

Insects & Spiders

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1. When I Grow Up I Want to be an Entomologist

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**When I grow up, I want to be something very interesting.
The job I'll do will help a lot of people, and I'll like the work that I do.
Each day will be adventurous, and I'll strive to learn a lot.
Then I'll share what I know and my knowledge will grow.
It's the perfect, perfect job!**

I think I would like to be an entomologist! It must be fun learning about insects and spiders and other arthropods, like centipedes. Entomologists study insects that damage crops and come up with ideas on how to prevent this. They learn about the praying mantis or the ladybird beetle, which help get rid of insect pests. If you become an entomologist, you could travel and study different insects all over the world.

Now science is important, so I'll study hard when learning about biology. Experiments in chemistry will help me learn to develop good hypotheses. Then I'll read and I'll read and I'll read some more, and I'll share just what I learn, 'cause when I grow up I want to be something very interesting.

(Chorus)

Yes, I'll share what I know and my knowledge will grow.
It's the perfect, perfect job

2. What is an Insect?

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Do you know what an insect is? Is a spider an insect, or a centipede? Although you might think that they are insects, they're not. Actually, insects have many characteristics that other animals do not have. Insects belong to a group of animals called arthropods. They have jointed legs and a hard body covering. While a person's skeleton is on the inside of the body, an insect's skeleton is on the outside. And a typical insect has six jointed legs and three body parts. Hey, this is a lot to remember. Listen to this song; it will help you remember facts about insects.

What is an insect? Can you see?
Look at a grasshopper or a bee.
Three body parts, let's name them all:
head, thorax, abdomen, I recall.
What is an insect? Can you see?
On an insect's head are three main things:
two antennae, and their eyes,
a mouth that's even the perfect size.

**Insects, insects, they lay eggs.
Most insects have six jointed legs.
They help our trees and plants to grow tall.
They're every color, some big, some small.**

What is an insect? Do you know
that some eat plants to help them grow?
Most adults have four wings to fly,
like the beautiful monarch butterfly.
What is an insect? Can you see
how important insects are for you and me?
They carry pollen from flower to flower,
and dead animals they help devour.

(Chorus)

Insects, insects, they lay eggs.
Most insects have six jointed legs.
They supply food for animals to eat.
Insects make our world complete.

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3. What Kind of Mouth do you Have?

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Insects are so interesting. Did you know that insects don't have teeth? Instead, they have special mouths that help them to eat. Mosquitoes have mouths that pierce like hypodermic needles. Flies soak up liquids like sponges. Moths and butterflies have mouths made for sucking, while beetles crush and chew their food.

Mosquitoes like to land on you.
They try quickly to eat some food
by piercing through your skin to get
the liquid before you get upset.

Now moths and butterflies, they use
a mouth that sucks; they do not chew.
Like a straw they suck the nectar from
the flowers, for teeth they have none.

**Sucking, piercing, crushing, or
soaking water up from the floor
are ways that insects eat their food.
Insects sure have special tools.**

A fly has a mouth with a broad tip
for soaking up liquids. They just dip
their mouth into water like a sponge.
Now, doesn't that sound like lots of fun?

Now tiger beetles use their jaws
to cut and chew their food, because
an insect does not have sharp teeth.
They move their jaws sideways to eat.

(Chorus)

4. Ants in My Pants

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As I was sitting 'neath a tree, I felt the strangest thing—
an itch of sorts, or a tickle that started 'round my knee.
So I looked down. You wouldn't believe, they were crawling up so fast.
By golly, I believe I'm getting ants in my pants!

(Chorus 1:)

**Help! Help! Ants are crawling up inside my pants.
It tickles, icky, icky ickles, ants are in my pants.
They're little itty bitty things. But, oh, they made me jump
and scared me so that then, I guess, I started to hiccup.**

So then, I had the hiccups while the ants were crawling 'round.
An answer to my problem, at that time, I had not found.
I quickly ran inside my house and shut the large screen door,
whipped down my pants and all the ants started crawling on the floor.

(Chorus 2:)

**Help! Help! Ants are crawling up and down my floor.
I hope they realize their home is out my large screen door.
They're little itty bitty things. I know not what to do.
I thought that ants appeared only at tasty barbeques.**

I do admit I was relieved, for the ants I had removed.
It's funny though, ants have a way of making someone groove.
For pants with ants will make one dance, this I will guarantee.
For dance I did throughout this whole ant catastrophe!

