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