



# WILD WISDOM 2019 – PREP QUIZ



## ANSWER SHEET

Dear Quizmaster,  
Greetings from WWF!

The following are the instructions to conduct Wild Wisdom 2019 – Prep Quiz

- There are 20 questions in question sheet.
- All questions are multiple choice questions (MCQs) and contain four options.
- Total time limit for the quiz is 15 mins.
- Each correct answer gets 1 point. There is no Negative marking.
- In case of a tie, the quizzer with the maximum number of correct answers to the questions marked with an asterisk (\*) will be the highest scorer.

1. Many sea-dwelling species depends on 'marine snow' for life. What causes it?

**a. Plants & Animals**

When the plants and animals near the surface of the ocean die and decay, they fall toward the seafloor. This decaying material is referred to as "marine snow" because it looks a little bit like white fluffy bits. The marine snow provides food for many deep-sea creatures. Many animals in the dark parts of the ocean filter marine snow from the water or scavenge it from the seabed.

\*2. The brazil-nut tree is one of the largest trees growing in the Amazon rainforests. Its seedpods are so hard that only one animal is able to break them and release the seeds. Which animal is it?

**c. Agouti**

Agoutis are large rodents with sharp teeth that can chisel into the brazil-nut tree's hard grapefruit-sized seed pods. They bury seeds to eat later, and those that they don't retrieve may germinate and grow into trees. Brazil-nut trees are found only where there are agoutis!

3. Antarctica contains 90% of the world's glacier ice. If it were all to melt, by how much would it raise global sea levels?

**d. 60 meters**

The Antarctic ice sheet is the largest single mass of ice on Earth - covering an area of almost 14 million sq km with an average thickness of over 2km.

4. Which freshwater species inspired the streamlined design of Japan's Shinkansen 'bullet' trains?

**a. Kingfisher**

Shinkansen trains can travel at up to 300 km/hour, but when first developed caused noise pollution when exiting tunnels because air pressure built up in front. Kingfishers experience a similar change in pressure when they dive from the air into water to catch fish. Imitating the kingfisher's shape, engineers equipped trains with a tapering nose nearly 50 feet long. As well as producing much less noise when exiting tunnels, the newly-designed train used 15% less electricity while travelling 10% faster. Taking inspiration from nature in man-made designs is called 'biomimicry'.



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5. What is the colour of the hairs that make up a polar bear's fur?

**c. Translucent**

Polar bears' fur appears white or yellowish, but hairs are actually translucent. Each hair shaft is pigment-free and transparent with a hollow core that scatters and reflects visible light, much like the way that ice and snow made from transparent water appears white. Surprisingly, underneath their fur polar bear's skin is black - but only their black nose is visible !

6. African black rhinos are critically endangered, having been hunted almost to extinction for their horns. What colour are African black rhinos?

**b. Grey**

The names of black and white rhinos are misleading - as both are actually grey. Black rhinos are the smaller of the two African rhino species.. Black rhinos are browsers rather than grazers, and their pointed lip helps them feed on leaves from bushes and trees.

7. One of the main reasons for jungle deforestation is to clear land to grow oil palms. What is palm oil used for?

**d. All of these**

Palm oil is an extremely versatile oil that has many properties and functions which makes it so widely used. It is also an incredibly efficient crop, producing more oil per land area than any other equivalent vegetable oil crop. This means that we should change the way it is farmed rather than boycotting it in favour of other oils that would take more land and resources to produce.

8. For what activity do leaf cutter ants use the pieces of leaf they take back to their nest?

**b. Farming**

Leafcutter ants use pieces of leaves to farm fungus which they can then feed to their larvae. After clipping out pieces of leaves with their jaws, the ants transport the fragments to an underground nest that can include over 1,000 chambers and house millions of individual ants.

\*9. When Alaskan bear catch Pacific salmon that have returned to spawn, how much of the salmon do they usually eat?

**a. The Brain and Skin**

During salmon spawning there are so many fish traveling upstream at once that bears can catch dozens and just eat the fattiest parts. They will usually only eat about 25% of each salmon, and prioritise the skin, brain and any remaining eggs.

10. Ice in the Arctic and Antarctic plays an important role in slowing global warming. How?

**b. Reflecting Sunlight**

Every one of us needs the ice in these frozen worlds. That's because it reflects the rays of the sun back into space and this keeps our planet cool. The Polar Regions act as a giant air conditioner, helping to protect us from the effects of climate change.



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11. Cheetahs have strong, muscular tails with a flattish shape. How do they use their tail when hunting?

