Student: _____

1. When humans manipulate the genes of microorganisms the process is called
   A. Bioremediation
   B. Genetic engineering
   C. Epidemiology
   D. Immunology
   E. Taxonomy

2. Which of the following is not considered a microorganism?
   A. Mosquito
   B. Protozoa
   C. Bacteria
   D. Viruses
   E. Fungi

3. All microorganisms are best defined as organisms that
   A. Cause human disease
   B. Lack a cell nucleus
   C. Are infectious particles
   D. Are too small to be seen with the unaided eye
   E. Can only be found growing in laboratories

4. Which activity is an example of biotechnology?
   A. Bacteria in the soil secreting an antibiotic to kill competitors
   B. A microbiologist using the microscope to study bacteria
   C. Egyptians using moldy bread on wounds
   D. Eschericia coli producing human insulin
   E. Public health officials monitoring diseases in a community

5. Living things ordinarily too small to be seen with the unaided eye are termed
   A. Bacteria
   B. Viruses
   C. Parasites
   D. Microorganisms
   E. None of the choices is correct

6. The study of the immune response to infection caused by microorganisms is
   A. Hypersensitivity
   B. Epidemiology
   C. Immunology
   D. Morbidity
   E. Geomicrobiology

7. Which of the following does not indicate microbe involvement in energy and nutrient flow?
   A. Formation of oxygen by an oxygenic photosynthesis
   B. Formation of greenhouse gases
   C. Formation of soil
   D. Digestion of complex carbohydrates in animal diets
   E. Decomposition of dead matter and wastes

8. The microorganisms that recycle nutrients by breaking down dead matter and wastes are called
   A. Decomposers
   B. Prokaryotes
   C. Pathogens
   D. Eukaryotes
   E. Fermenters

9. The microorganisms that do not have a nucleus in their cells are called
   A. Decomposers
   B. Prokaryotes
   C. Pathogens
   D. Eukaryotes
   E. Fermenters

10. The first prokaryotes appeared about ___ billion years ago.
   A. 5
   B. 4
   C. 3
   D. 2
   E. 1

11. Which of the following is not a human use of microorganisms?
   A. Baking bread
   B. Treating water and sewage
   C. Breaking down chocolate
   D. Mass producing antibiotics
   E. Cleaning up oil spills

12. Using microbes to detoxify a site contaminated with heavy metals is an example of
   A. Biotechnology
   B. Bioremediation
   C. Decomposition
   D. Immunology
   E. Epidemiology

13. Disease-causing microorganisms are called
   A. Decomposers
   B. Prokaryotes
   C. Pathogens
   D. Eukaryotes
   E. Fermenters

14. The number one worldwide infectious diseases are
   A. AIDS related diseases
   B. Diarrhea diseases
   C. Malaria diseases
   D. Measles
   E. Respiratory diseases

15. Which of the following is a unique characteristic of viruses that distinguishes them from the other major groups of microorganisms?
   A. Cause human disease
   B. Lack a nucleus
   C. Cannot be seen without a microscope
   D. Contain genetic material
   E. Lack cell structure

16. Helminths are
    A. Bacteria
    B. Protozoa
    C. Molds
    D. Parasitic worms
    E. Infectious particles

17. Organisms called parasites are
    A. Always classified in the kingdom Monera
    B. Always harmful to their host
    C. The decomposers in ecosystems
    D. Always a virus
    E. Free-living

18. Which group of microorganisms is composed only of hereditary material wrapped in a protein covering?

    A. Viruses
    B. Bacteria
    C. Parasites
    D. Fungi
    E. Yeasts

19. The Dutch merchant who made and used quality magnifying lenses to see and record microorganisms was
    A. Francesco Redi
    B. Antonie van Leeuwenhoek
    C. Louis Pasteur
    D. Joseph Lister
    E. Robert Koch

20. Which of the following is not a process in the scientific method?
    A. Belief in a preconceived idea
    B. Formulate a hypothesis
    C. Systematic observation
    D. Laboratory experimentation
    E. Development of a theory

