NAME: UBONGABASI EFIOK AKPAN

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ANSWERS

1. IMPORTANCE OF FUNGI TO MAN

Fungi are important to everyday human life. Fungi are important decomposers in most ecosystems. Mycorrhizal fungi are essential for the growth of most plants. Fungi, as food, play a role in human nutrition in the form of mushrooms, and also as agents of fermentation in the production of bread, cheeses, alcoholic beverages, and numerous other food preparations. Secondary metabolites of fungi are used as medicines, such as antibiotics and anticoagulants. Fungi are model organisms for the study of eukaryotic genetics and metabolism.

1. WELL LABELLED DIAGRAM OF A YEAST
2. Sexual reproduction, an important source of genetic variability, allows the fungus to adapt to new [environments](https://www.merriam-webster.com/dictionary/environments). The process of sexual reproduction among the fungi is in many ways unique. Whereas [nuclear](https://www.britannica.com/science/nuclear-envelope) division in other [eukaryotes](https://www.britannica.com/science/eukaryote), such as animals, plants, and protists, involves the dissolution and re-formation of the nuclear membrane, in fungi the nuclear membrane remains intact throughout the process, although gaps in its [integrity](https://www.merriam-webster.com/dictionary/integrity) are found in some species. The [nucleus](https://www.britannica.com/science/nucleus-biology) of the fungus becomes pinched at its midpoint, and the [diploid](https://www.britannica.com/science/diploidy) [chromosomes](https://www.britannica.com/science/chromosome) are pulled apart by spindle fibres formed within the intact nucleus. The [nucleolus](https://www.britannica.com/science/nucleolus) is usually also retained and divided between the daughter cells, although it may be expelled from the nucleus, or it may be dispersed within the nucleus but detectable.
3. Two adaptations made **the** move from water to land possible **for Bryophytes**: **a** waxy cuticle and gametangia. **The** waxy cuticle helped to protect **the** plants tissue from drying out and **the** gametangia provided further protection against drying out specifically **for the** plants gametes.
4. EUSTELES: a stele typical of dicotyledonous plants that consists of vascular bundles of xylem and phloem strands with parenchymal cells between the bundles.

ATACTOSTELE: is a type of eustele, found in monocots, in which the vascular tissue in the stem exists as scattered bundles. Most seed plant stems possess a vascular arrangement, which has been interpreted as a derived siphonostele and is called as eustele. There is also a variant on the eustele found in monocots, like maize and rye. The variation has numerous scattered bundles in the stem and is called as an atactostele.

SIPHONOSTELE: a type of vascular system consisting of a ring of vascular bundles surrounding central pith.

DICTYOSTELE: a stele in which the vascular cylinder is broken up into a longitudinal series or network of vascular strands around central pith (as in many ferns)