

Chapter 8: Parasitism and Mutualism Skeletal Notes

Requirements for Parasitism:

True Parasites take _____ and _____ from another _____ organism (_____), but do not _____. They typically associate with their host for _____ period of time.

- Requirements for _____ to be considered **parasitism**:
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 - - If it is _____ term then it is most likely an _____, not a true parasite. (Ex: _____, _____)
- Requirements for an _____ to be considered a **parasite**:
 - Parasite must be _____ than the host
 - Can not sustain itself on an animal smaller than it is
 - Highly _____ life to host (_____)
 - Ex:
 - High reproductive rate and high offspring numbers compared to host
- **Kleptoparasitism** is parasitism by _____, and is not considered _____
 - Ex:

Classifications of Parasites:

- Obligate vs facultative:
 - **Obligate:**
 - **Facultative:**
- Specialist vs generalist:
 - **Specialist:**
 - **Generalist:**
- Size:
 - **Microparasites:** Need a _____ to identify. Generally manifest as a _____ and infection is _____ compared to the host's lifespan.
 - Ex:
 - **Macroparasites:** Visible to the _____. Long _____ time and typically don't complete a _____ in the host.
 - Ex:

- Habitat:
 - **Endoparasites:**
 - **Ectoparasites:**
 - There are advantages and disadvantages to each approach:

	Advantages (+):	Disadvantages (-):
Endoparasitism:		
Ectoparasitism:		

Transmission:

- Transmission through different life stages is important in the _____ and _____ of parasites.
 - A parasite may be a _____ in one host species and an _____ in another
- The more _____ a parasite's life cycle, the more likely it is to go _____
 - _____ transmission is safer than _____ transmission for the parasite
- Density and frequency dependence can also play a role in how likely a parasite is to become extinct:
 - Density dependent transmission:
 - Parasite _____ as host populations _____
 - Frequency dependent transmission:
 - May be able to survive a _____ in host populations
 - Ex:

Host Response to Parasitism:

- Parasites can affect their host's _____ to achieve goals like _____:
 - Infected hosts often have _____ for other processes like reproduction, survival, etc.

- This makes it easy for the host to be _____, which may be necessary for the parasite to continue its _____
- Host defenses against _____:
 - Social grooming behaviors (only effective against _____)
 - Internal reactions (_____ and _____) can wall off parasites or help expel them.
 - Parasites are often able to _____ the host's _____ response through deactivating immune cells → effect may be beneficial to both _____ and _____

Mutualism:

Mutualistic relationships are those in which _____ from the interaction.

- Mutualisms involve diverse species interactions and can be involved in the _____.
- _____ are associated with mutualism, especially for endosymbionts
 - Ex: Smaller genome ~ _____ on host
- Defensive mutualism:
 - _____
- Symbiosis is context dependent
 - Ex: _____

Key Takeaways:

Overarching Themes and Unifying Concepts:

- Parasites have often _____ with hosts. Characteristics of parasites usually depend on the _____ of the host _____.
- Parasites are not always bad, hosts can evolve to benefit from parasites.