21. Experimentation
    A. Is designed to refute an hypothesis
    B. Is designed to support an hypothesis
    C. Provides a means to gather subjective data
    D. Provides a means to gather objective data
    E. Is the first step in the scientific method

22. A scientist that constructs a hypothesis and then tests its validity by outlining predicted events of the hypothesis followed by experiments to test for those events is using the _____ approach.
    A. Koch
    B. Scientific method
    C. Spontaneous generation
    D. Taxonomic
    E. None of the choices is correct

23. The scientific method includes all of the following except
    A. Hypothesis
    B. Experimentation
    C. Observation
    D. Control group
    E. Theory

24. Koch's postulates are criteria used to establish that
    A. Microbes are found on dust particles
    B. A specific microbe is the cause of a specific disease
    C. Life forms can only arise from preexisting life forms
    D. A specific microbe should be classified in a specific kingdom
    E. Microbes can be used to clean up toxic spills

25. The surgeon who advocated using disinfectants on hands and in the air prior to surgery was
    A. Joseph Lister
    B. Ignaz Semmelweis
    C. Robert Koch
    D. Louis Pasteur
    E. Antonie van Leeuwenhoek

26. Sterile refers to
    A. Pathogen free
    B. Absence of spores
    C. Absence of any life forms and viral particles
    D. Pasteurized
    E. Homogenized

27. Which scientist showed that anthrax was caused by the bacterium, Bacillus anthracis?
    A. Joseph Lister
    B. Ignaz Semmelweis
    C. Robert Koch
    D. Louis Pasteur
    E. Antonie van Leeuwenhoek

28. Taxonomy does not involve
    A. Nomenclature
    B. Classification
    C. Taxa
    D. Identification
    E. Common name

29. Which scientific field is involved in the identification, classification and naming of organisms?
    A. Nomenclature
    B. Taxonomy
    C. Phylogeny
    D. Woesean classification
    E. None of the choices is correct

30. The orderly arrangement of organisms into a hierarchy of taxa is called
    A. Classification
    B. Identification
    C. Nomenclature
    D. Experimentation
    E. Biotechnology

31. Which of the following is a taxon that contains all the other taxa listed?
    A. Species
    B. Phylum
    C. Kingdom
    D. Genus
    E. Family

32. The smallest and most significant taxon is
    A. Genus
    B. Species
    C. Kingdom
    D. Family
    E. Phylum

33. Select the correct descending taxonomic hierarchy (left to right).
    A. Family, order, class
    B. Family, genus, species
    C. Genus, species, family
    D. Class, phylum, order
    E. Kingdom, domain, phylum

34. Which of the following is a scientific name?
    A. Gram positive streptococcus
    B. Staphlococcus
    C. Streptococcus pyogenes
    D. Anthrax
    E. Streptobacilli

35. When assigning a scientific name to an organism,
    A. The species name is capitalized
    B. The species name is placed first
    C. The species name can be abbreviated
    D. Both genus and species names are capitalized
    E. Both genus and species names are italicized or underlined

36. The study of evolutionary relationships among organisms is called
    A. Biotechnology
    B. Genetics
    C. Recombinant DNA
    D. Phylogeny
    E. Taxonomy

37. Which area of biology states that living things undergo gradual structural and functional changes over long periods of time?
    A. Morphology
    B. Phylogeny
    C. Evolution
    D. Genetics
    E. None of the choices is correct

38. A scientist studying the sequence of nucleotides in the rRNA of a bacterial species is working on
    A. Determining evolutionary relatedness
    B. Bioremediation
    C. Recombinant DNA
    D. Nomenclature
    E. Determining if that species is the cause of a new disease

39. The scientist/s that proposed that organisms be assigned to one of 3 domains is/are
    A. Robert Koch and Louis Pasteur
    B. Antonie van Leeuwenhoek
    C. Carl Woese and George Fox
    D. Robert Whittaker
    E. Francesco Redi

40. In Whittaker's system, the protozoa and algae are classified in the kingdom
    A. Monera
    B. Protist
    C. Fungi
    D. Plant
    E. Animal

