1. Biodiversity hotspots cover just a tiny portion of the planet. They cover only _______% of all our land, but are home to more than __________ the plant and animal species on earth.
2. How many hotspots have been identified? ______________
3. If anyone is lost, we will lose __________ of species forever.
4. Biodiversity hotspots are in grave danger because they have under __________% of original natural vegetation remaining and in some cases only 1 to 5% of original habitat remaining.
5. Most of the hotspots are in the ____________ and most are rainforest.
6. They are disappearing due to destruction by humans including:
   - Unsustainable logging
   - The burning of jungle areas to create ________________and
   - Uncontrolled development
7. ________________ is a hotspot that is home to the remaining 50 species of lemurs.
8. Conservationists are working to see that all the biodiversity hotspots are protected to ensure that this planet’s rich and diverse natural wealth is carried safely into the next century.
9. Focusing on the threatened hotspots approach is a way of making this biodiversity crisis that much more ______________________.
10. Conservationists recommend that hotspots receive ______________________ international attention.
KEY
1. Biodiversity hotspots cover just a tiny portion of the planet. They cover only 2% of all our land, but are home to more than ½ the plant and animal species on earth.
2. How many hotspots have been identified? 17
3. If anyone is lost, we will lose 1000s of species forever
4. Biodiversity hotspots are in grave danger because they have under 25% of original natural vegetation remaining and in some cases only 1 to 5% of original habitat remaining.
5. Most of the hotspots are in the tropics and most are rainforest.
6. They are disappearing due to destruction by humans including:
   Unsustainable logging
   The burning of jungle areas to create farmland and
   Uncontrolled development
7. Madagascar is a hotspot that is home to the remaining 50 species of lemurs.
8. Conservationists are working to see that all the biodiversity hotspots are protected to ensure that this planet’s rich and diverse natural wealth is carried safely into the next century.
9. By focusing on the threatened hotspots approach is a way of making this biodiversity crisis that much more manageable.
10. Conservationist recommend that hotspots receive maximum international attention.
1. ________________ are those that play a unique and crucial role in ecosystems function and they have a disproportionately large effect on their environment relative to their abundance.

2. Efforts to manage and protect keystone species can help ________________ the entire biological community.

3. There are 5 general categories of Keystone species:
   - Keystone predators
   - Keystone modifiers
   - Keystone prey
   - Keystone mutualists
   - Keystone host

4. Predators
   ________________ keep the number of elk in check which protects the plants in the ecosystem from being over grazed.
   ________________ prey on mussels and keep them from overpopulating an area.
   Opens up habitats for other organisms.

   ________________ prey on fish, reptiles, amphibians, birds, and mammals

5. Modifier - change the environment making it more hospitable to other species
   ________________- dig depressions in the ground that fill with water that fill with fish and other aquatic species during the dry season.
   ________________ keeps grasslands properly maintain with a variety of plant species that benefit other species such as cattle and pronghorn. Make burrows that aerate compacted soil and allow water to penetrate deeper into the ground. Many other species use the burrows for shelter. They are important food source for coyotes, foxes, hawks, and the endangered black footed ferret.

6. Keystone Prey (affect predators’ densities)
   - Salmon
   ________________ salamanders-provide a lot of protein biomass

7. Keystone mutualist (mutually beneficial relationships)
   ________________-pollenate only highly specialized plants

8. Keystone host
   ________________ - create an open canopy that harbors diverse on the forest floor)

9. The greater biodiversity that keystone species help maintain afford
   - Protection of water resources and soil
   - Nutrient storage and recycling
   - Pollution control
   - Unpredictable environmental events
KEY

1. Keystone species are those that play a unique and crucial role in ecosystems function and they have a disproportionately large effect on their environment relative to their abundance.

2. Efforts to manage and protect keystone species can help stabilize the entire biological community.

3. There are 5 general categories of Keystone species:
   - Keystone predators
   - Keystone modifiers
   - Keystone prey
   - Keystone mutualists
   - Keystone host

4. Predators
   - Gray wolves keep the number of elk in check which protects the plants in the ecosystem from being over grazed.
   - Purple sea star prey on mussels and keep them from overpopulating an area. Opens up habitats for other organisms.
   - Alligators prey on fish, reptiles, amphibians, birds, and mammals (Keystone predator and modifier)

5. Modifier - change the environment making it more hospitable to other species
   - Alligators dig depressions in the ground that fill with water that fill with fish and other aquatic species during the dry season.
   - Black tailed prairie dogs—keeps grasslands properly maintain with a variety of plant species that benefit other species such as cattle and pronghorn. Make burrows that aerate compacted soil and allow water to penetrate deeper into the ground. Many other species use the burrows for shelter. They are important food source for coyotes, foxes, hawks, and the endangered black footed ferret.

6. Keystone Prey (affect predators’ densities)
   - Salmon vital food source
   - Black-bellied salamanders—provide a lot of protein biomass

7. Keystone mutualist (mutually beneficial relationships)
   - Ruby-throated hummingbirds—pollenate only highly specialized plants

8. Keystone host
   - Quaking Aspen—create an open canopy that harbors diverse on the forest floor

9. The greater biodiversity that keystone species help maintain afford
   - Protection of water resources and soil
   - Nutrient storage and recycling
   - Pollution control
   - Unpredictable environmental events