



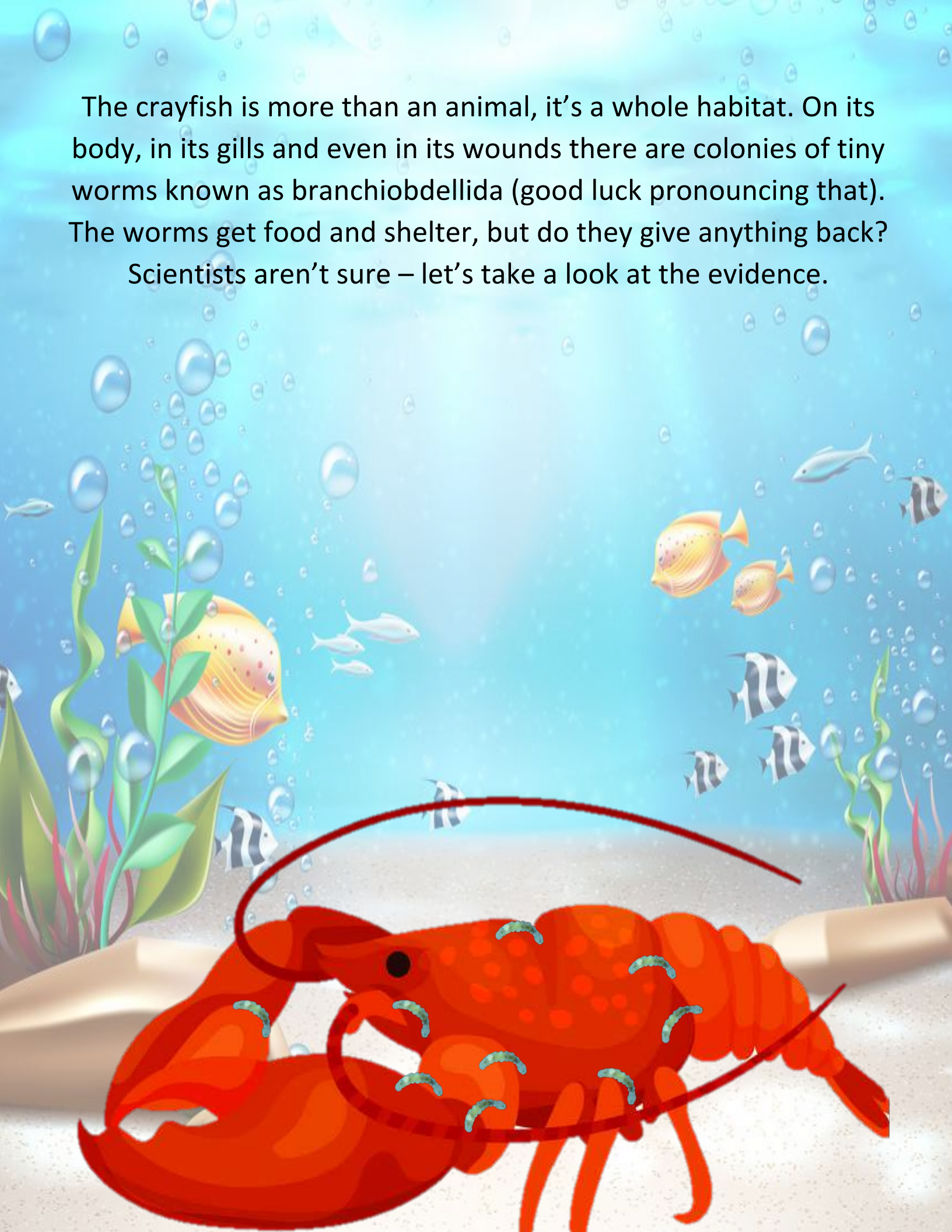
# Animal Sidekicks

## The Crayfish and the Worms





The crayfish is more than an animal, it's a whole habitat. On its body, in its gills and even in its wounds there are colonies of tiny worms known as branchiobdellida (good luck pronouncing that). The worms get food and shelter, but do they give anything back? Scientists aren't sure – let's take a look at the evidence.





## Mini Worms

Meet branchiobdellida: tiny worms who can't survive without a crayfish. These little creatures are closely related to leeches.





