



# Illustrating Ecosystems

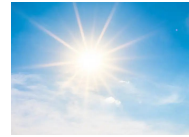
**Ecosystems** are complex systems composed of the relationships between animals, plants, soil, weather, water, and many other factors. To better understand ecosystems, we will illustrate these relationships through a diagram.



**Grey Snapper**



**Silver Rice Rat**



**Subtropical Climate**



**Fiddler Crab**



**Red Mangrove**



**Actinobacteria**



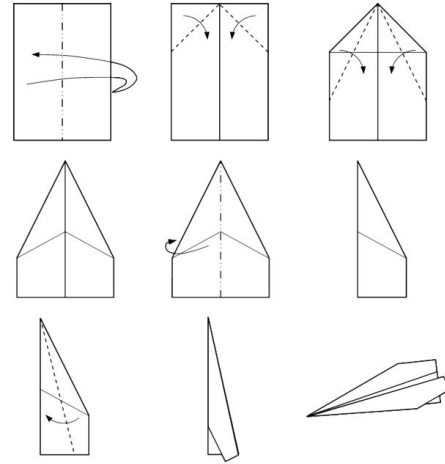
**Ocean Salt Water**

Florida Mangrove Ecosystem Components

**A Diagram** is a simplified drawing that shows what something is made of or how it works



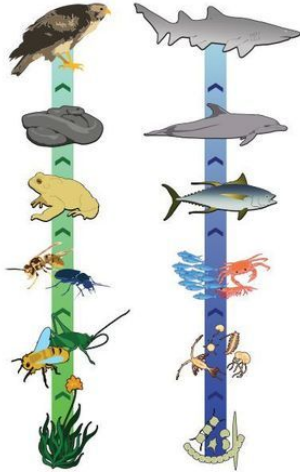
**Parts of a Shoe Diagram**



**Paper Plane Folding Diagram**

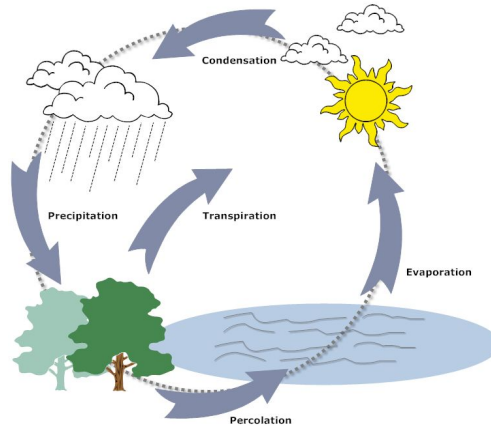
We will diagram the relationships in an ecosystem by showing:

### Food Chain



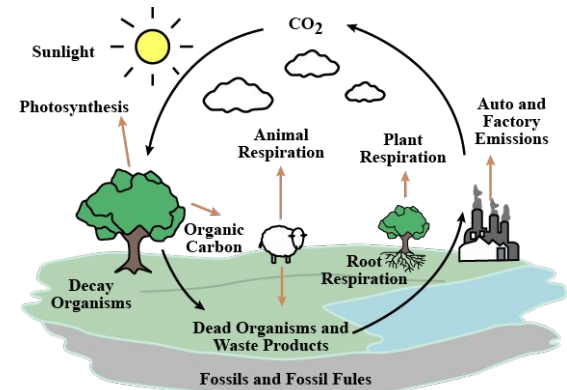
Organism depending on each other for food

### Water Cycle



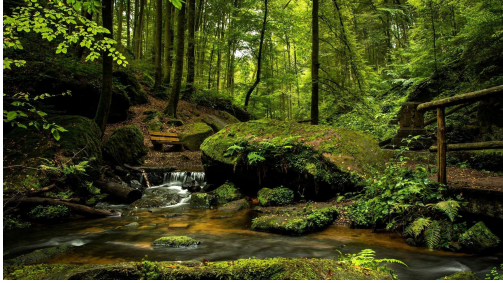
The path that water follows as it moves through the habitat

