**Fungi Classification**

**I. Kingdom Characteristics**

 **1. Circle the letter of the sentence that is true about fungi.**

 a. Fungi are heterotrophic organisms lacking chlorophyll.

 b. They are made of long, slender filamentous bodies.

 c. Cell walls are made of cellulose.

 d. Some fungi are parasitic.

 **2. Differentiate between hyphae and mycelium.**

 Hyphae : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Mycelium : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **3.**  **What reproductive structure do fungi produce?** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**II. *Phylum Deuteromycota*** *(“Imperfect Fungi”)*

 **1. Fungi capable of asexual reproduction only are called** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 **2. List the commercially-used product of each fungus.**

 *Penicillium* *roqueforti* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Aspergillus* *niger* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Aspergillus* *terreus* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**III. *Phylum Zygomycota*** *(“Common Molds”)*

 **1. What are zygomycetes?**

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **2. Match the terms with the correct definitions.**

 1. \_\_\_\_\_\_\_\_ *Sporangia* A. Specialized hyphae; Look like stalks

 2. \_\_\_\_\_\_\_\_ *Sporangiophore* B. Root-like hyphae that anchor fungi

 3. \_\_\_\_\_\_\_\_ Stolons C. Spore producing structures in fungi

 4. \_\_\_\_\_\_\_\_ Rhizoids D. Mycelia that grow along the surface

 **3. List four uses of the *Rhizopus* fungus.**

 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **4. What is the common name for *Rhizopus stolonifer*?** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**IV. *Phylum Ascomycota*** *(“Sac Fungi”)*

 **1. Define the term ascus.**

 Ascus –

 **2. Ascomycetes make up the largest phylum in the Kingdom Fungi.**

 Circle One : True False

 **3. Identify the product or disease caused the following ascomycete fungi.**

 Product Disease

 *Aspergillus oryzae* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Aspergillus flavus* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Morchella esculenta* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Candida albicans* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Neurospora cressa* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Cryphonectria parasitica* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Penicillium* *chrysogenum* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Microsporum audounii* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Saccharomyces cerevisiae* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Ophiostoma ulmi* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Tuber melanosporum* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**V. *Phylum Basidiomycota*** *(“Club Fungi”)*

 **1. Define the term basidium.**

 Basidium –

 **2. Asexual reproduction is uncommon among basidiomycetes.**

 Circle One : True False

 **3. Identify the use, product, or disease of the following basidiomycetes.**

 *Amanita muscaria*: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Armillaria bulbosa* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Boletus edulis* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Calvatia gigante* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Fomes fomentarius* :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Phallus impudicus* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Puccinia graminis* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Ustilago maydis* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_