**Text Quest Notes Pg 140- 147** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_

**Radio Wave Transmission:**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ send out or broad cast radio waves
* Radio stations electronics convert music into \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ and broadcasted by a large antenna
* A radio converts radio waves into electronic signals which come out of the radio as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Two radio frequency bands: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* AM signals travel by changing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ but the frequency stays \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* FM signals travel by changing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ but the amplitude stays the same
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ waves have a higher energy
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ waves travel farther on Earth
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ wave have better sound quality
* The following use radio communication:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Cell Phones:**

* The cellular system is divided into regions called \_\_\_\_\_\_\_\_\_\_\_\_\_
* Cell phone transmit and receive signals using high-frequency \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* The cell phone sends signals to a cell tower and then to a hub/tub. The hub/tower send the signal to

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and then to the receiving cell phone.

* Cell phones send digital signals which move as wave \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* The microwaves are sent and received in short \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Satellite Communication:**

* Satellite receivers and transmitters work in a similar way as \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ system
* Satellite communication systems receive:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Satellite phones use \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ waves to communicate and send information
* Television signals from satellites are scrambled and require a satellite dish \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to unscramble the signal

* GPS uses 24 satellites to broad cast \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ signals to Earth
* GPS can detect location on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ surface and in \_\_\_\_\_\_\_\_\_\_
* The following have GPS receivers:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* The fourth satellite of the global positioning system is used to:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Pg 152 Channel Surfing on an Infrared Wave**

* The TV remove uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ light to send signal
* The remote sends pulses of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ code
* Each command on the remote has a different binary code which consists of a combination of \_\_\_’s and \_\_\_’s
* The TV’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ interprets and carries out the command
* The remote only controls the TV because:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_