41. Which kingdom does not contain any eukaryotes?
    A. Monera
    B. Protist
    C. Fungi
    D. Plant
    E. Animal

42. Who developed the first rabies vaccine in 1885?
    A. Pasteur
    B. Lister
    C. Leeuwenhoek
    D. Redi

43. Which scientific name is written correctly?
    A. Staphylococcus aureus
    B. staphylococcus aureus
    C. Staphylococcus Aureus
    D. Staphylococcus aureus

44. Traditional approaches to taxonomy involved observation of visible morphological characteristics. Today, however, new molecular methods include the examination of:
    A. DNA
    B. rRNA
    C. proteins
    D. All of these

45. A scientist studying helminths is working with bacteria.
    True False

46. Members of the kingdom Fungi are photosynthetic.
    True False

47. The fossil record has established that prokaryotes existed on earth for approximately 2 billion years before eukaryotes appeared.
    True False

48. Many chronic conditions are found to be associated with microbial agents.
    True False

49. All microorganisms are parasites.
    True False

50. The scientific method involves formulating a tentative explanation, called the hypothesis, to account for what has been observed or measured.
    True False

51. A hypothesis must be tested many times before it can be considered a theory.
    True False

52. The term sterile means free of all life forms.
    True False

53. Members of the same species share many more characteristics compared to those shared by members of the same kingdom.
    True False

54. Once an organism is assigned to a particular taxonomic hierarchy, it is permanent and cannot be revised.
    True False

55. Viruses are not classified in any of Whittaker's 5 kingdoms.
    True False

56. The names of the three proposed Domains are: Bacteria, Protista, Eukarya.
    True False

57. One distinguishing characteristic of the archaebacteria is that they live in extreme environments.
    True False

58. Microbes have been found existing in salty, acidic lakes.
    True False

59. Researchers are trying to show if microbes can live in Antarctica glaciers perhaps they can live on planets with similar conditions.
    True False

1 Key

1. When humans manipulate the genes of microorganisms the process is called
   A. Bioremediation
   B. Genetic engineering
   C. Epidemiology
   D. Immunology
   E. Taxonomy

Cowan - Chapter 01 #1
Learning Objective: 1.02 Identify multiple types of professions using microbiology.

2. Which of the following is not considered a microorganism?
   A. Mosquito
   B. Protozoa
   C. Bacteria
   D. Viruses
   E. Fungi

Cowan - Chapter 01 #2
Learning Objective: 1.01 List the various types of microorganisms.

3. All microorganisms are best defined as organisms that
   A. Cause human disease
   B. Lack a cell nucleus
   C. Are infectious particles
   D. Are too small to be seen with the unaided eye
   E. Can only be found growing in laboratories

Cowan - Chapter 01 #3
Learning Objective: 1.01 List the various types of microorganisms.

4. Which activity is an example of biotechnology?
   A. Bacteria in the soil secreting an antibiotic to kill competitors
   B. A microbiologist using the microscope to study bacteria
   C. Egyptians using moldy bread on wounds
   D. Eschericia coli producing human insulin
   E. Public health officials monitoring diseases in a community

Cowan - Chapter 01 #4
Learning Objective: 1.01 List the various types of microorganisms.
Learning Objective: 1.02 Identify multiple types of professions using microbiology.
Learning Objective: 1.03 Describe the role and impact of microbes on the earth.
Learning Objective: 1.05 Explain the ways that humans manipulate organisms for their own uses.

5. Living things ordinarily too small to be seen with the unaided eye are termed
   A. Bacteria
   B. Viruses
   C. Parasites
   D. Microorganisms
   E. None of the choices is correct

Cowan - Chapter 01 #5
Learning Objective: 1.01 List the various types of microorganisms.
Learning Objective: 1.09 Compare and contrast the relative sizes of the different microbes.

6. The study of the immune response to infection caused by microorganisms is
   A. Hypersensitivity
   B. Epidemiology
   C. Immunology
   D. Morbidity
   E. Geomicrobiology

Cowan - Chapter 01 #6
Learning Objective: 1.02 Identify multiple types of professions using microbiology.