(Chorus 1)

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5. I am a Fierce Hunter

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I have a slender body. I'm known for praying arms.
If you are a beetle, you might become alarmed.
For if you come too close and I'm hungry for a snack,
I'll quickly use my powerful arms and then I will attack.

Who am I? Can you find me in a tree?

My color camouflages well against green leaves.

Who am I? A praying mantis, that is me.

I'm a fierce hunter. Other insects would agree.

In early spring, I push and wiggle through an egg case.
With lots of other siblings, I'm feeling out of place.
We all remain attached by two fine silk threads
until we free our legs, as the membrane we now shed.
Now that I am growing strong, I have an appetite
for moths and bees and butterflies. I hunt them day and night.
I grow throughout the summer. My exoskeleton I shed
I sit upon a branch as my wings I now outspread.

(Chorus)

I'm swollen with eggs as autumn slowly draws near.
I patiently await for a male mantis to appear.
My partner doesn't know that my supper he will be,
for when we're finished mating I will eat my company.
It's my turn to lay my eggs and make an egg case.
A sturdy branch will keep my babies nice and safe.
My life is now complete as the fall wind starts to blow.
Next spring, my baby mantises will begin to grow.

(Chorus)

6. What a Change

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A butterfly finds a leaf, then lays her eggs.
Caterpillars start to hatch with lots of little legs.
Soon they'll start to eat some green, sweet, tasty leaves.
The caterpillar now is big and starts to shed its skin.
The caterpillar molts and molts as it grows big.
It wants to form a chrysalis, and so it finds a twig.
It loses all its legs, and stays in the same place.
A cocoon it spins around itself as it starts to change.
It stays inside the chrysalis, patiently waiting.
When it is time to emerge, it makes an opening.
It hangs upside down, pumps blood all around into the wings.
You wouldn't believe—the change is quite extreme.
The butterfly's wings must dry before it can fly.
It's really quite a miracle, this you can't deny.
From a simple egg to a caterpillar with legs, this butterfly arrives one day.
Then it flies away.

7. Firefly, Won't You Come Out Tonight

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**Fireflies, won't you come out tonight,
come out tonight, come out tonight?
Fireflies, won't you come out tonight
and dance by the light of the moon?**

The firefly is not a fly, not a fly, not a fly.
The firefly is not a fly, but a beetle. My, oh my.

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The firefly's light is cold, light is cold, light is cold.
The firefly's light is cold, not hot like a light bulb.

(Chorus)

Look at the flying firefly, firefly, firefly.
Look at the flying firefly. He's flashing his bright light.

He hopes to find a pretty mate, pretty mate, pretty mate.
He hopes to find a pretty mate. She's flashing in the grass.

(Chorus)

She flashes light and sends a code, sends a code, sends a code.
She flashes and she sends a code from the wet, tall grass below.

He flies to meet his mate below, mate below, mate below.
He flies to meet his mate below, all from her special code.

(Chorus 2x)

8. Pass the Honey, Please

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Did you know that honeybees make food to eat?
Did you know that honeybees make food to eat?
Did you know that honeybees—they make honey? What a treat
—the only insect that makes food for us to eat.

Now a honeycomb the worker bees will build.
Now a honeycomb the worker bees will build.
Now a honeycomb the worker bees will build. It uses wax.
Six-sided cells are made to store those little eggs.

A honeybee goes through four different stages before it becomes an adult. It takes only twenty-one days for the bee to develop from an egg to an adult. The queen bee is fed a special "royal jelly" from the worker bees, which helps her lay up to 2,000 eggs per day.

Now the queen her only job is to lay eggs.
Now the queen her only job is to lay eggs.
Now the queen her only job is to lay eggs. She lays a lot.
The workers feed and groom the queen as she lays eggs.

From egg to larva, pupa, then adult.
From egg to larva, pupa, then adult.
From an egg it develops into a larva, then a pupa.
From pupa to adult it then will grow.

Honeybees are really amazing. They live and work together in colonies to make honey. They are the only insect that makes food for humans to eat. Bees are also important because they carry pollen from flower to flower. Without bees, we would have fewer flowering plants and fruit.

