

# Arachnid or Insect?

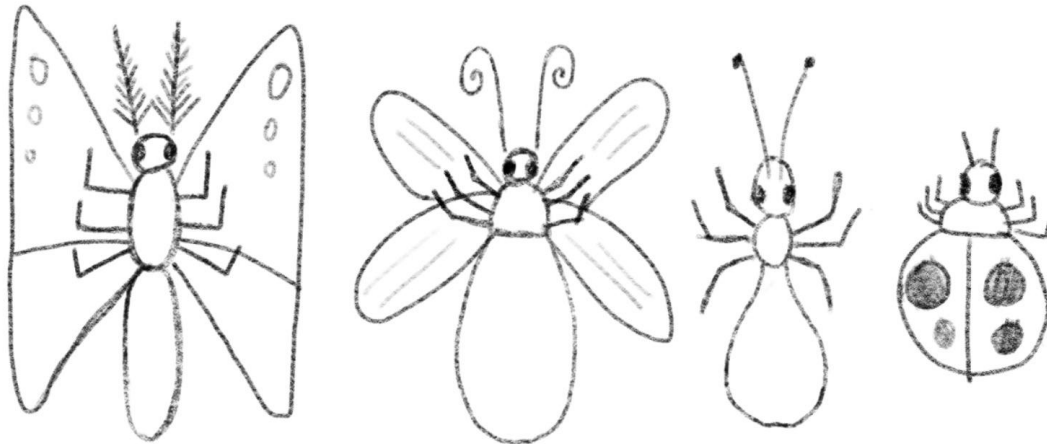
Have you ever seen a spider or a beetle? What about a scorpion? All of these animals are in a special group called arthropods—but some of them are insects, and some are arachnids. Like members of a family, they have some things in common, and some differences. Design and draw your own insect and your own arachnid to observe their similarities and differences.

## Materials

Blank paper  
Pencil, crayons, or colored pencils for drawing

## Directions

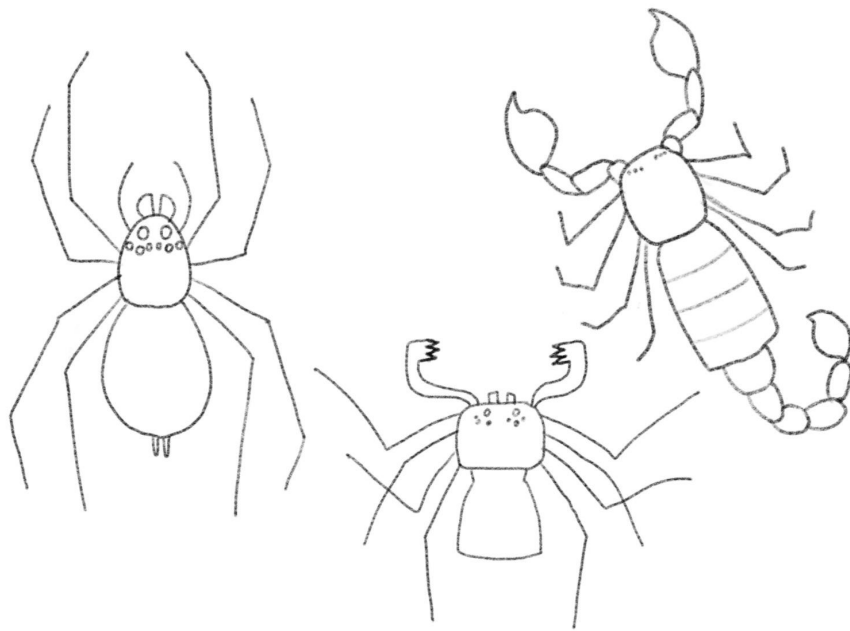
### Draw an Insect



1. **Look** at the insect outlines above or a photo of your favorite insect for inspiration or guidance as you follow along through the different insect body parts to design your own insect.
2. **Draw** 3 connected body parts, similar to the shape of a snowman. You get to choose whether they are like an oval, a circle, or a different shape altogether. These body parts are called the head, the thorax, and the abdomen. Is your insect's body long and slender like a butterfly's, or round like a beetle's?

3. **Add** 2 antennae to the top of your insect's head. These antennae can be plain lines, or you can give them some pizzazz by adding a small circle on top, a swirl shape, or branching fringe.
4. **Add** 2 compound eyes to your insect's head. Compound eyes have many little "faces" and you can show this in your drawing by coloring them in with a criss-cross pattern.
5. **Add** 3 legs to each side of your insect's thorax, (the middle part of its body) for a total of 6 legs! Arthropods have jointed legs, and you can reflect this by drawing sharp corners on any bends in your insect's legs.
6. *Optional: add wings!* Many, but not all, insects have wings. Will your insect have one pair of wings like a fly? Two pairs of fancy patterned wings like a butterfly or moth? Or will your insect have *elytra* –special covers for their wings like a ladybug and its other beetle relatives?
7. *Optional: color* your insect, or add other features that could help your insect survive. For example, a stinger like a bee's or a long proboscis (a mouth part like a straw) for a butterfly or mosquito-like insect.

## Draw an Arachnid



1. **Look** at the arachnid outlines or a photo of your favorite arachnid for inspiration or guidance as you follow along through the different arachnid body parts to design your own arachnid.



2. **Draw** 2 connected body parts for your arachnid. These are called the *cephalothorax* (“cephalo” means head, so the cephalothorax is like a head and upper body combination) and the abdomen. If your arachnid is spider-like, draw a big round abdomen. If it is more like a scorpion, its abdomen might look different!
3. **Add** some mouthparts to the front of your arachnid’s head. This can look like two little bumps on the front of the “face.”
4. **Add** eyes! Most spiders have 8 eyes, but they can have up to 12—or even no eyes at all! Scorpions have between 4 and 12 eyes, always in pairs. These eyes are simple eyes, different from the compound eyes of insects.
5. **Add** *pedipalps* to the front of your arachnid’s cephalothorax. These look almost like short legs for a spider and are often used for the sense of touch. If you are creating a scorpion-like arachnid, pedipalps are shaped like pincers.
6. **Add** walking legs. Draw 4 jointed legs on either side of your arachnid’s cephalothorax. Will your arachnid have slender legs, or thicker legs like a tarantula?
7. *Optional:* **add** 2 spinnerets to the bottom of your arachnid’s abdomen if it can spin webs, or add a scorpion tail with a venomous stinger if your arachnid can sting its prey.
8. *Optional:* **color** your arachnid or draw a background of its habitat, or home. Does your arachnid have any distinctive markings, like a black widow spider’s red hourglass or a peacock spider’s colorful abdomen?