

Unit 3

Communication Electronics

Lesson 3.5

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Lesson Title Basic Electronic Theory – Ohm’s Law

Curriculum Area Math

Grades 6 – 8

Duration 2 to 3 class periods

Content Standards M – 2
M – 3

Benchmarks M – 2.1
M – 3.1

Goals

- Develop the students’ understanding of basic electrical theory
- Develop the students’ understanding of resistance and its effect of the flow of electricity
- Develop the students’ understanding of the relationship between current, voltage and resistance.

Objectives

- Identify the effects resistance has on current flow
- Identify and discuss the relationship between current, voltage and resistance in an electrical circuit.
- Identify open and short circuits.

Resource Materials

Now You’re Talking, Chapter 5

Understanding Basic Electronics Chapters 3,12,17& 21

Instructional Content

Resistance and the relationship with water flowing through a pipe.

Ohm’s Law – the relationship between resistance, voltage and current.

Suggested Activities

Understanding Basic Electronics, Chapter 12, pages 12.1 to 12.6

