

RainForest Scavenger Hunt: Grades 7-8

1. Plants are important organisms because they convert carbon dioxide to oxygen, the gas all animals need to breathe. Rainforests make up less than 5% of earth's surface, but the plants in tropical rainforests provide 50% of the world's oxygen. Considering this fact, why is it critical to conserve rainforest ecosystems? What could happen if rainforests continue to be destroyed?
2. Reptiles and amphibians are two *classes* of animals in the animal kingdom. Both reptiles and amphibians have backbones and are ectothermic, meaning they cannot regulate their body temperatures. Amphibians are born in the water and absorb oxygen in the water through gills, but later in life develop lungs and breathe air. Reptiles lay eggs, have scales, and breathe air through lungs. Which animals on the first floor of the RainForest are amphibians? Which are reptiles?
3. Amphibians and reptiles are **ecto**thermic, which means their bodies cannot regulate their internal temperatures. Reptiles and amphibians rely on the heat from their environment to keep them warm and to keep their body systems operating. Why might the rainforest be a good place for ectotherms like reptiles and amphibians to live? Observe the reptiles and amphibians in their exhibits.
4. Observe the many different varieties of insects and arachnids (spiders and scorpions) in their habitats. Invertebrates like these organisms make up over 50% of the species found in the rainforest. Some of these organisms, like spiders and scorpions, are carnivorous, but most of these invertebrates consume organic matter, breaking down leaf litter. Why is this role important?
5. Observe the Asian turtles in their exhibit. These species face threats in the wild such as poaching and habitat loss. Turtles are particularly susceptible to population loss because they have few offspring, or babies, and do not mate until very late in their lives. How might this affect turtle population sizes? How can zoos and conservation organizations help turtles?
6. Deforestation, or the clearing of rainforest, is a critical threat. Read the posters about the rainforest ecosystems. Why is deforestation a problem for people that do not live in the rainforest? How does deforestation and the destruction of the rainforest affect us all?
7. Tropical rainforests are home to the largest number of birds in the world. Take a look at the exhibit placards to see photos of all of the birds in our canopy exhibit. Looking high and low, can you spot each bird: scarlet ibis, spoonbill, aracari, jacana, ground dove, teal, quail dove, and white face duck?
8. Many species of animals, like the Macaw, slow loris, and pythons, are illegally taken from the Rainforest and sold as pets. How can you and other individuals combat the illegal pet trade?
9. Francois Langurs have specialized stomachs to ingest toxic plants. Plants, just like animals, have defense mechanisms to protect themselves. How can a plant protect itself from being eaten by herbivorous animals?
10. Observe the orangutans in their exhibit. Orangutans are listed as critically endangered by the IUCN. One major threat they face is population fragmentation, or the isolation of groups of orangutans by the construction of roads. Human settlements and roads cut off groups of orangutans from one another. Why might population fragmentation a problem that affects the survival of the orangutan species?