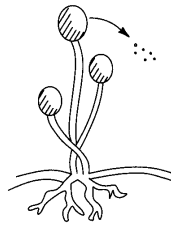


Background Information

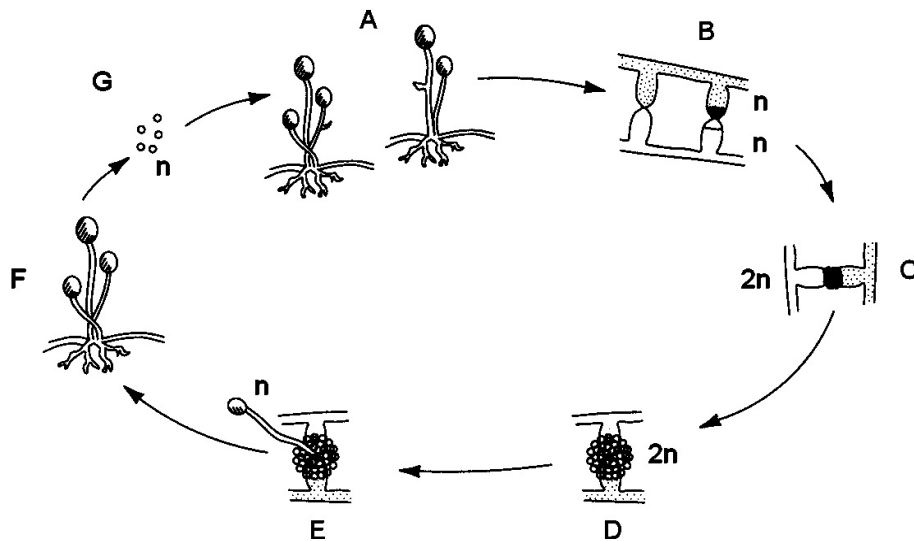
Forms of fungi can be seen almost everywhere out of doors. Some fungi are very small, and others are very large. But size cannot be used to identify a fungus. Fungi can be identified only by their reproductive structures, or fruiting bodies. The fruiting bodies of fungi are formed during the reproductive cycle of the organism. The fruiting bodies of fungi have characteristics that are specific to each species. These traits include shape, color, width, and height.

1. Label the diagram below of the mold *Rhizopus stolonifer* using the following terms: sporangiophore, stolon, rhizoid, sporangium, spores.



2. Briefly describe each structure.

The sexual reproductive process of *Rhizopus* is illustrated in the diagram below. Use this information to answer the questions that follow. The letters n and 2n represent haploid and diploid nuclei respectively.



3. Which stage represents haploid nuclei that function as gametes?
4. Which stage illustrates the diploid nucleus formed by the fusion of gametes?
5. Which structure produces haploid spores?
6. Between which two stages does meiosis occur?

7. Which stage shows the formation of a zygospore?
8. Which stage shows germination of a zygospore?
9. *Rhizopus* reproduces both sexually and asexually. Of what adaptive value to the fungus is each reproductive process?

Scientists who study fungi must keep accurate records of their field observations. Later, they can analyze this information and identify each organism. One way to analyze such data is to graph it for comparison. A comparison is useful to a biologist who wants to know how fungi are different from one another. A bar graph is a good way to compare these data.

The table below shows the average height of the fruiting bodies of ten species of fungi. Use this data to construct a bar graph.

Specimen	Species	Common Name	Height of Fruiting Body (centimeters)
1	<i>A. aurantia</i>	Orange-peel fungus	12
2	<i>C. argillacea</i>	Moor-club fungus	6
3	<i>L. lubrica</i>	Jellybaby	6
4	<i>C. uermicularis</i>	Field fungus	10
5	<i>P. uesiculosa</i>	Early-cup fungus	7
6	<i>X. hypoxylon</i>	Candle-snuff fungus	8
7	<i>L. molle</i>	-	5
8	<i>M. caninus</i>	Smaller-dog stinkhorn	2
9	<i>C. visocosa</i>	Stag's horn fungus	8
10	<i>R. flava</i>	Yellow-coral fungus	3

Bar Graph