7. Which of the following does not indicate microbe involvement in energy and nutrient flow?
A. Formation of oxygen by an oxygenic photosynthesis
B. Formation of greenhouse gases
C. Formation of soil
D. Digestion of complex carbohydrates in animal diets
E. Decomposition of dead matter and wastes

Cowan - Chapter 01 #7
Learning Objective: 1.01 List the various types of microorganisms.

8. The microorganisms that recycle nutrients by breaking down dead matter and wastes are called
A. Decomposers
B. Prokaryotes
C. Pathogens
D. Eukaryotes
E. Fermenters

Cowan - Chapter 01 #8
Learning Objective: 1.03 Describe the role and impact of microbes on the earth.

9. The microorganisms that do not have a nucleus in their cells are called
A. Decomposers
B. Prokaryotes
C. Pathogens
D. Eukaryotes
E. Fermenters

Cowan - Chapter 01 #9
Learning Objective: 1.07 Differentiate between prokaryotic and eukaryotic microorganisms.

10. The first prokaryotes appeared about ___ billion years ago.
A. 5
B. 4
C. 3
D. 2
E. 1

Cowan - Chapter 01 #10
Learning Objective: 1.07 Differentiate between prokaryotic and eukaryotic microorganisms.

11. Which of the following is not a human use of microorganisms?
A. Baking bread
B. Treating water and sewage
C. Breaking down chocolate
D. Mass producing antibiotics
E. Cleaning up oil spills

Cowan - Chapter 01 #11
Learning Objective: 1.03 Describe the role and impact of microbes on the earth.

12. Using microbes to detoxify a site contaminated with heavy metals is an example of
A. Biotechnology
B. Bioremediation
C. Decomposition
D. Immunology
E. Epidemiology

Cowan - Chapter 01 #12
Learning Objective: 1.03 Describe the role and impact of microbes on the earth.

13. Disease-causing microorganisms are called
A. Decomposers
B. Prokaryotes
C. Pathogens
D. Eukaryotes
E. Fermenters

Cowan - Chapter 01 #13
Learning Objective: 1.06 Summarize the relative burden of human disease caused by microbes.

14. The number one worldwide infectious diseases are
A. AIDS related diseases
B. Diarrhea diseases
C. Malaria diseases
D. Measles
E. Respiratory diseases

Cowan - Chapter 01 #14
Learning Objective: 1.06 Summarize the relative burden of human disease caused by microbes.

15. Which of the following is a unique characteristic of viruses that distinguishes them from the other major groups of microorganisms?
A. Cause human disease
B. Lack a nucleus
C. Cannot be seen without a microscope
D. Contain genetic material
E. Lack cell structure

Cowan - Chapter 01 #15
Learning Objective: 1.08 Identify a 3rd type of microorganism.

16. Helminths are
A. Bacteria
B. Protozoa
C. Molds
D. Parasitic worms
E. Infectious particles

Cowan - Chapter 01 #16
Learning Objective: 1.01 List the various types of microorganisms.

17. Organisms called parasites are
A. Always classified in the kingdom Monera
B. Always harmful to their host
C. The decomposers in ecosystems
D. Always a virus
E. Free-living

Cowan - Chapter 01 #17
Learning Objective: 1.01 List the various types of microorganisms.

18. Which group of microorganisms is composed only of hereditary material wrapped in a protein covering?
A. Viruses
B. Bacteria
C. Parasites
D. Fungi
E. Yeasts

Cowan - Chapter 01 #18
Learning Objective: 1.01 List the various types of microorganisms.
Learning Objective: 1.08 Identify a 3rd type of microorganism.

19. The Dutch merchant who made and used quality magnifying lenses to see and record microorganisms was
A. Francesco Redi
B. Antonie van Leeuwenhoek
C. Louis Pasteur
D. Joseph Lister
E. Robert Koch

Cowan - Chapter 01 #19
Learning Objective: 1.10 Make a timeline of the development of microbiology from the 1600s to today.

