

**Lights, Camera, Media Literacy!**  
**How Electronic Television Works**  
**Answer Key**

- 1) CRT stands for CATHODE RAY TUBE.
- 2) Another term for a positive battery terminal is ANODE.
- 3) Another term for a negative battery terminal is CATHODE.
- 4) In a CRT, the heated filament is the CATHODE.
- 5) The cathode is in a glass TUBE.
- 6) With a vacuum in the tube, the ray (or stream of ELECTRONS) Pour off the cathode and fly through the tube at high-speed until hitting the flat SCREEN at the other end.
- 7) The screen is coated with PHOSPHOR and glows when the BEAM hits it.
- 8) A phosphor is a material that emits a visible LIGHT when exposed to a beam of electrons.
- 9) Black and white screens have one phosphor that glows WHITE.
- 10) Color screens have three phosphors that emit RED, GREEN, AND BLUE light and three beams to illuminate the colors together.
- 11) Inside the TV set, the tube is wrapped in steering coils, so that the beams don't all go to the CENTER of the screen.
- 12) The beam quickly SCANS the screen...back and forth, one row at a time... just as Farnsworth's plowing lines did in his family's potato field.