Eagles — Masters of the Sky

Instructions: Read the text about eagles. Look for the science vocabulary in **bold**. Then answer the questions using evidence from the passage.

Eagles and their habitats

An **eagle** is a large bird of prey. That means it is a hunter with sharp eyes, powerful feet, and a hooked beak for tearing food. Eagles live in many different **habitats**, from mountain cliffs to forests and coastlines. Even when two eagles live far apart, they still share the same basic needs: food, water, shelter, and a safe place to raise young.

Eagles are also **top predators**. This matters because predators help keep ecosystems balanced. If there are too many rabbits, fish, or other prey animals, plants and smaller animals can suffer. An eagle's hunting choices can shape what happens across a whole landscape.

Eagle facts

Flight: riding invisible elevators

Watching an eagle circle high above you can look like magic, but it is really smart science. Many eagles travel by **soaring**, holding their wings out and saving energy by flapping less. Instead of beating their wings all the time, they search for rising air.

One kind of rising air is a **thermal updraft**. When the sun warms the ground, the air above it can heat up and rise like a slow bubble. Eagles can circle

Soaring and gliding

inside these columns of warm air to climb without much effort, then glide away until they find the next one. Eagles can also use wind pushed upward along hills and ridges to stay aloft for longer.

Eyesight and hunting

An eagle's best tool is often its eyes. Many sources estimate eagle vision can be **3–4 times** sharper than human vision, helping them spot movement from far away. Some reports suggest eagles can see clearly for **miles** in good conditions.

Once an eagle finds prey, it may dive, spread its wings to slow down, and strike with its **talons**—the curved claws on its feet. A bald eagle's gripping pressure has been estimated at around **400 psi** (pounds per square inch), which helps it hold slippery fish or struggling prey.

Talons and beak

Nests: a home that grows every year

Eagles do not just need food—they need a safe place for eggs and chicks. Many species build an **eyrie** (a nest) high in a strong tree or on a cliff ledge. Bald eagle nests can become huge because pairs often add sticks each year. Some sources describe typical nests as about **5 feet** across, with some much larger after years of use.

After the eggs hatch, parents bring food and protect the chicks, called **eaglets**. Growing up is risky: storms, hunger, and human disturbance can all threaten a nest. That is why the nest site and the surrounding habitat matter so much.

Nesting

Why eagles need protecting

Because eagles are top predators, changes in the environment can affect them quickly. If rivers are polluted, fish may become harder to catch. If tall trees are cut down, nesting sites can disappear. Even small changes—like people getting too close to a nest—can cause parents to leave, putting eggs or chicks at risk.

Protecting eagles usually means protecting whole places: clean water, healthy forests, and quiet nesting areas. When these habitats stay healthy, eagles can keep soaring, hunting, and raising new generations.

Protecting habitats

Glossary

Word	Meaning
Habitat	The natural place an animal lives (for example, forests, coasts, or mountains).
Top predator	An animal near the top of a food chain that hunts other animals and has few predators.
Soaring	Flying with wings held out, using rising air currents instead of flapping often.
Thermal updraft	A column of warm air rising because the sun has heated the ground beneath it.
Talons	An eagle's curved claws used to grab and hold prey.
PSI	Pounds per square inch: a measure of pressure (force spread over a small area).
Eyrie	An eagle's nest, often built high in a tree or on a cliff.
Eaglet	A baby eagle.

Questions

1. Explain what a **top predator** is *using the passage*. Why does the text say top predators matter?

   _____

2. List **two** different **habitats** where eagles can live, according to the first section.

   _____

3. Describe **soaring** in your own words. What does the eagle do with its wings, and why?

   _____

4. What is a **thermal updraft**? Explain how it forms and how an eagle uses it.

   _____

5. The passage says an eagle's vision may be **3–4 times** sharper than a human's. What advantage would this give an eagle when hunting?

   _____

6. What are **talons**? Give one reason from the text why talons are useful for catching prey.

   _____

7. Define **psi** (pounds per square inch) using the context of the passage. What does a higher psi mean?

   _____

8. What is an **eyrie**? Where might an eagle build one?

   _____

9. Why can bald eagle nests become very large over time?

   _____

10. Name the word used for a baby eagle. What are **two** dangers to young eagles mentioned in the passage?

_____

11. Give **two** ways humans can accidentally harm eagles or their nesting success, based on the final section.

_____

12. The passage says protecting eagles often means protecting whole habitats. Explain this idea using **two** examples from the text.

_____

Answer Key

1. A top predator is a hunter near the top of the food chain. The passage says they matter because they help keep ecosystems balanced by controlling prey populations.
2. Any two: mountain cliffs, forests, coastlines.
3. Soaring is flying with wings held out (not flapping much) to save energy by using rising air.
4. A thermal updraft is a column of warm air that rises when the sun heats the ground. An eagle circles in it to gain height, then glides away.
5. Sharper vision helps an eagle spot prey or movement from farther away, making hunting more successful.
6. Talons are the curved claws on an eagle's feet. They are useful for grabbing and holding prey (including slippery fish).
7. PSI is pounds per square inch, a measure of pressure. A higher psi means more force is being applied over a small area (a stronger gripping pressure).
8. An eyrie is an eagle's nest. The passage says it can be built high in a strong tree or on a cliff ledge.
9. They can become large because pairs often reuse the same nest and add sticks each year.
10. A baby eagle is an eaglet. Any two dangers: storms, hunger, human disturbance.
11. Any two: pollution that affects rivers/fish; cutting down tall trees that removes nest sites; getting too close to nests so parents leave.
12. Because eagles depend on whole ecosystems: e.g., clean water helps keep fish available; healthy forests provide tall nesting trees; quiet nesting areas reduce disturbance so parents keep caring for eggs/chicks.