### Nutrient Cycle (nitrogen + carbon)



The cyclical flow of nutrients through an ecosystem

# Choose an Ecosystem



Forest Ecosystem



Grassland Ecosystem



Tundra Ecosystem



Desert Ecosystem

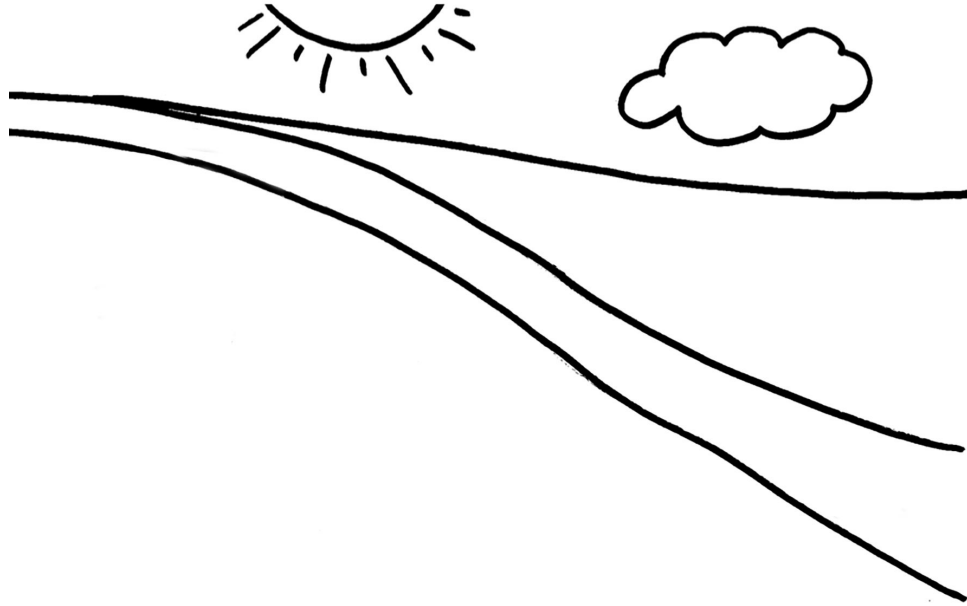


