

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.