1. A species' **niche** is…

   ☐ its number of offspring

   ☐ its colour

   ☐ its role and the range of resources it uses

   ☐ the exact spot where it sleeps

2. An **r-selected** species tends to…

   ☐ live for centuries

   ☐ produce few offspring with much care

   ☐ never reproduce

   ☐ produce many offspring with little parental care

3. A **survivorship curve** shows…

   ☐ the size of an animal

   ☐ the weather over a year

   ☐ the colour of a species

   ☐ how many of a group survive to each age

4. The **carrying capacity** of an environment is…

   ☐ the largest population it can support long-term

   ☐ the fastest rate a population grows

   ☐ the number of species it holds

   ☐ the total rainfall it receives

5. With **unlimited** resources, a population grows…

   ☐ not at all

   ☐ exponentially, in a J-curve

   ☐ in a straight line

   ☐ downward

6. A narrow base, with few children and many elderly, predicts a _____ population.

   _____

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   _____

8. The time it takes a population to double in size is its _____ time.

   _____

9. In the final stage, both birth and death rates are _____, so the population is roughly stable.

   _____

10. A species with a narrow niche, using very few resources, is a _____.

    _____

1. **its role and the range of resources it uses**

   A **niche** is a species' role – what it eats, where it lives, and the conditions it needs.

2. **produce many offspring with little parental care**

   r-selected species have many offspring quickly and give little care – most young die, but some survive.

3. **how many of a group survive to each age**

   A **survivorship curve** plots how many individuals of a group are still alive at each age.

4. **the largest population it can support long-term**

   The **carrying capacity** (K) is the maximum population an environment can sustain with its resources.

5. **exponentially, in a J-curve**

   With no limits, growth is **exponential** – a J-shaped curve that gets ever steeper.

6. **shrinking**

   Few young people means few future parents, so the population will **shrink**.

7. **shrink**

   Below the replacement level, each generation is smaller, so the population **shrinks**.

8. **doubling**

   Doubling time $\approx 70 \div$ (growth rate in percent) – even a small rate doubles a population over time.

9. **low**

   By **Stage 4**, both rates are low, so a developed country's population is large but stable.

10. **specialist**

    A **specialist** uses a narrow set of resources – like a panda that eats almost only bamboo.

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