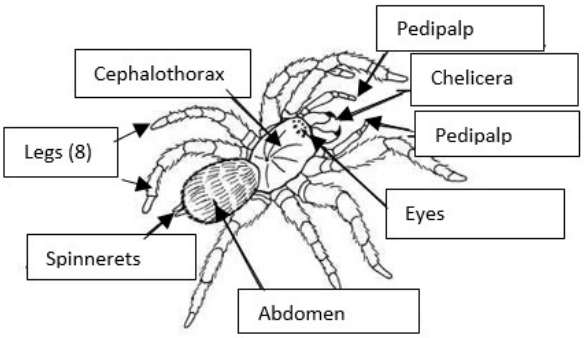
Antelope Island Spider Festival: Spider Facts

What are Spiders?

Arachnids (Class Arachnida)

- 2 body segments, usually 8 legs
- **Chelicera** are mouth parts, located behind th fangs.
- **Other Arachnids:** scorpions, ticks, mites, harvestmen ("daddy long-legs"), solifuges ("camel spiders" or "wind scorpions")



Spiders (Order Araneae)

- All born with **8 legs**, but can be lost or damaged easily, so commonly found with less.
- **Spinnerets** produce silk from glands
  - Up to 8 types: web frame threads, sticky silk for capture, egg sacs, draglines, and more!
- **Pedipalps** are chemosensory (taste/smell) organs, and are the reproductive organs in males.
- **Females** are usually larger than **males**, especially her **abdomen**, which contains the female's reproductive organs.
- Most spiders are **predatory**, though biologists have discovered a few almost completely **herbivorous** species.
- More than **45,000 species** of spiders have been identified.
- There are **over 600 known** species of spiders in Utah.
- A typical spider can eat about **2,000** insects/year.
- Spiders can have from **0-4 pairs of eyes**; the most common being 6 or 8 eyes.

Spiders are NOT:

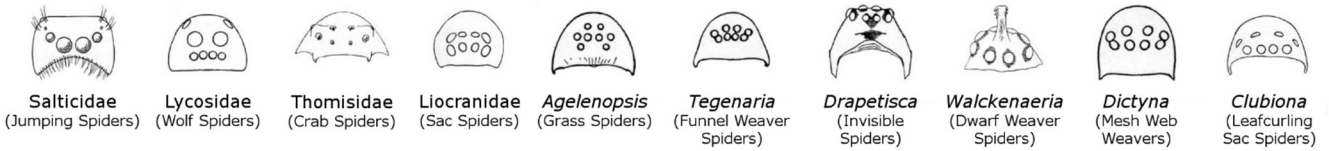
Insects

- 3 body segments, 6 legs
- The mouth parts of insects are **mandibles**.
- Sensory **antennae** on head.
- Often have wings.

Dangerous

- Most spiders are **venomous**. They are not **poisonous**: **venom** is injected while **poison** is applied topically or ingested.
- No spider has been found to be **lethal** to humans in even 10% of **verified bites**.
  - Doctors commonly mis-diagnose unidentified skin lesions as "spider bite".
  - **Verified bites** require the biting spider to be collected and identified by an **arachnologist**.
- Spiders that possess venom that may have severe effects in a significant percentage of humans are considered **medically significant.**
  - The **black widow** is the only medically significant spider in Utah.
  - **Brown recluses** do not occur in Utah.
  - Recent evidence has found that **hobo spiders** are not medically significant.

Easily Identified

- **Color** is one of the **least reliable** characteristic for identification of spiders.
- You **can not** usually identify a spider by "markings", with few exceptions.
  - **Female black widows** don't always have **hourglass** shapes (on underside of abdomen), but no other spider does.
- Spiders are classified into families based on **structure**: eyes, claws, spinneret structure, and arrangement of specialized hairs/spines.
  - Often, **microscopic differences** in reproductive organs differentiate species.

Eye Arrangements of Some 8-eyed North American Spiders