**Chapter 5 Summary and Vocabulary**

**(p.118)**

**Key Ideas**

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**Section 1: Populations**

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| http://my.hrw.com/sh2/sh07_10/student/images/common/chevron_bio.gif | Understanding population growth is important because populations of different species interact and affect one another, including human populations. |
| http://my.hrw.com/sh2/sh07_10/student/images/common/chevron_bio.gif | Exponential growth occurs when numbers increase by a certain factor in each successive time period. Logistic growth is population growth that starts with a minimum number of individuals and reaches a maximum depending on the carrying capacity of the habitat. |
| http://my.hrw.com/sh2/sh07_10/student/images/common/chevron_bio.gif | Water, food, predators, and human activity are a few of many factors that affect the size of a population. |
| http://my.hrw.com/sh2/sh07_10/student/images/common/chevron_bio.gif | Better sanitation and hygiene, disease control, and agricultural technology are a few ways that science and technology have decreased the death rate of the human population. |

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| Two macaws |

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| **Population** |  |
| **Carrying capacity** |  |

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**Section 2: Interactions in Communities**

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| http://my.hrw.com/sh2/sh07_10/student/images/common/chevron_bio.gif | Species that involve predator-prey or parasite-host relationships often develop adaptations in response to one another. |
| http://my.hrw.com/sh2/sh07_10/student/images/common/chevron_bio.gif | Mutualism and commensalism are two types of symbiotic relationships in which one or both of the species benefit. |

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| Cleaner shrimp |

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| Predation |  |
| Coevolution |  |
| Parasitism |  |
| Symbiosis |  |
| Mutualism |  |
| Commensalism |  |

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**Section 3: Shaping Communities**

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| http://my.hrw.com/sh2/sh07_10/student/images/common/chevron_bio.gif | A niche includes the role that the organism plays in the community. This role affects the other organisms in the community. |
| http://my.hrw.com/sh2/sh07_10/student/images/common/chevron_bio.gif | Competition for resources between species shapes a species’ fundamental niche. |
| http://my.hrw.com/sh2/sh07_10/student/images/common/chevron_bio.gif | Interactions between organisms and the number of species in an ecosystem add to the stability of an ecosystem. |

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| Otters |

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| Niche |  |
| Fundamental niche |  |
| Realized niche |  |
| Competitive exclusion |  |
| Keystone species |  |