



# RFI Detective

You will need: Portable radio, small batteries, a piece of wire

**Turn on your radio. Chose "AM," and tune it** to a frequency low on the dial where there are no stations.

What do you notice? What can you hear? \_\_\_\_\_  
 \_\_\_\_\_

**Record** the dial setting: \_\_\_\_\_ kHz

**Tap** one end of the wire to one end of the battery (the wire should be bare). **Touch the other bare end of the wire** to the battery.

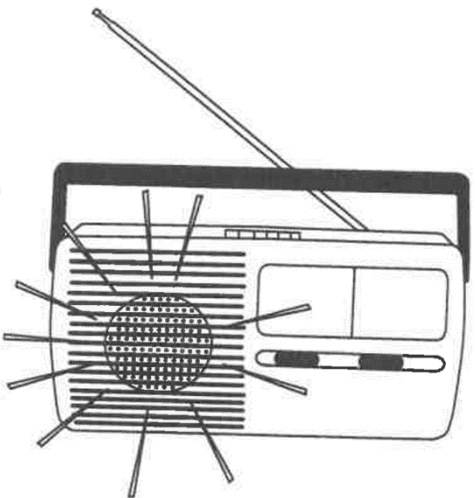
What do you notice? What can you hear? \_\_\_\_\_  
 \_\_\_\_\_

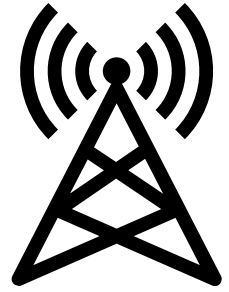
**Change the dial** on the radio, and repeat the battery experiment. Does the interference get louder or quieter?

Dial Setting (kHz)	Interference Level (Range of 1 to 5, quiet to loud)

Try the FM dial.

Dial Setting (kHz)	Interference Level (Range of 1 to 5)





**Now, let's look for interference where you live!**

Use your radio to find as many sources of interference as you can.

But first, **make a prediction**. What kinds of things do you think will give off interference?

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**Record** the dial setting: \_\_\_\_\_ FM AM (circle one)

Object	Description of interference	Interference Level (Range of 1 to 5, quiet to loud)

Were you right? \_\_\_\_\_

Do you notice any patterns? \_\_\_\_\_

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**Extension:** Record the interference on your phone or computer, and view a spectrum of it at <http://www.visualizationsoftware.com/gram.html>