Freshwater Ecosystem

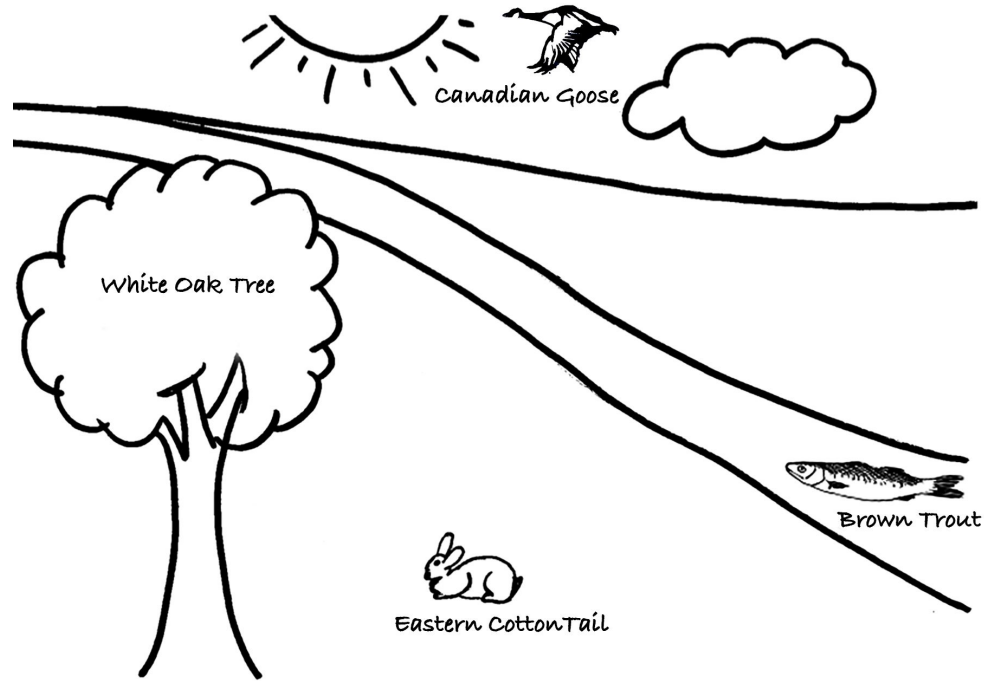


Saltwater Ecosystem

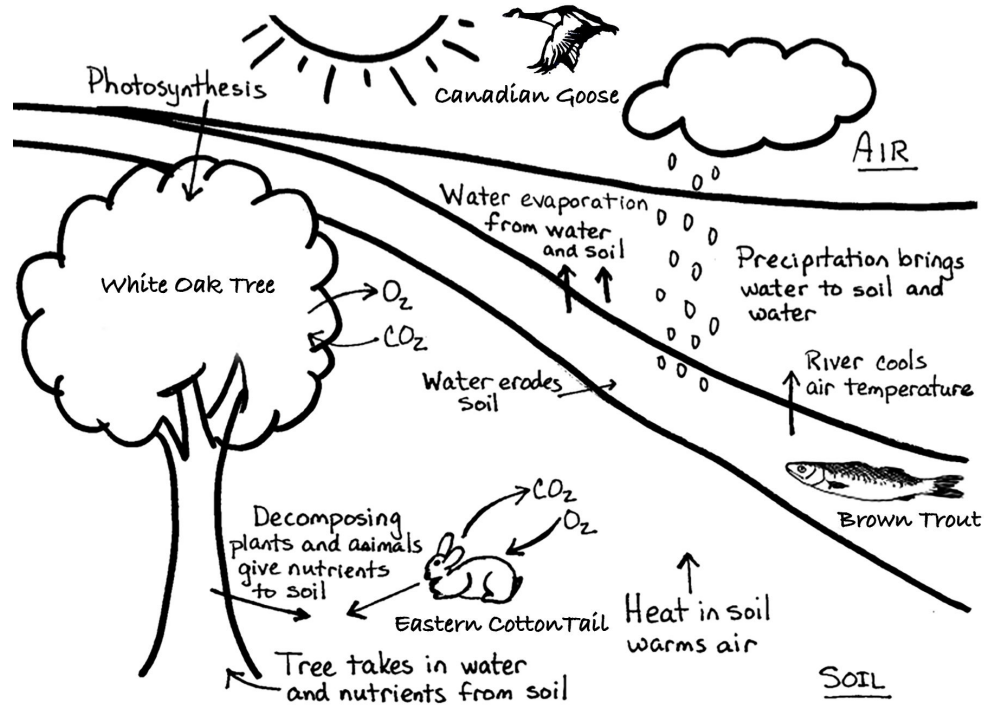
**Start** by representing the non-living elements of the ecosystem (landscape, water bodies, weather).



