



2010 National Scout Jamboree

Radio Merit Badge



Earn the badge while you are here, about 5 hours.

Each session begins on the hour.

Session 1 Midway Radio MB booth side A _____

Session 2 Midway Radio MB booth side B _____

Session 3a K2BSA Station (Mahone area) req 7, 8 + Amateur Radio option _____

Session 3b Midway Radio MB booth req 7, 8 + Broadcast Radio option _____

Session 3c Midway Radio MB booth req 7, 8 + Shortwave Listening option _____

Name: First _____ Last _____

Jamboree ID number (Off your badge) _____

Jamboree Troop Number _____ Home Troop Number _____

Home address: number & street _____

City: _____ State: _____ zip code: _____

SESSION 1 WORKBOOK

<u>Requirement</u>	<u>Date</u>	<u>Initial</u>	<u>Requirement</u>	<u>Date</u>	<u>Initial</u>
1. Explain what radio is	_____ / _____		3b. Label chart, MF, HF	_____ / _____	
2. Radio wave travel	_____ / _____		3c. Locate 8 services	_____ / _____	
3a. Draw a spectrum chart	_____ / _____				

1. Explain what radio is. Then discuss the following: _____

a. The differences between broadcast radio _____

and hobby radio. _____

b. The differences between broadcasting _____

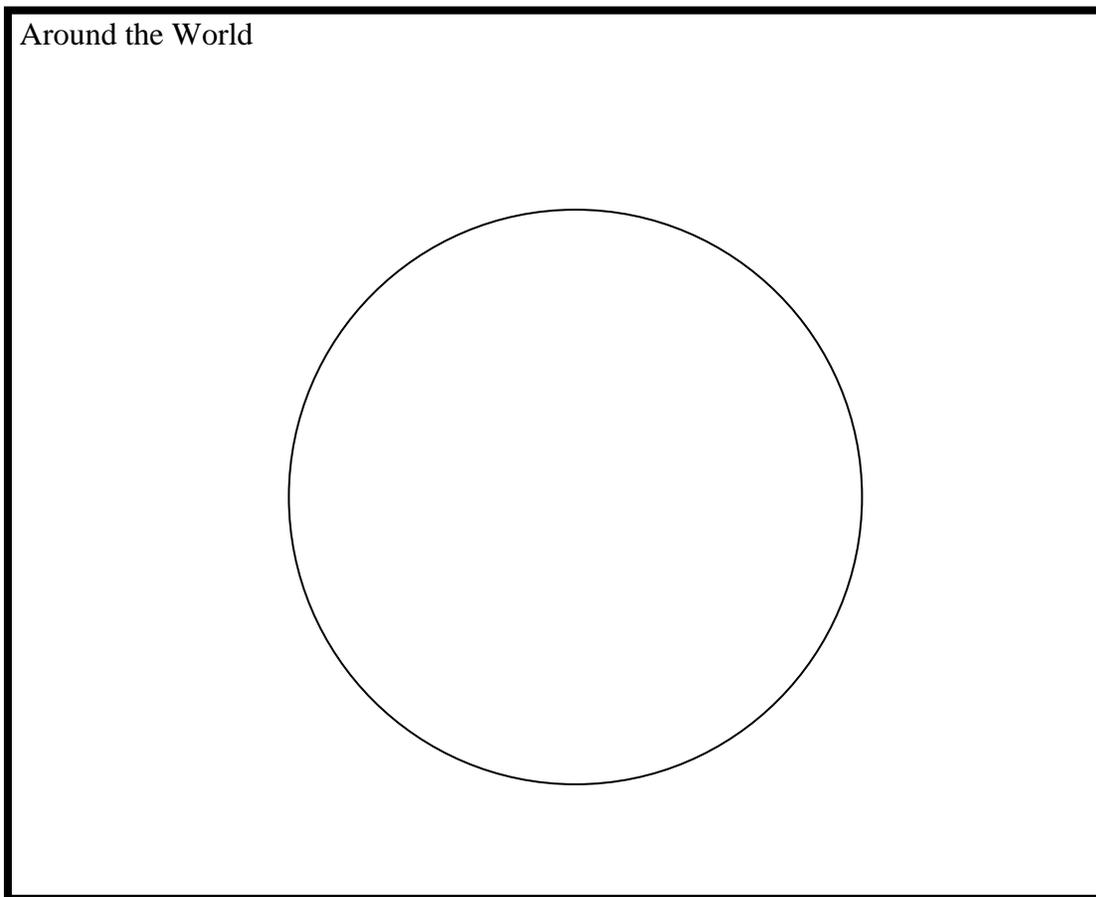
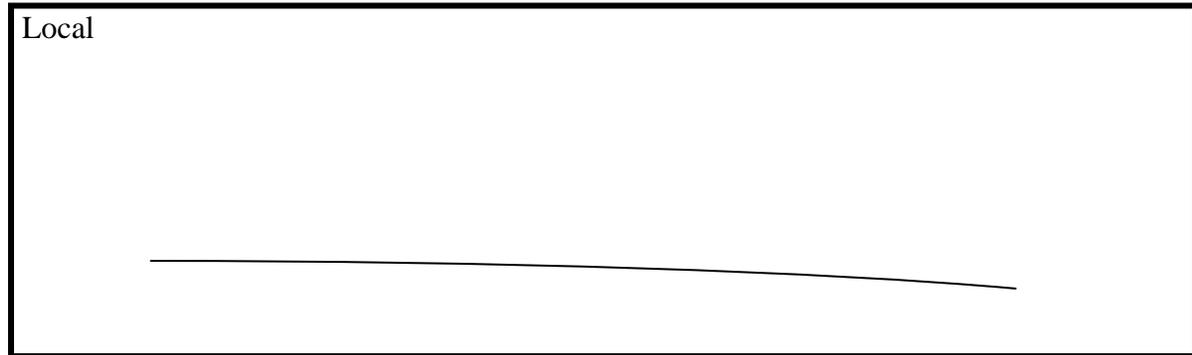
and two-way communications. _____

c. Radio call signs and how they are used in broadcast radio and amateur radio _____

d. The phonetic alphabet and how it is used to communicate clearly. _____

2. Do the following:

a. Sketch a diagram showing how radio waves travel locally and around the world.



Explain how the broadcast radio stations, WWV and WWVH can be used to help determine what you will hear when you listen to a shortwave radio? _____

b. Explain the difference between a DX _____

 and a local station. _____

Discuss what the Federal Communication Commission (FCC) does _____

 and how it is different from the International Telecommunication Union. _____

3. Do the following:

- a. Draw a chart of the electromagnetic spectrum covering 100 kilohertz (kHz) to 1000 megahertz (MHz).
- b. Label the MF, HF, VHF, UHF, and microwave portions of the spectrum on your diagram.
- c. Locate on your chart at least eight radio services such as AM and FM commercial broadcast, citizens band (CB), television, amateur radio (at least four amateur radio bands), and public service (police and fire).