20. Which of the following is not a process in the scientific method?
A. Belief in a preconceived idea
B. Formulate a hypothesis
C. Systematic observation
D. Laboratory experimentation
E. Development of a theory

Cowan - Chapter 01 #20
Learning Objective: 1.12 Explain what is important about the scientific method.

21. Experimentation
A. Is designed to refute an hypothesis
B. Is designed to support an hypothesis
C. Provides a means to gather subjective data
D. Provides a means to gather objective data
E. Is the first step in the scientific method

Cowan - Chapter 01 #21
Learning Objective: 1.12 Explain what is important about the scientific method.

22. A scientist that constructs a hypothesis and then tests its validity by outlining predicted events of the hypothesis followed by experiments to test for those events is using the _____ approach.
A. Koch
B. Scientific method
C. Spontaneous generation
D. Taxonomic
E. None of the choices is correct

Cowan - Chapter 01 #22
Learning Objective: 1.12 Explain what is important about the scientific method.

23. The scientific method includes all of the following except
A. Hypothesis
B. Experimentation
C. Observation
D. Control group
E. Theory

Cowan - Chapter 01 #23
Learning Objective: 1.12 Explain what is important about the scientific method.

24. Koch's postulates are criteria used to establish that
A. Microbes are found on dust particles
B. A specific microbe is the cause of a specific disease
C. Life forms can only arise from preexisting life forms
D. A specific microbe should be classified in a specific kingdom
E. Microbes can be used to clean up toxic spills

Cowan - Chapter 01 #24
Learning Objective: none

25. The surgeon who advocated using disinfectants on hands and in the air prior to surgery was
A. Joseph Lister
B. Ignaz Semmelweis
C. Robert Koch
D. Louis Pasteur
E. Antonie van Leeuwenhoek

Cowan - Chapter 01 #25
Learning Objective: 1.10 Make a timeline of the development of microbiology from the 1600s to today.

26. Sterile refers to
A. Pathogen free
B. Absence of spores
C. Absence of any life forms and viral particles
D. Pasteurized
E. Homogenized

Cowan - Chapter 01 #26
Learning Objective: 1.03 Describe the role and impact of microbes on the earth.
Learning Objective: 1.10 Make a timeline of the development of microbiology from the 1600s to today.
Learning Objective: 1.12 Explain what is important about the scientific method.

27. Which scientist showed that anthrax was caused by the bacterium, Bacillus anthracis?
A. Joseph Lister
B. Ignaz Semmelweis
C. Robert Koch
D. Louis Pasteur
E. Antonie van Leeuwenhoek

Cowan - Chapter 01 #27
Learning Objective: 1.10 Make a timeline of the development of microbiology from the 1600s to today.

28. Taxonomy does not involve
A. Nomenclature
B. Classification
C. Taxa
D. Identification
E. Common name

Cowan - Chapter 01 #28
Learning Objective: 1.13 Differentiate between the terms nomenclature
Learning Objective: taxonomy and classification.

29. Which scientific field is involved in the identification, classification and naming of organisms?
A. Nomenclature
B. Taxonomy
C. Phylogeny
D. Woesean classification
E. None of the choices is correct

Cowan - Chapter 01 #29
Learning Objective: 1.13 Differentiate between the terms nomenclature
Learning Objective: taxonomy and classification.

30. The orderly arrangement of organisms into a hierarchy of taxa is called
A. Classification
B. Identification
C. Nomenclature
D. Experimentation
E. Biotechnology

Cowan - Chapter 01 #30
Learning Objective: 1.13 Differentiate between the terms nomenclature
Learning Objective: taxonomy and classification.

31. Which of the following is a taxon that contains all the other taxa listed?
A. Species
B. Phylum
C. Kingdom
D. Genus
E. Family

Cowan - Chapter 01 #31
Learning Objective: 1.13 Differentiate between the terms nomenclature
Learning Objective: taxonomy and classification.

32. The smallest and most significant taxon is
A. Genus
B. Species
C. Kingdom
D. Family
E. Phylum

Cowan - Chapter 01 #32
Learning Objective: 1.13 Differentiate between the terms nomenclature
Learning Objective: taxonomy and classification.

