

# Microbiology

## Module Activity Sheet

Name \_\_\_\_\_ Block \_\_\_\_\_

**Enter Date example: Oct. 25**

### **Session # 1**

Module Guide Score = \_\_\_\_\_ / 10 ..... Date Completed \_\_\_\_\_  
Aseptic Technique ..... Date Completed \_\_\_\_\_  
Set Up Cultures ..... Date Completed \_\_\_\_\_  
Assessment Answers Completed in Packet (Pg. 2).. Date Completed \_\_\_\_\_  
Enrichment Menu-Bloop/Critter Cross (10 minutes) Date Completed \_\_\_\_\_

### **Session # 2**

RCA 's Score = \_\_\_\_\_ / 30 ..... Date Completed \_\_\_\_\_  
Microscope Activity ..... Date Completed \_\_\_\_\_  
Assessment Answers Completed in Packet (Pg. 3).. Date Completed \_\_\_\_\_  
Vocabulary Page Completed in Packet (Pg. 5)..... Date Completed \_\_\_\_\_

### **Session # 3**

RCA's Score = \_\_\_\_\_ / 30 ..... Date Completed \_\_\_\_\_  
Bacterial Shapes..... Date Completed \_\_\_\_\_  
Photograph Slides..... Date Completed \_\_\_\_\_  
Technical Writing Page Completed in Packet(Pg. 6) Date Completed \_\_\_\_\_

### **Session # 4**

RCA's Score = \_\_\_\_\_ / 30 ..... Date Completed \_\_\_\_\_  
Helpful Bacteria.... Date Completed \_\_\_\_\_  
Photographic Slides..... Date Completed \_\_\_\_\_  
Career Sheet Page Completed in Packet (Pg. 7)..... Date Completed \_\_\_\_\_

### **Session # 5**

RCA's Score = \_\_\_\_\_ / 30 ..... Date Completed \_\_\_\_\_  
Protists ..... Date Completed \_\_\_\_\_  
Photographic Slides..... Date Completed \_\_\_\_\_  
Word Search Page Completed in Packet (Pg. 8)..... Date Completed \_\_\_\_\_

### **Session # 6**

Test Review "Game"..... Date Completed \_\_\_\_\_  
Videotape Live Protists..... Date Completed \_\_\_\_\_  
Test Review Page Completed in Packet (Pg. 10)..... Date Completed \_\_\_\_\_

### **Session # 7**

Post Test Score = \_\_\_\_\_ / 100 % ... Date Completed \_\_\_\_\_  
Microbial Diversity..... Date Completed \_\_\_\_\_  
Micro. Diversity Worksheet completed (Pg. 9)..... Date Completed \_\_\_\_\_  
View Cultures ..... Date Completed \_\_\_\_\_  
Assessment Answers Completed in Packet (Pg. 4)... Date Completed \_\_\_\_\_  
I Have Inspected My Packet – It is Complete..... Date Completed \_\_\_\_\_

# Microbiology

## Assessment Worksheet Session 1

Instructions: On the session day indicated above, please write the answers to the assessment questions.

**If you need more room to write a response – use the back of this page.**

### Session 1 – Aseptic Techniques

1. **Describe** what is meant by Aseptic Lab Technique. (**Short Statement**)
  - A.
  - B.
2. **List** two of safety rules from today's lab.
  - A.
  - B.
3. **Explain** how to inoculate culture plates with water.
4. **Explain one** event from the modern-day history of the classification system.



# Microbiology

## Assessment Worksheet Session 7

Instructions: On the session day indicated above, please write the answers to the assessment questions.

**If you need more room to write a response – use the back of this page.**

### Session 7 - Microbial Diversity

1. **Describe how** fungi and fungus-like protists are similar?
2. **Describe how** fungi and fungus-like protists are different?
3. **Explain how** fungi and fungus-like protists reproduce?
4. **Explain** the types of organisms **most** fungi or fungus-like protists attack.

# Microbiology Vocabulary Worksheet

Please write a definition for each vocabulary term.

1. Algae-

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2. Bacteria-

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3. Botulism-

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4. Cilia-

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5. Flagella-

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6. Fungi-

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7. Fungus-

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8. Host-

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9. Moneran-

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10. Nucleus-

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11. Parasite-

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12. Protist-

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13. Protozoan-

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14. Pseudopods-

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15. Virus-

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# Technical Writing

1. Locate the book *"The Way Things Work"* and select any topic of interest to you. Read the section you selected. In the provided space below, describe / summarize what you have learned about your selected topic in complete sentences. If your writing does not fill the entire section, select a second topic to complete your writing assignment.

**\*\* To get full credit your writing should fill all the lines \*\***

Topic Title \_\_\_\_\_ Page # \_\_\_\_\_

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2. Now, select another section of this book or any other book at your module. Read a section of interest to you. In the provided space below, describe / summarize what you have read about your selected topic in complete sentences. If your writing does not fill the entire section below, select a second topic to complete your writing assignment.

