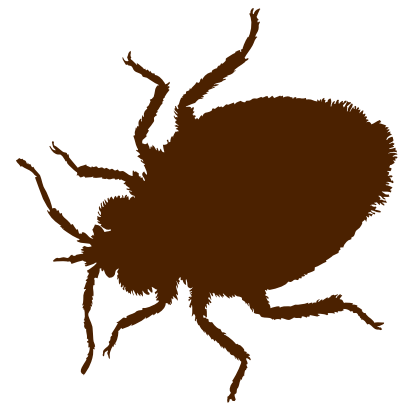


Invasion of the Bloodsuckers

Bedbugs and Beyond!

To Be...or Not to Be...an Insect!



The organisms in this exhibit are all in the **Kingdom Animalia**. Explain the following characteristics of the Kingdom Animalia:

Multicellular _____

Eukaryotic _____

Heterotrophic _____

Motile _____

Kingdoms are divided into **Phyla**. These organisms are in the **Phylum Arthropoda**, which includes the insects, arachnids, and crustaceans. Explain the following characteristics of the Phylum Arthropoda:

Invertebrate _____

Exoskeleton _____

Jointed appendages _____

Phyla are divided into **Classes**. Ticks are in the **Class Arachnida**. Mosquitoes, fleas, bedbugs, and lice are in the **Class Insecta**. Fill in the chart with characteristics for each Class.

	Arachnida	Insecta
Number of Body Segments? (name body segments)		
Type of Eyes? (description)		
Number of Legs?		
Antennae?		
Wings?		
Mouthparts?		
Metamorphosis?		

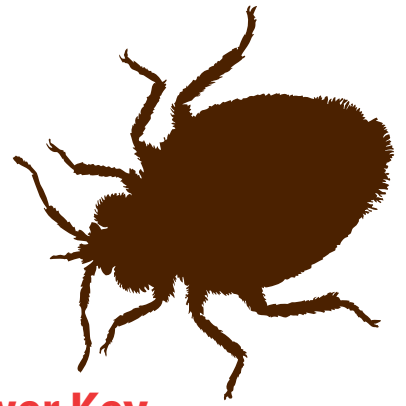
What does **hematophagy** mean? _____

What does it mean to be **host-specific**? _____

What is **biodiversity**? _____

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To Be...or Not to Be...an Insect! — Answer Key

The organisms in this exhibit are all in the **Kingdom Animalia**. Explain the following characteristics of the Kingdom Animalia:

Multicellular - *composed of more than a single cell*

Eukaryotic - *"true nucleus" with membrane-bound organelles and a nuclear membrane*

Heterotrophic - *eat other organisms for nutrition (autotrophic organisms such as plants can make their own food)*

Motile - *ability to move; have moving parts even if body is attached to substrate*

Kingdoms are divided into **Phyla**. These organisms are in the **Phylum Arthropoda**, which includes the insects, arachnids, and crustaceans. Explain the following characteristics of the Phylum Arthropoda:

Invertebrate - *no backbone*

Exoskeleton - *external skeleton*

Jointed appendages - *legs or limbs made of connecting components - allowing more mobility*

Phyla are divided into **Classes**. Ticks are in the **Class Arachnida**. Mosquitoes, fleas, bedbugs, and lice are in the **Class Insecta**. Fill in the chart with characteristics for each Class.

	Arachnida	Insecta
Number of Body Segments? (name body segments)	2 (cephalothorax, abdomen)	3 (head, thorax, abdomen)
Type of Eyes? (description)	Simple (detect light, dark)	Compound (detect color, movement)
Number of Legs?	8	6
Antennae?	No	Yes
Wings?	No	Yes
Mouthparts?	Chelicerae (fangs)	Mandibles
Metamorphosis?	No	Yes

What does **hematophagy** mean? - *The practice of certain animals of feeding on blood.*

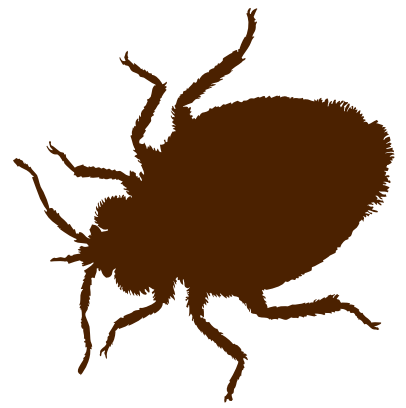
What does it mean to be **host-specific**? - *Only able to live on or in one species of host.*

What is **biodiversity**? - *The variety of life in the world or in a particular habitat or ecosystem.*

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Invasion of the Bloodsuckers

Bedbugs and Beyond!



Invasion of the Bloodsuckers: Bedbugs and Beyond

(Write YES or NO in each box.)

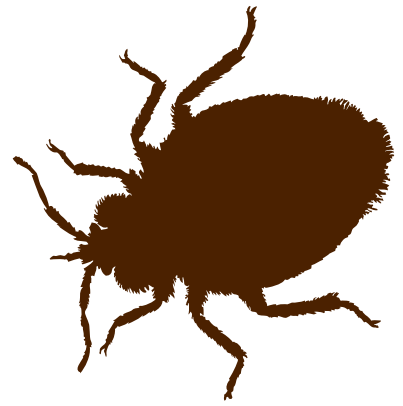
	Insect?	Bite animals?	Bite humans?	Transmit diseases to humans?	Host-specific?
Bedbug					
Flea					
Louse					
Mosquito					SOMETIMES
Tick					

1. Which of these organisms is **NOT** an insect? _____
2. What is it? _____
3. Which of these organisms does **NOT** bite other animals? _____
4. How many organisms bite humans? _____
5. Which organisms **DO NOT** transmit diseases to humans? _____
6. Which organism is **NEVER** host-specific? _____

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Invasion of the Bloodsuckers

Bedbugs and Beyond!



Invasion of the Bloodsuckers: Bedbugs and Beyond —Answer Key

(Write YES or NO in each box.)

	Insect?	Bite animals?	Bite humans?	Transmit diseases to humans?	Host-specific?
Bedbug	YES	YES	YES	NO	YES
Flea	YES	YES	YES	YES	NO
Louse	YES	NO	YES	NO	YES
Mosquito	YES	YES	YES	YES	SOMETIMES
Tick	NO	YES	YES	YES	YES

1. Which of these organisms is **NOT** an insect? TICK
2. What is it? ARACHNID
3. Which of these organisms does **NOT** bite other animals? LOUSE
4. How many organisms bite humans? ALL OF THEM
5. Which organisms **DO NOT** transmit diseases to humans? BEDBUG AND LOUSE
6. Which organism is **NEVER** host-specific? FLEA

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