United Streaming: The Value of Evidence Name _____

Complete this worksheet as you watch the video.

1. The job of the Forensic Science Unit is to collect _____ evidence.

2. To document a tire track, it is first _____ and then _____ are made using dental cement that is poured into a metal form.

3. Investigators use a high-powered _____ to trace the path to the victim. The light shines at _____ that cause materials to fluoresce and _____ goggles help make evidence stand out sharply.

4. Evidence that is collected at a crime scene is sent to the Department of Law Enforcement and is analyzed by a _____, who goes through the debris that is collected at a crime scene.

5. _____ fibers are valuable clues because they can link suspects to a specific location.

6. The tire track expert studies the photographs taken at the crime scen

Word Bank

Carpet
Casts
Chemist
Conviction
Evidence
Fibers
Hair
Individual
Light
Orange
Pattern
Photographed
Physical
Pitches
Sites
Source
Tools
Wavelengths

D) chromosomes are duplicated.
E) the spindle is organized.

7) How is the S phase of the cell cycle measured?
A) counting the number of cells produced per hour
B) determining the length of time during which DNA synthesis occurred in the cells
C) comparing the synthesis versus the breakdown of S protein
D) determining when the S chromosome is synthesized
E) stopping G_1 and measuring the number of picograms of DNA per cell

8) Cytokinesis usually, but not always, follows mitosis. If a cell completed mitosis but not cytoki
the result would be a cell with
A) a single large nucleus.
B) high concentrations of actin & myosin.
C) two abnormally small nuclei.
D) two nuclei.
E) two nuclei but with half the amount c

9) Taxol is an anticancer drug extracted from the Pacific yew tree. In animal cells, taxol disrupts microtubule formation by binding to microtubules and accelerating their assembly from the prote precursor, tubulin. Surprisingly, this stops mitosis. Specifically, taxol must affect
A) the fibers of the mitotic spindle.
B) anaphase.
C) formation of the centrioles.
D) chromatid assembly.
E) the S phase of the cell cycle.

10) Movement of the chromosomes during anaphase would be *most* affected by a drug that
A)reduces cyclin concentrations.
B) increases cyclin concentrations.
C) prevents elongation of microtubules.
D) prevents shortening of microtubules
E) prevents attachment of the microtub
the kinetochore.