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| 1. The most common type of regenerated fiber, which is derived from cellulose and is mostly plant in origin, is rayon.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 2. Synthetic polymer fibers, which all originate with petroleum products, are cellulose-based fibers.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 3. Polyester has properties similar to nylon except it is easily broken down by light and concentrated acid.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 4. A disadvantage of manufactured fibers is that they can deteriorate in bright sunlight and melt at a lower temperature than natural fibers.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 5. Fibers are woven into textiles or fabrics.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 6. Fibers that have been spun together are called:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | a textile. | b. | yarn. | |  | c. | a mineral fiber. | d. | a fiber. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 7. A small molecule that may bond to other monomers to become a polymer is a:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | monomer. | b. | polymer. | |  | c. | fiber. | d. | None of these choices. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 8. When fibers are transferred directly from victim to suspect or suspect to victim, this is called:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | necessary transfer. | b. | direct transfer. | |  | c. | absolute transfer. | d. | None of these choices. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 9. The transfer of evidence such as a fiber from a source to a person, then to another person, is called:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | primary transfer. | b. | tertiary transfer. | |  | c. | secondary transfer. | d. | direct transfer. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 10. Early collection of fibers in an investigation is critical.  Within 24 hours, an estimated:   |  |  |  | | --- | --- | --- | |  | a. | 75% of all fibers may have fallen from a victim or been lost from a crime scene. | |  | b. | 85% of all fibers may have fallen from a victim or been lost from a crime scene. | |  | c. | 95% of all fibers may have fallen from a victim or been lost from a crime scene. | |  | d. | None of these choices. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 11. A forensic scientist will ask questions about:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | type of fiber. | b. | fiber color. | |  | c. | number of fibers found. | d. | where the fiber was found. | |  | e. | ​textile from which fiber originated. | f. | ​a, b, and e | |  | g. | ​c, b, and d | h. | ​All of these choices. | |  | i. | ​None of these choices. |  |  |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 12. Fiber evidence is gathered with:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | vacuums. | b. | tape. | |  | c. | forceps. | d. | glue. | |  | e. | lint roller. | f. | a, b, d, e | |  | g. | ​a, b, c, e | h. | ​All of these choices. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 13. Two methods that can analyze fibers without damaging them are:   |  |  |  | | --- | --- | --- | |  | a. | polarizing light microscopy and infrared spectroscopy. | |  | b. | polarizing light spectroscopy and infrared microscopy. | |  | c. | heat and light. | |  | d. | None of these choices. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 14. Fibers are classified as either:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | natural fibers or synthetic fibers. | b. | polymers or synthetic fibers. | |  | c. | acrylic fibers or plant fibers. | d. | olefins or synthetic fibers. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 15. Natural fibers come from:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | animals. | b. | plants. | |  | c. | minerals that are mined from the ground. | d. | All of these choices. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 16. Natural plant fibers are produced from:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | seeds. | b. | fruits. | |  | c. | stems and leaves. | d. | All of these choices. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 17. All plant fibers share the common polymer that is:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | cellulose. | b. | protein. | |  | c. | sulfuric acid. | d. | None of these choices. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 18. One seed fiber is:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | cotton. | b. | coir. | |  | c. | hemp. | d. | jute. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 19. Fiberglass is a fiber form of:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | proteins. | b. | glass. | |  | c. | cellulose. | d. | polymers. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 20. Until the nineteenth century, only plant or animal fibers were used to make clothing and textiles.  Half the fibers produced today are synthetic.  They are categorized as:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | fruit fibers and polymers | b. | regenerated fibers and polymers. | |  | c. | stem fibers and polymers. | d. | seed fibers and polymers. |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 21. Weave patterns have names like tabby, twill and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 22. The simplest weave pattern is the plain, or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, weave.   |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 23. The number of threads that are packed together for any given amount of fabric is known as   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 24. Manila is a fiber extracted from the leaves of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, a relative of the banana tree.   |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| 25. Flax is the most common stem fiber, and is most commonly found in the textile, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |

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| abaca | hemp | type of fiber |
| polymer | linen | tabby |
| thread count | satin | acrylic fibers |