HPS Wave Technology 2020 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Objective: explain how technological devices use the principles of waves to transmit information and energy (Obj 3)

Electromagnetic waves are produced through the oscillation of a charged particle. We use many of these waves throughout our day, sometimes without even realizing it. For **8** of the technologies listed, find the **range of wavelength or frequency** used and one interesting fact.

**Wifi**

Range—

Interesting fact—

**Bluetooth**

Range—

Interesting fact—

**Airdrop**

Range—

Interesting fact—

**4GLTE**

Range—

Interesting fact—

**Airplay**

Range—

Interesting fact—

**FM radio**Range—

Interesting fact—

**AM radio**

Range—

Interesting fact—

**XM radio**

Range—

Interesting fact—

**Cell phone reception**

Range—

Interesting fact—

**TV remote**

Range—

Interesting fact—

**Keyless entry for vehicles**

Range—

Interesting fact—

**Garage door opener**

Range—

Interesting fact—

**NFC (Near Field Communication)**

Range—

Interesting fact—

**Infrared heater**

Range—

Interesting fact—

**Remote engine starter**

Range—

Interesting fact—

Directions: Using the data you collected above, label the different types of technology on the EM spectrum. What do you notice?