33. Select the correct descending taxonomic hierarchy (left to right).
A. Family, order, class
B. Family, genus, species
C. Genus, species, family
D. Class, phylum, order
E. Kingdom, domain, phylum

Cowan - Chapter 01 #33
Learning Objective: 1.13 Differentiate between the terms nomenclature
Learning Objective: 1.14 Create a mnemonic device for remembering the taxonomic categories.
Learning Objective: taxonomy and classification.

34. Which of the following is a scientific name?
A. Gram positive streptococcus
B. Staphlococcus
C. Streptococcus pyogenes
D. Anthrax
E. Streptobacilli

Cowan - Chapter 01 #34
Learning Objective: 1.15 Correctly write the binomial name for a microorganism.

35. When assigning a scientific name to an organism,
A. The species name is capitalized
B. The species name is placed first
C. The species name can be abbreviated
D. Both genus and species names are capitalized
E. Both genus and species names are italicized or underlined

Cowan - Chapter 01 #35
Learning Objective: 1.15 Correctly write the binomial name for a microorganism.

36. The study of evolutionary relationships among organisms is called
A. Biotechnology
B. Genetics
C. Recombinant DNA
D. Phylogeny
E. Taxonomy

Cowan - Chapter 01 #36
Learning Objective: 1.04 Differentiate between evolution and the theory of evolution.

37. Which area of biology states that living things undergo gradual structural and functional changes over long periods of time?
A. Morphology
B. Phylogeny
C. Evolution
D. Genetics
E. None of the choices is correct

Cowan - Chapter 01 #37
Learning Objective: 1.04 Differentiate between evolution and the theory of evolution.

38. A scientist studying the sequence of nucleotides in the rRNA of a bacterial species is working on
A. Determining evolutionary relatedness
B. Bioremediation
C. Recombinant DNA
D. Nomenclature
E. Determining if that species is the cause of a new disease

Cowan - Chapter 01 #38
Learning Objective: 1.04 Differentiate between evolution and the theory of evolution.

39. The scientist/s that proposed that organisms be assigned to one of 3 domains is/are
A. Robert Koch and Louis Pasteur
B. Antonie van Leeuwenhoek
C. Carl Woese and George Fox
D. Robert Whittaker
E. Francesco Redi

Cowan - Chapter 01 #39
Learning Objective: 1.16 Draw a diagram of the three major domains.

40. In Whittaker's system, the protozoa and algae are classified in the kingdom
A. Monera
B. Protist
C. Fungi
D. Plant
E. Animal

Cowan - Chapter 01 #40
Learning Objective: none

41. Which kingdom does not contain any eukaryotes?
A. Monera
B. Protist
C. Fungi
D. Plant
E. Animal

Cowan - Chapter 01 #41
Learning Objective: none

42. Who developed the first rabies vaccine in 1885?
A. Pasteur
B. Lister
C. Leeuwenhoek
D. Redi

Cowan - Chapter 01 #42
Learning Objective: 1.10 Make a timeline of the development of microbiology from the 1600s to today.

43. Which scientific name is written correctly?
A. Staphylococcus aureus
B. staphylococcus aureus
C. Staphylococcus Aureus
D. Staphylococcus aureus

Cowan - Chapter 01 #43
Learning Objective: 1.15 Correctly write the binomial name for a microorganism.

44. Traditional approaches to taxonomy involved observation of visible morphological characteristics. Today, however, new molecular methods include the examination of:
A. DNA
B. rRNA
C. proteins
D. All of these

Cowan - Chapter 01 #44
Learning Objective: 1.17 Explain the difference between traditional and molecular approaches to taxonomy.

45. A scientist studying helminths is working with bacteria.
FALSE

Cowan - Chapter 01 #45
Learning Objective: 1.01 List the various types of microorganisms.

46. Members of the kingdom Fungi are photosynthetic.
FALSE

Cowan - Chapter 01 #46
Learning Objective: none

47. The fossil record has established that prokaryotes existed on earth for approximately 2 billion years before eukaryotes appeared.
TRUE

Cowan - Chapter 01 #47
Learning Objective: none

48. Many chronic conditions are found to be associated with microbial agents.
TRUE

Cowan - Chapter 01 #48
Learning Objective: 1.03 Describe the role and impact of microbes on earth.

