Simple Organisms test review:

Kingdom Protista:

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#1. Like fungi, fungus –like protists are heterotrophs that absorb nutrients from dead or decaying organic matter. Unlike most true fungi, fungus-like protists lack chitin and hyphae and do not reproduce using spores.

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#1. C #9. B

#11. Various answers possible. Ex: Yes, the terms are useful because many protists have characteristics similar to those of plants, fungi and animals.

#13. Ciliates use cilia, short hair-like projections used to move and feed. The cilia cover the entire outer body of the organism. Sarcodines move using pseudopods, temporary cytoplasmic projections (“fake feet”) used to move and feed.

#15. Algae are photosynthetic protists that contain chlorophyll, unlike the other protists who are heterotrophic.

#18. Multicellular plant-like protists:

 Red algae, ex: dulse

 Brown algae, ex: seaweed

 Green algae, ex: volvox

#21. High levels of pollutants act as a food source for fire algae, so lots of pollution often results in lots of fire algae. When Fire Algae bloom, the cause a red tide – the water looks fiery red and contains toxic chemicals harmful to swimmers and shellfish.

Kingdom Fungi:

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#1. All fungi are heterotrophic and eukaryotic. They all have chitin in their cell walls. They all reproduce using spores and grow using hyphae. None of them are motile.

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#1. Molds: do not have cells walls separating the cells in the hyphae

 Sac fungi: sexual spores created in small sac-like structures

 Club fungi: sexual spores created in small club-like structures found on the gills in the cap.

 Imperfect fungi: Create asexual spores only.

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#1. A

#11. The cell walls of fungi contains chitin, a compound also found in the exoskeleton of insects.

#16. Fungi are divided into 4 phylums based on their structures (what body structures they have or don’t have).

# 19. Most yeasts are classified in the Sac Fungi phylum because they create their sexual spores in small sac-like structures.

# 32. Sexual reproduction offers the advantage of genetically diverse offspring – the offspring have unique sets of DNA that increase the chances of survival both for the individual and the species.

Asexual reproduction saves the organism time and effort since it does not have to find a mate of the same species in order to reproduce. This is ideal in harsh conditions when few other organisms are present in the environment. However, as a result, the offspring are clones of the parent, and carry all the same genetic defects as the parent.