

Photo Description



A large spider sits on a person's hand. The spider has long, thin legs with dark stripes and a brown body. You can see the spider's small eyes looking forward. The spider is not moving fast—it is just sitting still on the warm skin.

Scientific Phenomena

Anchoring Phenomenon: Why do spiders sometimes crawl on people, and what are they doing?

Spiders are arthropods (animals with jointed legs and hard outer bodies) that explore their environment to find food, water, or a safe place to rest. The spider in this image is likely investigating the hand as a new surface. Spiders use their legs to sense vibrations and chemicals, which helps them understand their world. They do not bite or hurt people unless they feel scared or trapped—most spiders are shy and prefer to hide.

Core Science Concepts

- * Spiders are living things: Spiders need food, water, air, and shelter to survive, just like all animals do.
- * Spiders have special body parts: Spiders have eight legs (not six like insects), multiple eyes, and fangs they use to catch and eat tiny bugs.
- * Spiders are helpful to people: Spiders eat mosquitoes, flies, and other bugs that might bother us. They are nature's pest control helpers.
- * Spiders live in different places: Some spiders live in gardens, homes, trees, or soil. Different spiders like different homes.

Pedagogical Tip:

For Kindergarteners, use sensory-rich language when discussing spiders: "bumpy skin," "tickly legs," "gentle crawler." Many young children feel scared of spiders, so normalize them by talking about how small and helpful they are. Showing real (or high-quality photo) examples reduces fear and builds curiosity.

UDL Suggestions:

Representation: Provide multiple ways to learn about spiders—real-life observation (in a safe container), photos, videos, and books with illustrations. Some students may be anxious about spiders, so offer a "spider explorer" role where they observe from a distance without touching.

Action & Expression: Allow students to show learning through drawing spiders, acting out spider movements, building spider habitats with blocks, or dictating facts to a teacher. Not all students need to handle or see a live spider to learn meaningfully.

Engagement: Create a "spider discovery station" with magnifying glasses, pictures, and safe exploration tools. Celebrate curious questions about spiders rather than fearful ones.

Discussion Questions

1. What do you notice about the spider's legs? Why might a spider need so many legs? (Bloom's: Observe | DOK: 1)
2. Where do you think this spider lives, and what might it eat? (Bloom's: Infer | DOK: 2)
3. How do you think the spider feels when it crawls on a person's hand? Is it scared, curious, or looking for something? (Bloom's: Analyze | DOK: 2)
4. What is one helpful thing spiders do in our world? (Bloom's: Understand | DOK: 1)

Extension Activities

1. Spider Movement Dance: Play soft music and invite students to move like spiders—crawling on all fours, moving their "legs" in different directions, and exploring the classroom. This helps them understand how spiders move and builds comfort with the idea of spiders.
2. Create a Spider Habitat (in a safe container): Use a clear plastic container with soil, leaves, and a small hiding spot. Students can observe a spider (collected safely by an adult) and draw or dictate what they notice about where it goes and what it does. Release the spider afterward.
3. Spider Snack Sorting Activity: Use crackers shaped like bugs (goldfish, ants on a log, etc.) and have students sort them into a "spider's web" drawn on paper with yarn. Students count how many "bugs" the spider "ate." This reinforces that spiders are predators and eat insects.

NGSS Connections

Performance Expectation (Kindergarten):

K-LS1-1: Use observations to describe patterns of what plants and animals (including humans) need to survive.

Disciplinary Core Ideas:

- * K-LS1.A All organisms have basic needs, such as food, water, and a place to live.
- * K-LS1.C Animals have body parts that help them sense their world (legs, eyes, fangs).

Crosscutting Concepts:

- * Patterns Spiders follow patterns in their behavior, like hunting bugs and hiding in safe places.
- * Structure and Function Spider legs help them walk, climb, and sense their environment.

Science Vocabulary

- * Spider: An animal with eight legs, multiple eyes, and a body that helps it catch bugs for food.
- * Legs: The long, jointed body parts that spiders use to walk, climb, and feel their world.
- * Fangs: Small, pointed teeth that spiders use to catch and eat tiny insects.
- * Web: A sticky trap that some spiders build to catch flying bugs.
- * Predator: An animal that hunts and eats other small animals for food.

External Resources

Children's Books:



Orb Weaver — Kindergarten Lesson Guide

The Very Busy Spider* by Eric Carle (Kindergarten favorite about a spider spinning a web)

Spinderella* by Donovan Bixley (A fun, rhyming story about spiders)

Are You a Spider?* by Judy Allen (Lift-the-flap book about spider life cycles)

YouTube Videos:

"National Geographic Kids: Spiders" – A short, animated video about spider facts and habitats. https://www.youtube.com/results?search_query=National+Geographic+Kids+Spiders (Note: Preview before showing to assess appropriate length and content for your class.)*

* "Crash Course Kids: What Do Spiders Eat?" – A 3-minute introduction to spiders as helpful predators. https://www.youtube.com/watch?v=H8HZeD_2Qe4