49. All microorganisms are parasites.
FALSE

Cowan - Chapter 01 #49
Learning Objective: 1.01 List the various types of microorganisms.
Learning Objective: 1.03 Describe the role and impact of microbes on the earth.

50. The scientific method involves formulating a tentative explanation, called the hypothesis, to account for what has been observed or measured.
TRUE

Cowan - Chapter 01 #50
Learning Objective: none

51. A hypothesis must be tested many times before it can be considered a theory.
TRUE

Cowan - Chapter 01 #51
Learning Objective: 1.12 Explain what is important about the scientific method.

52. The term sterile means free of all life forms.
TRUE

Cowan - Chapter 01 #52
Learning Objective: 1.12 Explain what is important about the scientific method.
Learning Objective: none

53. Members of the same species share many more characteristics compared to those shared by members of the same kingdom.
TRUE

Cowan - Chapter 01 #53
Learning Objective: 1.13 Differentiate between the terms nomenclature
Learning Objective: 1.14 Create a mnemonic device for remembering the taxonomic categories.
Learning Objective: taxonomy and classification.

54. Once an organism is assigned to a particular taxonomic hierarchy, it is permanent and cannot be revised.
FALSE

Cowan - Chapter 01 #54
Learning Objective: none

55. Viruses are not classified in any of Whittaker's 5 kingdoms.
TRUE

Cowan - Chapter 01 #55
Learning Objective: none

56. The names of the three proposed Domains are: Bacteria, Protista, Eukarya.
FALSE

Cowan - Chapter 01 #56
Learning Objective: 1.16 Draw a diagram of the 3 major domains.

57. One distinguishing characteristic of the archaebacteria is that they live in extreme environments.
TRUE

Cowan - Chapter 01 #57
Learning Objective: none

58. Microbes have been found existing in salty, acidic lakes.
TRUE

Cowan - Chapter 01 #58
Learning Objective: 1.11 List some recent Microbiology discoveries of great impact.

59. Researchers are trying to show if microbes can live in Antarctica glaciers perhaps they can live on planets with similar conditions.
TRUE

Cowan - Chapter 01 #59
Learning Objective: 1.11 List some recent Microbiology discoveries of great impact.

1 Summary

Category	*# of Questions*
Cowan - Chapter 01	59
Learning Objective: 1.01 List the various types of microorganisms.	10
Learning Objective: 1.02 Identify multiple types of professions using microbiology.	3
Learning Objective: 1.03 Describe the role and impact of microbes on earth.	1
Learning Objective: 1.03 Describe the role and impact of microbes on the earth.	6
Learning Objective: 1.04 Differentiate between evolution and the theory of evolution.	3
Learning Objective: 1.05 Explain the ways that humans manipulate organisms for their own uses.	1
Learning Objective: 1.06 Summarize the relative burden of human disease caused by microbes.	2
Learning Objective: 1.07 Differentiate between prokaryotic and eukaryotic microorganisms.	2
Learning Objective: 1.08 Identify a 3rd type of microorganism.	2
Learning Objective: 1.09 Compare and contrast the relative sizes of the different microbes.	1
Learning Objective: 1.10 Make a timeline of the development of microbiology from the 1600s to today.	5
Learning Objective: 1.11 List some recent Microbiology discoveries of great impact.	2
Learning Objective: 1.12 Explain what is important about the scientific method.	7
Learning Objective: 1.13 Differentiate between the terms nomenclature	7
Learning Objective: 1.14 Create a mnemonic device for remembering the taxonomic categories.	2
Learning Objective: 1.15 Correctly write the binomial name for a microorganism.	3
Learning Objective: 1.16 Draw a diagram of the 3 major domains.	1
Learning Objective: 1.16 Draw a diagram of the three major domains.	1
Learning Objective: 1.17 Explain the difference between traditional and molecular approaches to taxonomy.	1
Learning Objective: none	10
Learning Objective: taxonomy and classification.	7