

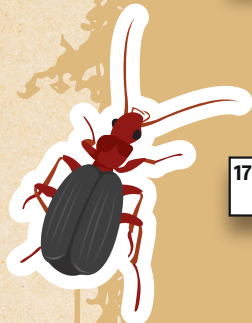
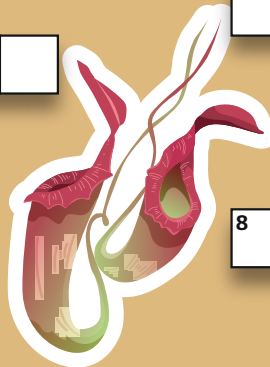
SCIENCE Quiz #4

Self-defence Strategies in Kingdoms Animalia & Plantae

It's a dog-eat-dog world out there, but are you aware that plants and animals have their way of ensuring their own survival? Check out these cool yet strange self-defence strategies deployed by members of the Animalia and Plantae kingdoms by completing the puzzle below. Take on the challenge!



Complete your Young Scientist badge here!



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ACROSS

2. When on the losing end of an attack, the exploding ant (*Colobopsis saundersi*) will forcefully contract its abdominal muscles and _____, spraying a sticky and corrosive substance onto its attackers.
4. Some plants develop sharp _____ on their leaves and stems to discourage large herbivores from eating them.
6. To discourage insects like butterflies from laying eggs on their leaves, some plants _____ the presence of eggs there.
8. The poison ivy produces urushiol, a clear chemical that causes _____ and rashes upon contact with your skin.
10. _____ are the most significant herbivores, and plants have to evolve to defend themselves against them.
12. There are plants that attack instead of setting up defences. The _____ grabs and digests animal prey such as beetles and spiders.
16. To deter _____ by bigger Komodo dragons, the young roll around in the faeces of disembowelled prey to mask their smell with an off-putting scent.
17. When threatened, the Madagascar hissing cockroach contracts its abdomen to force air out from the breathing holes or spiracles along its side. This produces a loud _____ sound, resembling that made by a snake. This startles the predator, giving the cockroach time to escape.
18. The horned lizard found in the Southwest region of the United States can shoot _____ from its eyes to deter predators. This red fluid emanates from ducts located at the corner of its eyes and can travel up to one metre.
19. While we use essential oils as type of _____, they can also be used as chemical insect toxins to deter animals from approaching plants.
20. The _____ is a cute-looking, furry animal with a vicious odour. It has a potent musk which can cause temporary blindness when sprayed directly into an enemy's eyes.

DOWN

1. The cell _____ can help defend a plant cell against fungi and bacterial invasion.
3. A species of frog found in Central Africa breaks its own toe bones so that the bones can act as claws for self-_____.
5. Some sea cucumbers can expel their internal _____ to repel or confuse predators. This does not harm the sea cucumber as it will eventually regrow its innards.
7. _____ is an alkaloid found in plants like coffee. It inhibits the germination of other seeds in the vicinity, thus reducing competition for space and nutrients.
9. The bombardier beetle squirts boiling chemicals from its rear end when provoked. When mixed, the reactants in the chemical undergo a violent exothermic reaction, bringing the _____ of the mixture to almost the boiling point of water.
11. The pitcher plant is a _____ plant with pitfall traps that cause animals to slip into the cavity of a cupped leaf and then be drowned and dissolved by the liquid within.
13. Some plants may develop a _____ relationship with natural predators of herbivores, such as assassin bugs. The plants provide housing and exclusive food for the assassin bugs, while the bugs protect the plants from herbivores.
14. The Eurasian Roller's _____ will vomit a noxious substance on their bodies for self-defence. This not only makes them less appealing for predators, it also emits a smell to alert the parent bird to return to the nest.
15. The hagfish has an amazing ability to exude _____ when captured. When combined with water, this excretion expands to become a sticky goo, which makes the animal less appetising for the predator and aids its escape.



Answer

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20 S K U L L
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