



Arachnid or Insect?

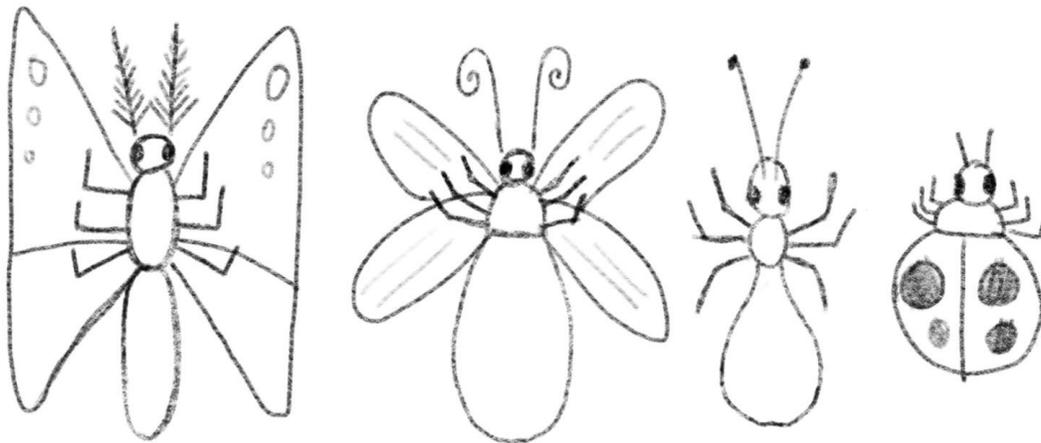
Have you ever seen a spider or a beetle? What about a scorpion? All of these animals are in a special group called arthropods—but some of them are insects, and some are arachnids. Like members of a family, they have some things in common, and some differences. Design and draw your own insect and your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

Materials

Blank paper
Pencil, crayons, or colored pencils for drawing

Directions

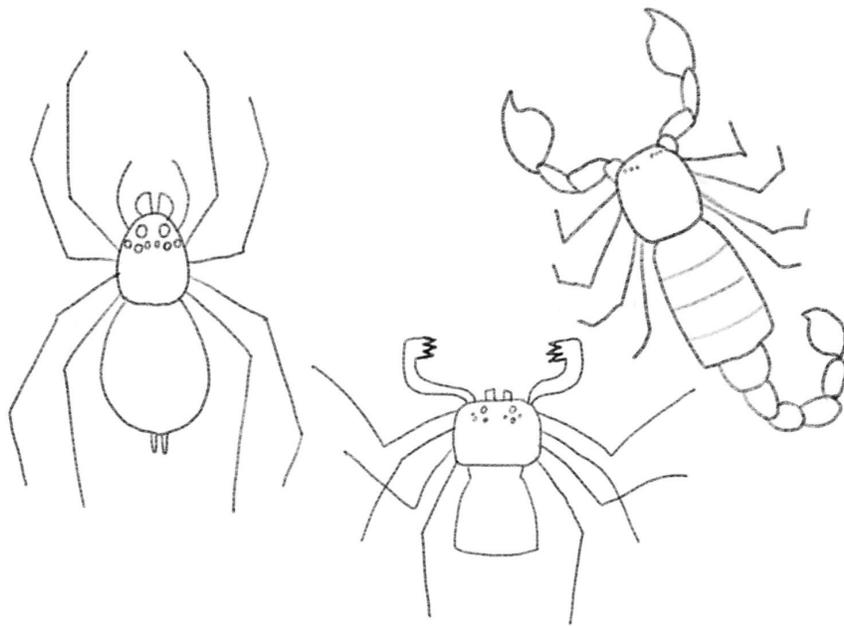
Draw an Insect



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?