**Then,** represent the species diversity of plants and animals through quick sketches.

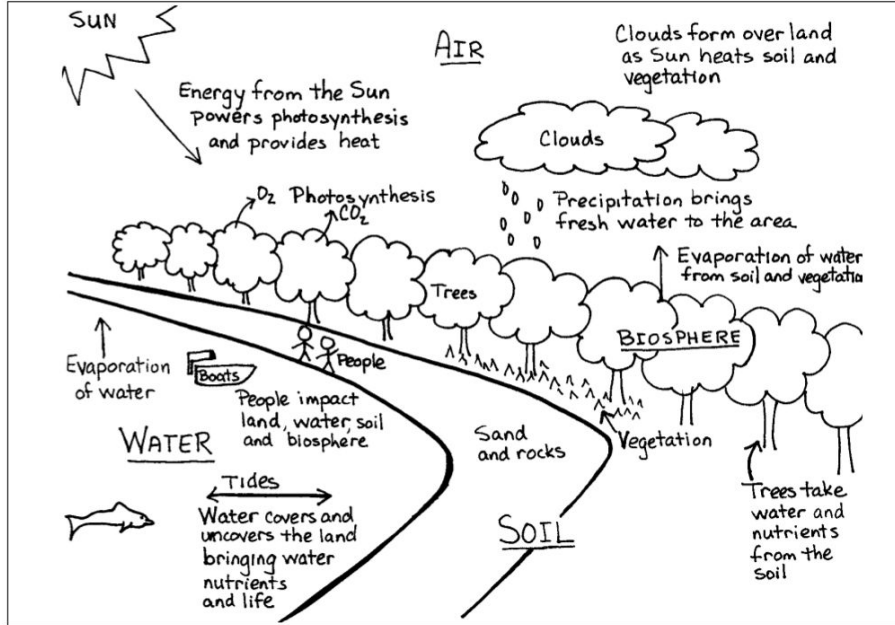


**Finally,** diagram the connections, relationships, and cycles through arrows and notes.

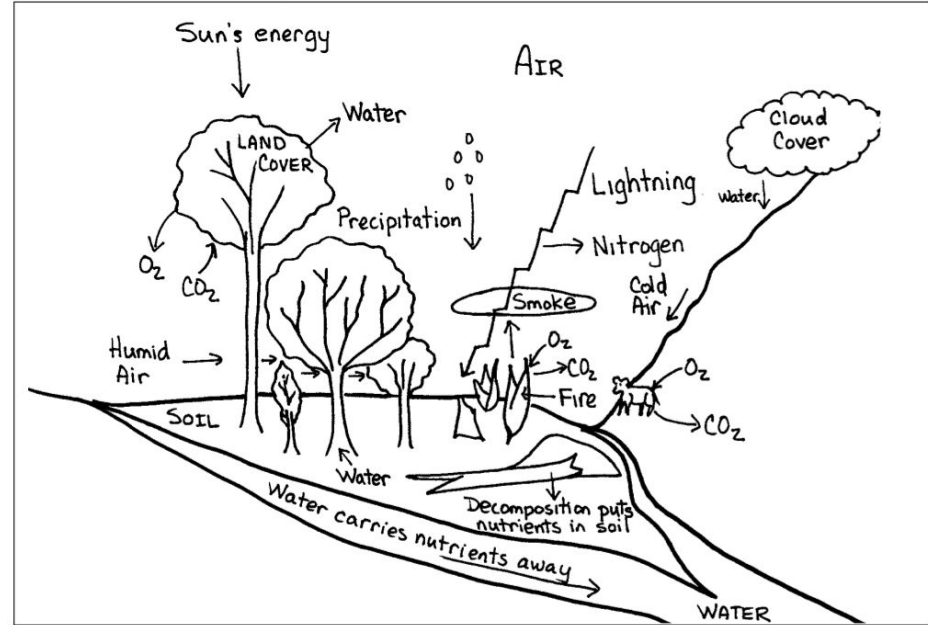


# Examples

Marine/Coastal (41.00° S, 173.5° E)



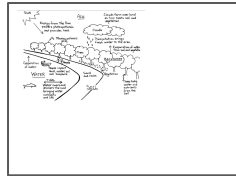
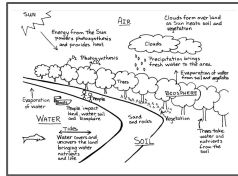
Rainforest (17.00° N, 89.50° E)



# Diagramming Tips



Spend enough time researching your chosen ecosystem to select a wide variety of plant and animal species to show.



Be sure to use your whole paper, not just a corner of the page.



Diagrams are made of quick sketches, not time-consuming artwork.