

# know your neighbor: LICHEN



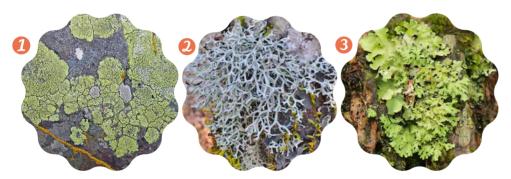
# WHAT IS LICHEN?

A lichen is a composite organism consisting of a fungus and an alga (plural algae). The fungus and alga grow together and form a symbiotic relationship, meaning they help each other out! The alga photosynthesizes and makes food for the fungus, while the fungus provides protection from the environment for the alga.

Lichen vs. moss: Mosses are non-flowering plants. Lichen are not plants. Moss does not have roots or stems, but does have tiny leaves and threadlike rhizoids that hold the moss to a surface. Multiple leaflets create a green, leafy, spongy mat. Lichen, though, does not have leaves.

## THREE KINDS OF LICHEN

How would you describe each type of lichen? What does each type remind you of?



**Crustose:** Two dimensional, flat, crusty, firmly attached to a surface entirely; underside of lichen cannot be viewed.

**D**Fruiticose: Three dimensional, sticks out from surface, shrubby.

**3** Foiliose: Somewhere between crustose and fruiticose, is three dimensional but does not stick out far, grows out in sheets, leafy, and is not attached by entire lower surface.



# WHERE CAN I FIND LICHEN?

Lichen needs water, air, nutrients, and light and can live on a variety of surfaces that other organisms cannot, which is what makes lichen a pioneer species.

Once you start looking for lichen, you'll start finding it all over. The most common places you'll find lichen are on trees, rocks, and soil, but it can grow on many other surfaces, such as:

- sidewalks rusty metal
- buildings statues/tombstones
- wooden signs

What are other surfaces around you where you could possibly find lichen?

#### Reviving Lichen

When lichen dries out, it shrivels up, becomes brittle, and has a dull color. If you find lichen like this, spray some water on it and watch it expand and its color brighten right before your eyes!

### SEARCHING FOR LICHEN

Go out and explore an area near you! Take a journal and keep track of all the different kinds of lichen you see and the surfaces you find lichen growing on.

- How many different kinds did you find?
- What kinds of surfaces was it growing on? Where did you find the most?
- Did you notice any patterns in your observations of the types of lichen or where they were growing?
- What are you still curious about?