- is the solution.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

Who is the "Criminal"?

(The three boxes left unchecked will reveal the crime. If you cannot figure it out, you may be next.)

The Players

Dr. Alpha	<input type="checkbox"/>
Miss Beta	<input type="checkbox"/>
Mrs. Gamma	<input type="checkbox"/>
Professor Delta	<input type="checkbox"/>
Mr. Epsilon	<input type="checkbox"/>
Coach Omega	<input type="checkbox"/>

The Last Known Whereabouts

Atrium	<input type="checkbox"/>
Gym	<input type="checkbox"/>
Kitchen	<input type="checkbox"/>
Library	<input type="checkbox"/>
Movie Theater	<input type="checkbox"/>
Pool	<input type="checkbox"/>

The Method

Chemical Poisoning	<input type="checkbox"/>
Cougar Attack	<input type="checkbox"/>
Electrocution	<input type="checkbox"/>
Fallen Object	<input type="checkbox"/>
Stubbed Toe	<input type="checkbox"/>
Venomous Bite	<input type="checkbox"/>

???

Clue #1

W E O D U N N I I ?

$$9 - (3 \div 3)^2$$

- 6 The injury was not from chemical poisoning.
- 7 Mr. Epsilon was reading in the library.
- 8 The victim was not injured by a cougar.
- 9 Coach Omega was exercising in the gym.

W E O D U N N I I ?

Clue #2

$$4 - 5 + 6 \div 2 \cdot 7$$

- 1 The injury was not a stubbed toe.
- 13 The victim was not electrocuted.
- 17.5 Professor Delta was watching a movie in the theater.
- 20 Dr. Alpha was cooking in the kitchen.

???

???

Clue #3

W E O D U N N I I ?

$$\frac{1 - 5^2}{-2 + 4}$$

- 12 The victim did not have a venomous bite.
- 1 Miss Beta was lounging around the atrium.
- 1 Mrs. Gamma was laying by the pool.
- 12 The injury was not from a fallen object.

W E O D U N N I I ?

Clue #4

$$(8 - (4 - 2) - (7 - 9)) \cdot 9$$

- 9 Mr. Epsilon was eating a snack in the kitchen.
- 34 The victim did not have a venomous bite.
- 72 Miss Beta was watching a movie in the theater.
- 118 The victim was not injured by a cougar.

???

???

Clue #5

W E O D U N N I I ?

$$(-12) \div (-3 + 16 \div 8)^3 + 2$$

- 18 Mr. Epsilon was reading by the pool.
- 14 The victim was not electrocuted.
- 24 Miss Beta was using a computer in the library.
- 30 The victim was not injured by a cougar

W E O D U N N I I ?

Clue #6

$$9 + (6 - 6) \cdot 4 - (-7 - (-2))$$

- 5 The injury was not carried out with a fallen object.
- 14 Coach Omega was taking a nap in the atrium.
- 27 The injury was not a stubbed toe.
- 38 Dr. Alpha was swimming in the pool.

???

???

Clue #7

W E O D U N N I I ?

$$4^2 \div \left(2^3 \div \left((-1) \cdot (9 + (-5)) \right) \right)$$

- 8 The injury was not from a fallen object.
- 2 The victim did not have a venomous bite.
- 0 Coach Omega was browsing books in the library.
- 44 Professor Delta was playing basketball in the gym.

W E O D U N N I I ?

Clue #8

$$6 \cdot 2 \div (-1)^{4 \cdot 5 - (8 + 3)}$$

- 12 Mrs. Gamma was doing yoga in the gym.
- 8 Miss Beta was reading in the library.
- 4 The injury was not a stubbed toe.
- 1 The victim did not have a venomous bite.

???

???

Clue #9

W E O D U N N I I ?

$$(24 \div 6 - 2 + 5 \cdot 3 \cdot (-1 - 3) \div 4)^2$$

69 Dr. Alpha was watching a movie in the theater.

112 The injury was not from chemical poisoning.

144 Mr. Epsilon was reading in the library.

169 The injury was not a stubbed toe.

W E O D U N N I I ?

Clue #10

$$7 - 9 + (9 - 5)^2 - 4 \cdot \frac{2+4}{-5-1} + 8 - 3 \cdot 100$$

-274 Mr. Epsilon was doing laps in the pool.

-135 The injury was not done from chemical poisoning.

62 The victim was not electrocuted.

452 Professor Delta was browsing books in the library.

???

???

Alternate Ending

W E O D O N N O O ?

"Mr. Epsilon used chemical poisoning in the pool".

W E O D O N N O O ?

Clue #10

$$7 - 9 + (9 - 5)^2 - 4 \cdot \frac{2+4}{-5-1} + 8 - 3 \cdot 100$$

- 274 Professor Delta was browsing books in the library.
- 135 The injury was not done from chemical poisoning.
- 62 The victim was not electrocuted.
- 452 Mr. Epsilon was doing laps in the pool.

???