Unit 3
Communication Electronics
Lesson 3.4

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Lesson Title  Basic Electrical Theory – Conductors & Insulators

Curriculum Area  Science

Grades  6 – 8

Duration  2 to 3 class periods

Content Standards  SC – 1
                   SC – 4

Benchmarks  SC – 1.1
            SC – 4.1

Goals
• Develop the students’ understanding of basic electrical theory
• Develop the students’ understanding of conductors & insulators

Objectives
• Students describe and identify various conductive materials
• Students describe and identify various insulating materials

Resource Materials
Now You’re Talking, Chapter 5
Understanding Basic Electronics, Chapters 10, 25 & 26

Instructional Content
1. Name materials that conduct electrical current
   Silver   Copper
   Gold    Aluminum
2. Name materials that do not conduct electrical current
   Mica    Rubber
   Wax   Porcelain
   Bakelite  Plastics

Suggested Activities
1. Discovery Lesson – Understanding Electricity –
   www.school.discovery.com/lessonplans/programs/understanding-electricity
2. Gather 24 different materials. Sort them according to two categories: Conductors & Insulators.