**d. To help steer**

Many adaptations allow cheetahs to run incredibly fast and catch fast-moving preys. Along with their light bones and a streamlined shape, cheetahs have special hard paw pads and semi-retractable claws that help them grip the ground, a flexible spine that works as a spring for its powerful back legs. Meanwhile, the tail acts like a ship's rudder, allowing it to make quick turns by counteracting its bodyweight.

12. Only 3% of all water on our planet is freshwater (non-salty). What percentage of this is accessible for people to use?

**a. Less than 1%**

Almost all freshwater is locked up in ice caps or glaciers or buried deep underground. We are able to use less than one per cent of freshwater as it flows through rivers and streams, ponds, lakes and wetlands.

\*13. What important job do walruses use their whiskers for?

**a. Finding food**

A walrus has between 400 and 700 whiskers in up to 15 rows around their nose. The whiskers, also known as vibrissae, are attached to muscles and are supplied with blood and nerves, making them highly sensitive. Walruses use their sensitive whiskers to locate prey on the sea bottom, including worms, snails, crabs and sea cucumbers.

14. Scientists say that humans are causing a mass extinction of species on our planet, due to the rate at which species are being lost. Which of these effects of human activity is the main threat to 85% of all species currently described as threatened or endangered?

**c. Habitat Loss**

Habitat loss and degradation are currently the main causes of decline in wildlife populations, mainly due to agriculture, logging and changes to freshwater systems. This could change if carbon emissions are not reduced, with one in six species estimated to be at risk of extinction from climate change - including up to half of plant and animal species in some of the world's most naturally-rich areas, such as the Amazon and the Galapagos.

\*15. Pacific salmon live most of their lives in the ocean, but are born in freshwater streams to which they return to lay their own eggs when fully mature. What is a newly hatched salmon in the first stage of its life cycle called?

**d. Alevin**

The just-hatched fish are called "alevins" and still have the yolk sac attached to their bodies in Spring. When their yolk sac is absorbed the alevins become increasingly active and begin their journey up through the gravel of the riverbed. When strong enough the small fish must rise to the surface of the water and gulp air. This critical period is therefore referred to as "swim-up" and exposes the young to dangerous predators for the first time. Once they begin to swim freely they are called fry.



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16. Recent evidence shows that the shells of sea butterflies in Antarctic waters are dissolving. What is thought to be causing this?

**b. Ocean Acidification**

Sea butterflies, scientific name Thecosomata, are a taxonomic suborder of small pelagic swimming sea snails. Over the past century, the pH of the ocean has decreased from 8.2 to 8.1 as a result of climate change. Warmer water can absorb more CO<sub>2</sub> from the air, and this makes the ocean more acidic than before. This means the conditions are changing from those in which sea creatures like sea butterflies evolved, and in some cases it stops them from being able to build their shells or exoskeletons.

17. In recent years human activity has become the dominant influence on climate and the state of the environment. What do scientists call this new geological age for our planet?

**a. Anthropocene**

In 2000 scientists Paul Crutzen and Eugene Stoermer used the concept of the Anthropocene to discuss the ever-increasing influence of humans on Earth. The Anthropocene defines Earth's most recent geologic time period, in which humans have significantly altered the Earth through human activity. The word combines the root "anthropo", meaning "human" with the root "-cene", the standard suffix for "epoch" in geologic time. The new epoch has yet to be officially declared, and has no agreed start point.

\*18. What is the main food of the Crabeater Seal?

**b. Krill**

Contrary to its name, the crabeater seal feeds almost exclusively on krill. Its name comes from the word 'krebs' in German which is a general term for crustaceans. Krill is the term for a number of species of small crustaceans that live in the open ocean. The word 'krill' means 'whale food'. They live in dense swarms that can be small patches or spread over several kilometres. For many marine mammals and seabirds in the Southern Ocean, krill is one of the most important items in their diet.

19. Seas cover 70% of the surface of our planet, but because of their depth they represent 97% of habitable space. There are more than 240K known species living in the seas. How much of our planet's seas have we explored?

**a. 5%**

The ocean is, on average, 4,000 metres deep and contains 1.3 billion cubic kilometres of water. Scientists estimate that up to 80% of marine species have yet to be discovered - meaning there could be more than a million species in the oceans. A growing number of marine species are threatened with extinction - but only a small fraction have been studied.

20. Earth Hour 2019 was celebrated across the world on Saturday 30<sup>th</sup> March 2019. At what local time was the symbolic lights out event celebrated?

**b. 08:30– 09:30 PM**

Started as a symbolic light out event in Sydney in 2007, Earth Hour is now the world's largest grassroots movement for the environment, inspiring millions of people to act for our planet and nature.

