

RADIO TELECOMMUNICATION

• Radio signals are invisible **w** _____ which carry **e** _____ from a **t** _____ to a **r** _____.

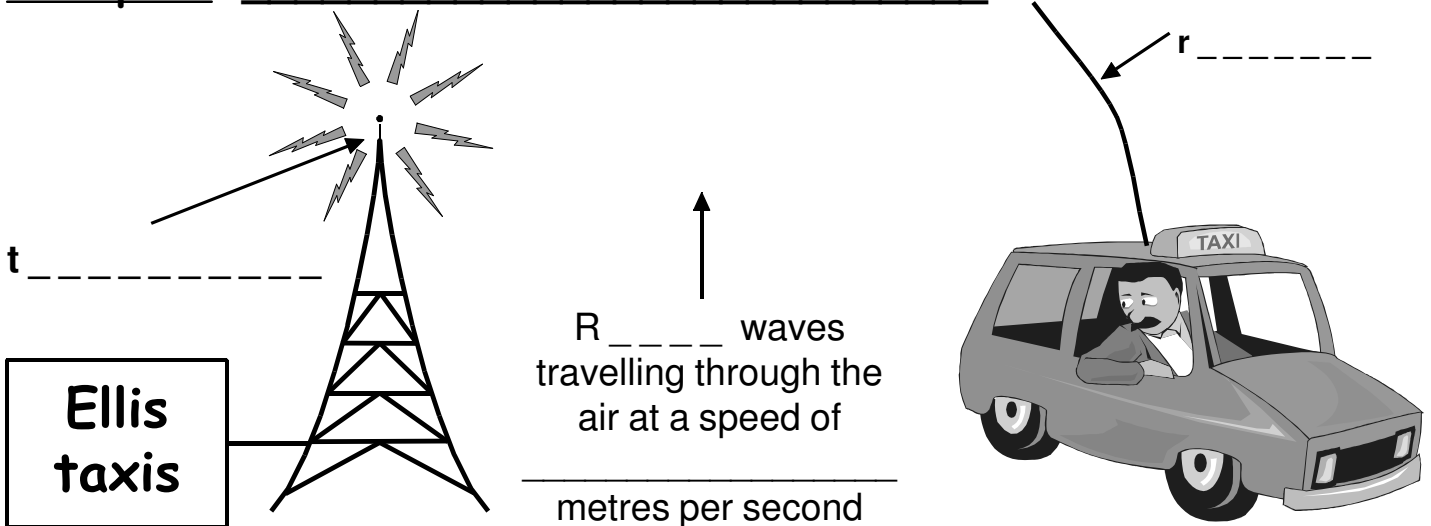
• A transmitter _____

• A receiver _____

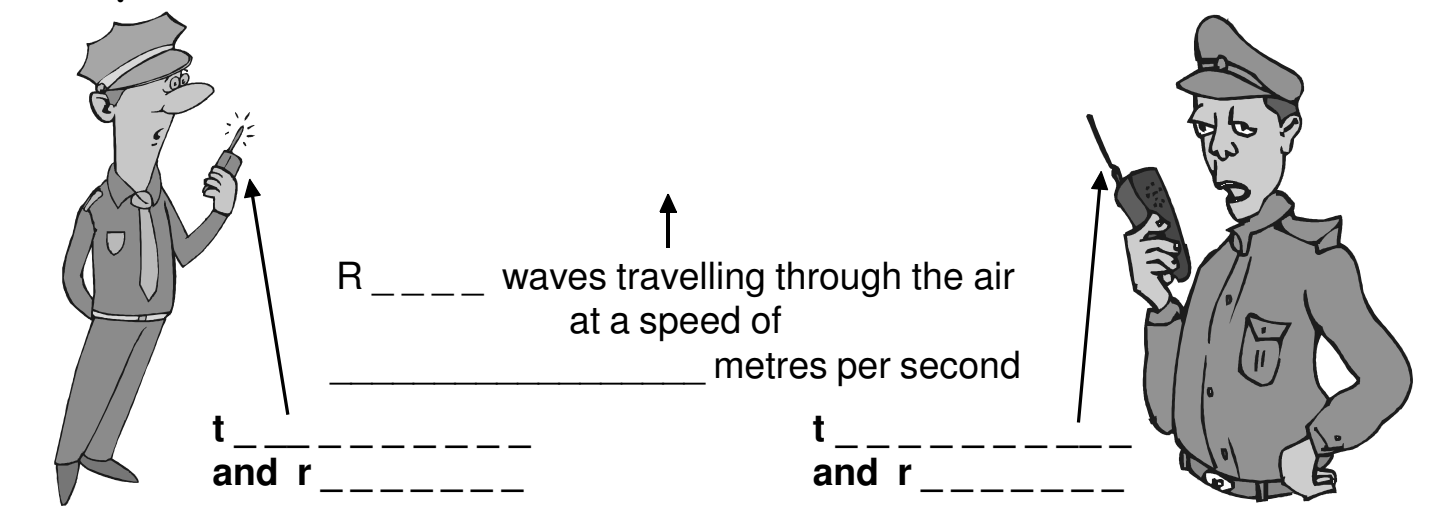
• There are no **w** _____ between the transmitter and receiver.

• Radio signals (waves) travel through air at a speed of _____ **million metres per second** (_____ **metres per second**).

Example 1: _____



Example 2: _____



Frequency

The **frequency** of a **radio wave** tells us

Frequency is measured in **h** _____ (____).

Identifying Radio Stations

So that **radio signals** do not get "mixed up", every radio station sends out **radio waves** with a different **f** _____ .



tuning display

On radio receivers, the **tuning dial** and **display** (which we use to select the radio station we want to listen to) shows the **f** _____ value of the radio stations.

We can identify a **radio station transmitter** by the **f** _____ of the **radio waves** it sends out.

For example, some of the radio stations people in Fife can receive:

Radio Bands

To make it easy for us to describe how **radio waves** behave, we put them into groups called **b** _____ .

Radio waves in the same **b** _____ have similar **frequencies**, so behave in similar ways.

For example:

Band: ELF (E _____ L _____ F _____)
frequency = 30 Hz to 30 000 Hz

Can pass deep into the seas and oceans, so are used to communicate with submerged **s** _____ .

