

Skills Worksheet

Critical Thinking**Work-Alikes**

In the space provided, write the letter of the term or phrase that best describes how each numbered item functions.

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|--------------------------------|--|
| ____ 1. anaphase I | a. bees returning to the hive |
| ____ 2. crossing-over | b. a meeting |
| ____ 3. metaphase I | c. shuffling a deck of cards |
| ____ 4. meiosis II | d. raindrops joining together |
| ____ 5. telophase I | e. other half of a baseball inning |
| ____ 6. prophase I | f. exchanging dance partners |
| ____ 7. independent assortment | g. pulling apart string cheese |
| ____ 8. random fertilization | h. breaking a container and water spills |

Cause and Effect

In the space provided, write the letter of the term or phrase that best matches each cause or effect given below.

Cause	Effect	
9. _____	first cell of new individual	a. gametes
10. meiosis I and II	_____	b. eggs and sperm join
11. _____	gametes join by fusion	c. all cells of organisms are haploid cells
12. repair of damaged DNA	_____	d. possible explanation of evolution of sexual reproduction

Trade-offs

In the space provided, write the letter of the bad news item that best matches each numbered good news item below.

Good News	Bad News
____ 13. The ovum produced by oogenesis is very large and filled with nutrients.	a. Organisms must use energy to produce gametes and find mates.
____ 14. Asexual reproduction allows organisms to reproduce quickly.	b. They may be at a disadvantage in a changing environment.
____ 15. Sexual reproduction makes different combinations of genes quickly.	c. Two polar bodies die.

Critical Thinking *continued*

Linkages

In the spaces provided, write the letters of the two terms or phrases that are linked together by the term or phrase in the middle. The choices can be placed in any order.

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|---|--|
| 16. _____ meiosis II _____ | a. budding in hydra |
| 17. _____ independent assortment
_____ | b. four chromatids line up in prophase I |
| 18. _____ crossing-over _____ | c. gametes |
| 19. _____ individuals split off
_____ | d. meiosis I |
| | e. asexual reproduction |
| | f. recombination of genes in gametes |
| | g. unpaired chromosomes in gametes |
| | h. pairs of chromosomes in organisms |

Analogies

An analogy is a relationship between two pairs of terms or phrases written as $a : b :: c : d$. The symbol $:$ is read as “is to,” and the symbol $::$ is read as “as.” In the space provided, write the letter of the pair of terms or phrases that best completes the analogy shown.

- _____ 20. chromatids : crossing-over ::
- gametes : chromosomes
 - metaphase : anaphase
 - hook : fishing rod
 - stamps : trading stamps
- _____ 21. asexual reproduction : identical ::
- spermatogenesis : ovum
 - fission : budding
 - sexual : diverse
 - fragmentation : budding
- _____ 22. haploid life cycle : fusion ::
- diploid life cycle : fusion
 - diploid life cycle : fertilization
 - fertilization : gametes
 - gametes : fertilization
- _____ 23. sporophyte : spore ::
- sexual reproduction : clone
 - spore : sporophyte
 - gamete : spore
 - gametophyte : gamete