Name: Cayce Beames

Date: 9/11/19

Period:

WORKSHEET

OHM'S LAW

1. OHM'S law states that current is directly proportional to a) voltage and inversely proportional to b) resistance .

1A.	voltage
1B.	resistance

2. Using the OHM'S law triangle below, write the 3 OHM'S law formulas.

2A.	$V = I \times R$
2B.	$I = V / R$
2C.	$R = V / I$

MATCHING

3. Current is measured in:

4. V is the letter symbol for:

5. R is the letter symbol for:

6. Voltage is measured in:

7. Resistance is measured in:

8. I is the letter symbol for:

9. Conductance is measured in:

a. resistance
b. volts
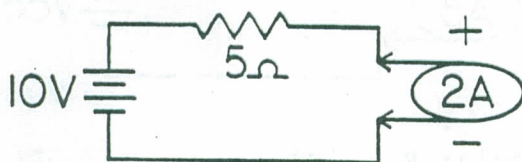c. voltage
d. amperes
e. current
f. OHMS
g. siemens

3.	d
4.	c
5.	a
6.	b
7.	f
8.	e
9.	g

10. Using the circuit below:

a. Identify the "R" (resistance) value in the circuit.

10A.	5Ω

b. Identify the "V" (voltage) value in the circuit.

10B.	10Vdc

c. Identify the "I" (current) value in the circuit.

10C.	2A

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OHM'S LAW MATCHING:

18. V = 52V, R = 4Ω, I = _____

19. R = 1,000Ω, I = .2A, V = _____

20. I = .5A, V = 15V, R = _____

21. I = .01A, R = 4,700Ω, V = _____

22. V = 15V, R = 100Ω, I = _____

23. I = 2A, V = 4,560V, R = _____

a. .15A

b. 13A

c. 2280Ω

d. 47V

e. 200V

f. 30Ω

18. b

19. e

20. f

21. d

22. a

23. c

Work for Prob. 18

I = 52V / 4Ω
I = 13A
b.

Work for Prob. 19

V = 1,000Ω * .2A
V = 200A
e.

Work for Prob. 20

R = 15V / .5A
R = 30Ω
f.

Work for Prob. 21

V = .01A * 4,700Ω
V = 47
d.

Work for Prob. 22

I = 15V / 100Ω
I = .15A
a.

Work for Prob. 23

R = 4,560V / 2A
R = 2280Ω
c.