18. Classification, biodiversity and conservation — Starter Quiz · 课前小测

A-Level Biology Name: _____ Score: _____

1. The biological species concept defines a species as a group whose members:
   - ☐ can breed together to produce fertile offspring
   - ☐ simply look alike
   - ☐ live in the same place
   - ☐ have the same number of cells
2. The smallest, most specific group in the taxonomic hierarchy is the _____.

   _____
3. An ecosystem is:
   - ☐ all the living things in an area together with their non-living surroundings
   - ☐ a single species
   - ☐ only the non-living environment
   - ☐ a type of sampling
4. Which is a cause of extinction?
   - ☐ loss and damage of a species' habitat
   - ☐ higher biodiversity
   - ☐ random sampling
   - ☐ a larger gene pool
5. A group whose members can breed together to produce fertile _____ is a biological species.

   _____
6. Which level is the smallest, most closely related group?
   - ☐ species
   - ☐ kingdom
   - ☐ phylum
   - ☐ class
7. Biodiversity is measured at three levels: ecosystems/habitats, species/abundance, and:
   - ☐ genetic variation within each species
   - ☐ the number of atoms

☐ the temperature

☐ the soil pH

8. Two organisms in the same genus are more closely related than two that only share the same class.

   ☐ True ☐ False

9. Conserving a species in its natural habitat (e.g. a nature reserve) is called _____ conservation.

   _____

10. Random sampling is used so the sample is not biased and fairly represents the whole area.

    ☐ True ☐ False

A-Level Biology

1. **can breed together to produce fertile offspring**

   The biological concept uses interbreeding to produce fertile offspring; other concepts use appearance or ecological role.

2. **species**

   Domain → kingdom → phylum → class → order → family → genus → species.

3. **all the living things in an area together with their non-living surroundings**

   An ecosystem includes the living community and the abiotic surroundings; a niche is a species' role within it.

4. **loss and damage of a species' habitat**

   Habitat loss (plus climate change, competition and hunting) can drive a species extinct.

5. **offspring**

   A mule (horse × donkey) is sterile, so horses and donkeys are different species.

6. **species**

   Species is the most specific level; kingdom is the broadest.

7. **genetic variation within each species**

   The three levels are ecosystem diversity, species diversity (and abundance), and genetic diversity.

8. **True**

   The further down the hierarchy two organisms still match, the more closely related they are.

9. **in situ**

   In situ = in place (the habitat); ex situ = off-site (zoos, seed banks).

10. **True**

    Picking spots by chance (e.g. with coordinates) stops you only choosing the interesting-looking places.