Watch Out for Bugs!
Well, more than just bugs...

After all, a bug is just one type of insect.

Insects have six legs, and three body parts: a head, thorax, and abdomen.

Bugs are a type of insect. So are beetles, butterflies, wasps, ants, and flies.
Some insects are very big.

This stick insect is two feet long!

Measure your arm with a ruler. Is your arm longer or shorter than two feet?

But most insects are very, very small, and many other animals like to eat them.
So, imagine you are the size of an insect. How would you protect yourself?
There are lots of good answers, because insects have lots of different defenses!

**STING**
Yellow jackets are a type of wasp—and will sting again and again if they think their nests are threatened.

**STAND OUT**
Animals such as ladybugs often signal that they taste bad by really standing out!

**SPRAY**
Bombadier beetles shoot a painful chemical at attackers.
But the best defense is to not be found in the first place!

Activity: What Helps Things Hide?

Either in a room or outside, hide one green object, one brown object, and one red object. Which was the hardest to find? Why?
When animals hide or disguise themselves, that’s called **camouflage**.

- **COLOR**
- **PATTERN**
- **DISGUISE**
- **MIMICRY**
Can you find the camouflaged insects?
Where’s the insect??
Lichen Katydid blend in by mimicking lichen, which looks like a plant or moss, but is actually a different, special organism with no roots, stems, or leaves.
Where’s the insect??
This one gets even crazier—not only can a geometrid moth caterpillar look like a twig, but it smells like one too! After it’s eaten some of a plant, it can take on the same smell too, so predators have no chance.
Want to keep going? Check out this website for more amazing camouflages across the animal world:

https://www.nhm.ac.uk/discover/can-you-spot-hidden-animals-cunning-camouflage.html
Now let’s move closer to home. Here are some insects that live in Montana... maybe even on your street!
The Mourning Cloak Butterfly is the state butterfly of Montana. It loves cottonwood, elm, and willow leaves. Its dark-colored wings help it blend in with the bark of these trees. These butterflies live at high elevation and love the early spring, so the dark wings also let them warm up faster and get flying in cold temperatures.
Can you SPOT the spotted knapweed root weevil? These weevils love eating spotted knapweed—so much so that their coloring mimics the dried flowers and stems of the plant. Spotted knapweed is a harmful noxious weed in Montana, so scientists will actually release knapweed root weevils as a **biocontrol**, to kill as much as they can.
Now it’s your turn!

Find a spot in your house, yard, or outdoor space. Using paper, markers, pencils, glue, natural materials, scraps, or whatever else you can think of, create an insect that can camouflage in that spot!

When you’re done, hide your bug, and see if a family member can find it.

Confused? Go to the next page for an example.
Need an example?

Here’s my insect, the one-of-a-kind Travelers’ Rest Cottonwood Beetle. Can you find it in the leaves?

Remember: To be an insect, it has to have six legs, and a head, thorax, and abdomen!
Now What?

DO.
Send a picture of your camouflaged insect to Leah at leah.schulson@mt.gov and earn a virtual badge!

WATCH.
Want to meet some more bugs? The Missoula Butterfly House and Insectarium will be showing off some of their friends over Facebook Live on Wednesdays at 11am and Fridays at 3pm!

FIND.
Head outside to a yard or park and see what you’re able to find! What made the insect easy to see...or not?!