Collecting pollen from the flowers bees will do.
Collecting nectar from the flowers bees will do.
Collecting pollen and sweet nectar from the flowers,
then they'll fly back to the hive to store the pollen in the cells.
It regurgitates the nectar from the crop.
It regurgitates the nectar from the crop.
It regurgitates the nectar for the other bees to eat.
The rest is stored and turns to honey in the cells.

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9. What is a Spider?

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Did you know that eight legs a spider has?
They are not insects, but in a special class.
For they are called **arachnids** with two body parts.
How can we tell these animals apart?

Now let's look at a spider, and you will see
that a spider has eight eyes, but he has no wings.
A cephalothorax and the abdomen
are parts of our little spider friend.

Listen, and I'll tell you just how a spider eats.
Once the prey is captured, the meal won't retreat
for venom is injected. The prey is paralyzed,
then quickly the prey becomes liquidized.

Now, spiders they have no teeth with which to eat.
Like sucking from a straw, their meal becomes a treat.
It might take several hours just to liquefy a fly,
but well worth the wait for the spider's appetite.

Silk glands in the abdomen a spider will rely on.
Although they all don't spin webs, but silk they all supply.
Spiders are important, for they prey on insect pests
that damage crops and do things that farmers detest.

10. Millipedes and Centipedes

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Millipede means "a thousand legs." This creature's quite a sight.
One thousand legs it does not have, but hundreds would be right.
It feeds on plants or dead insects and slowly crawls around.
You'll find it lives in dark, damp places close to the ground.

Now, **centipede** means "a hundred legs." This creature's quite a sight.
One hundred legs it does not have, but fifty would be right.
You'll find it feeds mainly at night; by day it will withdraw.
It feeds on insects that are alive and kills them with its claws.

Many legs, many legs running all around.

**A millipede, a centipede, you'll find them on the ground
or under leaves or rotted wood where it is nice and dark.
They even like to hide by rocks or by a piece of bark.**

Now, millipedes and centipedes are good mothers to their young.
They make a nest and lay their eggs and clean each little one.
They coil their bodies around the eggs until they finally hatch
and help protect the newborns in its damp, dark habitat.
A millipede, when it is scared, will curl up in a coil,
protecting all its inner parts as it lays in the soil.
Pick up a rock and look real close, these creatures you will see.
For millipedes and centipedes will hide from you and me.

(Chorus)

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11. Ladybug, Ladybug

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Oh, what do you eat, ladybug, ladybug?
Oh, what do you eat when you're hungry?
I eat aphids for a snack. They suck juice from the plants.
And the farmers like that I protect their crops.

Oh, what do you do when you're scared, ladybug?
Oh, what do you do when you're frightened?
I turn over on my back, tuck my legs in and play dead,
and most birds know that I'm not a tasty meal.

Oh, what do you do when it's time to lay your eggs?
Oh, what do you do when it's time?
I find a leaf or plant, lay my yellow eggs on them.
They are sticky, so they don't fall to the ground.

Oh, what do you do when the wind starts to blow?
Oh, what do you do when it's cold?
I find other ladybugs and we find a hiding place
and we hibernate throughout the long cold winter.

12. True Bugs

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**Bed bugs, stink bugs, chinch bugs, too,
are true bugs belonging to a special group.
Hemiptera is the scientific name,
for not all insects are grouped the same.**

*Some people call all insects bugs, but they aren't all true bugs. True bugs are grouped in a special class called **hemiptera**, meaning "half-wing." The front wings of an insect in this class have a leathery base with a filmy outer edge. True bugs have sucking mouth parts and only go through three stages before developing into an adult.*

Bugs have a way of eating all their meals.
They have a proboscis, which is really ideal.
They pierce their prey and then they inject
some poison that the victim doesn't expect.
They suck their meal in a peculiar way.
It's a straw-like motion of sucking their prey.
The liquid makes such a tasty snack
that meal time becomes a special knock.

(Chorus)

Now all true bugs aren't predators, you see.
For shield bugs they suck sap from leaves.
Bugs have very distinctive wings.
Yes, true bugs really are amazing things!

They certainly are amazing. Did you know that the giant water bug can catch a small fish or frog with its hooked front legs, and water bugs can grow to be four inches long in South America?

(Chorus)