**\*\* To get full credit your writing should fill all the lines \*\***

Book Name / Topic Title \_\_\_\_\_ Page # \_\_\_\_\_

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## Microbiology Career Investigation

From the *Occupational Outlook Handbook* –Look up the career that is assigned to your module topic. Using the information in the book answer the following question about the assigned career. The career for your module is:

### **Biological Scientists and is on Page 151**

1. **Nature of the work** (What does the occupation do?):
  - A.
  - B.
2. **Working conditions** (Ex. inside / outside, clean / dirty, safe / hazardous etc.):
3. **Training or education needed, other qualifications required, and possible advancements / promotions:**
4. **Job Outlook** (In the future, what is the demand / forecast for this job):
5. **Earnings** (What is the average salary / income for this career):
6. **Related occupations** (What other occupations are part of the selected topic):
  - A.
  - B.
7. **Sources of additional information** (Sites, agencies or references to provide more information on your selected occupation):
  - A.
  - B.

## Microbiology Module WordSearch

A H Y G D V W B C A B G Q I U Y K A E Y  
 A P C B B R R X T D L Z J O L B N E T J  
 B F I P A T M X G D N L F C M Y R T I N  
 P A N L H S H B T I R T E N Z J Y F S F  
 C S G K T N K E B Y U I J G L B I E A U  
 W A E K U P H A I S C K Q G A M T K R N  
 E R B U K G C M S I L U T O B L T P A G  
 D T X Y D T K P V I B I J K X V F R P U  
 A P J Q E O Z V O P X F N D N F D O C S  
 X R R R C I P E A U H A L Z X N L T N B  
 Q L I O S E P O X G R U D B S D L O Q U  
 T A C E T Y E I D E N U C L E U S Z I F  
 D J Q T G I M H N S F R D X A R U O J X  
 E T S I K U S O Z V P O D H Q D R A J D  
 C O K Z C B M T G P E C F K Q E I N X V  
 H D S G E K I G B Y W X B Y U P V B B K  
 A D Y O G M D G M I F L P I L J B L W D  
 C O D A I L I C N Q U W Z V F X G F O P  
 I V R X S B X J Z U J B F X L P L V H J  
 G I I D W B M R K A F Z D D T F L W E N

**Find the following hidden words:**

**algae, bacteria, botulism, cilia, flagella, fungi, fungus, host, moneran, nucleus,  
parasite, protist, protozoan, pseudopods, virus**



# Microbial Diversity

## Worksheet

### A. Number of Microbial Colonies

| Sample Area | Total Number of Colonies | Total Number of Mold Colonies |
|-------------|--------------------------|-------------------------------|
| 1.          |                          |                               |
| 2.          |                          |                               |
| 3.          |                          |                               |
| 4.          |                          |                               |

### B. Number of Bacterial Colonies

Sample Area 1: \_\_\_\_\_ Total Bacterial Colonies: \_\_\_\_\_  
 Total Types of Colonies: \_\_\_\_\_

Sample Area 2: \_\_\_\_\_ Total Bacterial Colonies: \_\_\_\_\_  
 Total Types of Colonies: \_\_\_\_\_

Sample Area 3: \_\_\_\_\_ Total Bacterial Colonies: \_\_\_\_\_  
 Total Types of Colonies: \_\_\_\_\_

Sample Area 4: \_\_\_\_\_ Total Bacterial Colonies: \_\_\_\_\_  
 Total Types of Colonies: \_\_\_\_\_

1. Which sample area grew the most bacterial colonies? \_\_\_\_\_ Which grew the fewest? \_\_\_\_\_

2. Compare the colonies grown from body areas with those grown from the environment. Is there a difference in number or type of colonies? If so, what might cause the difference?

# Microbiology

## Test Review

**Circle the correct answers while playing the Review Game at the beginning of Session # 6.**

1. The deadly disease, malaria, is carried by a protist found in the gut of what organism?
  - A. termite
  - B. mosquito
  - C. horse fly
  - D. flea
2. Which of the following statements best defines symbiosis?
  - A. two organisms of the same species that coexist
  - B. two organisms that exists in the same community, but do not interact
  - C. two organisms of different species that coexist
  - D. two organisms of different species that feed upon one another
3. Of the four forms of motility listed, which one does a Euglena use?
  - A. flagellum
  - B. cilia
  - C. pseudopod
  - D. gliding
4. Which group of organisms are prokaryotes?
  - A. animals
  - B. protists
  - C. monerans
  - D. fungi
5. What term is defined as a group of bacteria that started with one bacterium?
  - A. colony
  - B. bunch
  - C. cluster
  - D. plague
6. What is a binomial nomenclature?
  - A. a three-step program to develop a new species
  - B. a two-part naming system used by scientists
  - C. a two-part elimination system for molds
  - D. a three-step process for classifying protozoa
7. What is the basic structure of the flagella that some protists use for movement?
  - A. tiny and hair-like
  - B. extensions of cytoplasm
  - C. long and whip-like
  - D. hard and jointed
8. What are protozoa?
  - A. multicelled organisms with flagella
  - B. multicelled organisms with chlorophyll
  - C. single-celled organisms with animal-like characteristics
  - D. single-celled organisms without a nucleus
9. An organism is multicellular and eukaryotic, and feeds by secreting digestive juices outside its body. It belongs to which kingdom?
  - A. Monera
  - B. Protista
  - C. Fungi
  - D. Plantae
10. Which of the following organisms is a producer?
  - A. cactus
  - B. worm
  - C. diatom
  - D. fungus