

Unit 4

Transmitting and Receiving Devices

Lesson 4.1

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Lesson Title Station Components and Layout

Curriculum Areas Technology

Grades 6 – 8

Duration 1 class period

Content Standard T – 1

Benchmark T – 1.1

Goal

- Develop students knowledge of the components of a basic Amateur Radio station

Objective

- Students will identify and assemble a mockup Amateur Radio station

Resource Materials

Now You're Talking

Instructional Content

1. Block diagrams and how to use them
2. Components that make up a typical HF Amateur Radio station
3. Components that make up a typical VHF/UHF Amateur Radio station
 - Transmitter Power Supply
 - Receiver Antenna Switch
 - Transceiver SWR / Power Meter
 - Antenna Transmission/Feed Line
 - TNC Modem
 - Antenna Tuner

Suggested Activities

Activity Sheet # 4.1 – Station Layout

Unit 4

Activity Sheet 4-1

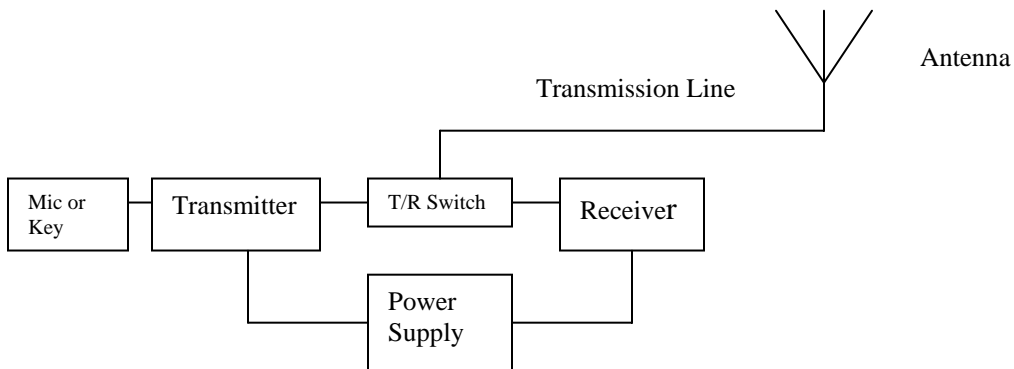
Station Layout

Instructions:

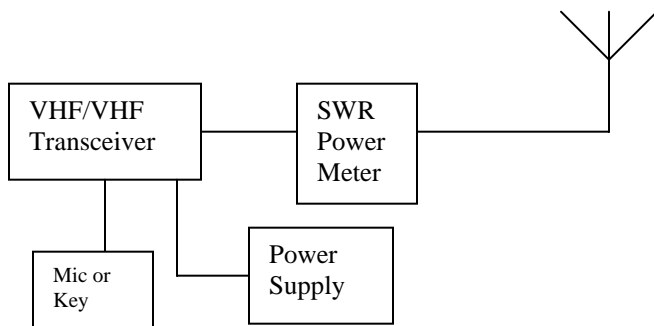
1. Cut out rectangles for each of the radio station components listed.
2. Label each rectangle with the correct name.
3. Glue or tape them in the proper position on a separate piece of paper.
4. Draw lines to connect the components – use a piece of string to represent the transmission line and antenna.

Materials: Scissors, string, tape or glue

Example: Basic HF Amateur Radio Station.



Example: Basic UHF/VHF Amateur Radio Station.



Cut out the rectangles and label them: Transmitter, Receiver, Transceiver, Mic/Key, SWR/Power Meter, Transmatch, Power Supply

