

# Practice Quiz for Lecture 10

## Latin and Greek in Scientific Terminology

### I. TRANSLATE

Provide Latin roots corresponding to the definitions provided, forming a complete English word.

1. 'with', 'together' + 'flock' + 'having', 'having the shape of', 'characterized by having' (3 marks): **con-greg-ate**
2. 'before', 'in front of' + 'back' + 'pertaining to', 'like', 'belonging to', 'having the character of' (3):
3. 'apart', 'in different directions', 'thoroughly' + 'to turn' (2):
4. 'hard' + 'able to be', 'able to', 'tending to' (2):
5. 'to', 'toward', 'near' + 'to stick' + 'person who', 'that which' (3):

### II. INTERPRET

#### *Prefixes*

Identify five Latin prefixes in the following passage and provide their definitions.

1. Rui Castanhinha et al. 2013. 'Bringing Dicynodonts Back to Life: Paleobiology and Anatomy of a New Emydopoid Genus from the Upper Permian of Mozambique.' *PLoS ONE* 8 (12): e80974. doi:10.1371/journal.pone.0080974.

Dicynodonts are an exclusively herbivorous clade of synapsids. They comprise more than 100 species that are known from the Middle Permian the Late Triassic periods Dicynodonts were morphologically disparate and presented a wide range of sizes and putative ecological niches, including semi-aquatic, fossorial, arboreal and grazing. Despite over 150 years of dicynodont research, several paleobiological aspects of the neuroanatomy, inner ear morphology and internal cranium anatomy remain practically obscure. Moreover, because the destructive technique of serial sampling was the primary way to access the internal anatomy of dicynodont skulls, the data available for various taxa was inconsistent and rarely subjected to synthetic treatments. As a result, details of internal skull anatomy have been overlooked in recent phylogenetic analyses. Only

Surkov and Benton included a large number of braincase characters in a phylogenetic analysis of dicynodonts. Recent advances in non-destructive imaging techniques such as high resolution computed tomography, neutron tomography, and synchrotron radiation based micro-computed tomography, hold the potential to provide significant new insight into fossil skull morphology. However, the application of such techniques to dicynodonts has been limited.

1. in: 'into', 'on'
- 2.
- 3.
- 4.
- 5.
- 6.

### Wood Roots

Identify four Latin or Greek word roots in the following passage and provide their definition.

*Note:* The *-ed* suffix is from Old English and does not need to be defined.

1. Xiaoyun Shen, Jinhua Zhang, and Renduo Zhang. 2014. 'Phosphorus Metabolic Disorder of Guizhou Semi-Fine Wool Sheep'. *PLoS ONE* 9 (2): e89472. doi:10.1371/journal.pone.0089472.

The sheep used in these experiments were cared as per outlined in the Guide for the Care and Use of Animals in Agricultural Research and Teaching Consortium [8]. Thirty affected and 30 unaffected sheep were slaughtered with electrical stunning then exsanguination .... The study area was located in a region adjoined by the provinces of Guizhou, Yunnan, and Sichuan (26°56'-27°47' N, 103°56'-104°51' E), with the average elevation 2100 m above the sea level, the annual precipitation 956 mm, and the average atmospheric temperature 9–11°C. The main grassland species include Puccinellia (*Chinam poensis ohuji*), Siberian Nitraria (*Nitraria sibirica pall*), Floriated astragalus (*Astragalus floridus*), Polybranched astragals (*A. polycladus*), Falcate whin (*Oxytropis falcate*), Ewenki automomous banner (*Elymus nutans*), Common leymus (*Leymus secalinus*), and June grass (*Koeleria cristata*). Most of the plants are herbaceous and good resources for grazing animals.

1. ex-sanguin-at-ion: 'removal' + 'blood' + 'having' + 'act of'
- 2.
- 3.
- 4.
- 5.