The illustration on the left shows one much bigger than they are in real life – some of them are smaller than the full stop at the end of this sentence.





## Take a Deep Breath

The gills of a crayfish, which it uses to breathe, are perfect homes for the worms. Some scientists think the worms eat tiny organisms and debris inside the gills, clearing them up and allowing the crayfish to breathe easier.

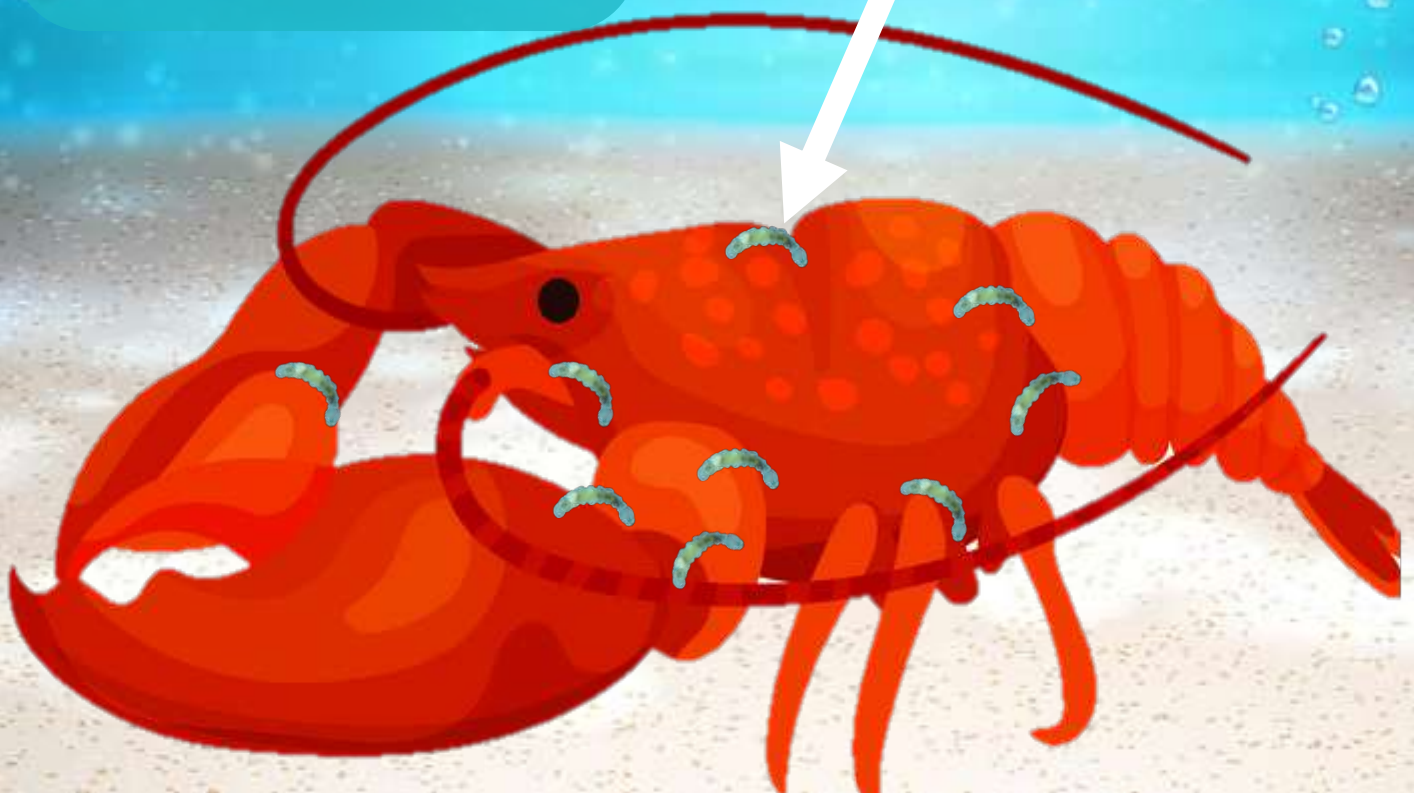




Water  
leaves gills



Water  
enters gills





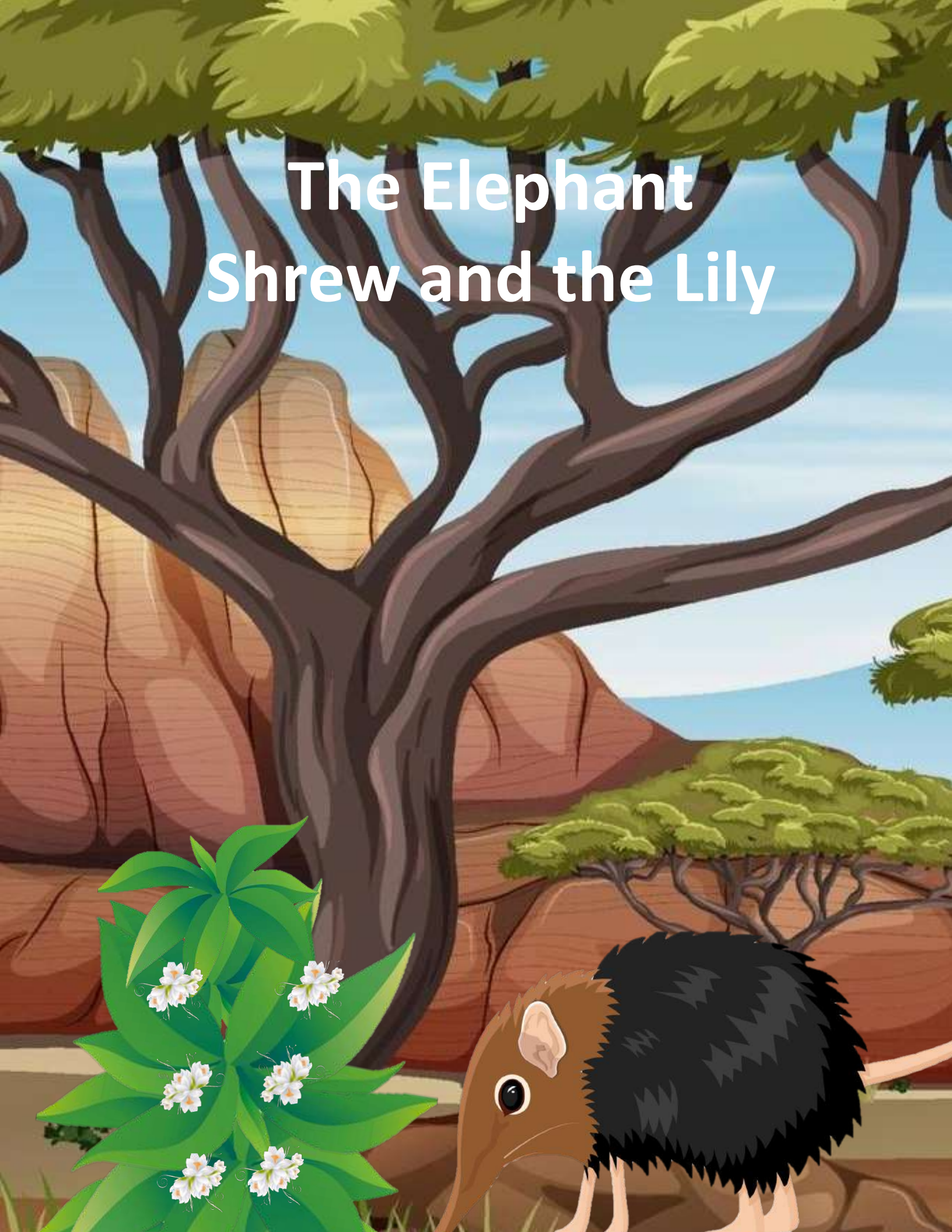
## Wounded Animal

Other researchers note that the worms enjoy living inside the open wounds of crayfish. Sometimes they feed on the crayfish's flesh, which makes it harder for the wound to heal. Do you think the worms are good or bad for their crayfish hosts?





# The Elephant Shrew and the Lily





The elephant shrew, a small mammal from Africa, shares a special relationship with the pagoda lily plant. The elephant shrew is the lily's adorable pollinator-in-chief, and the lily is the provider of the elephant shrew's favourite food in the whole wide world.





## Shrew or Elephant?

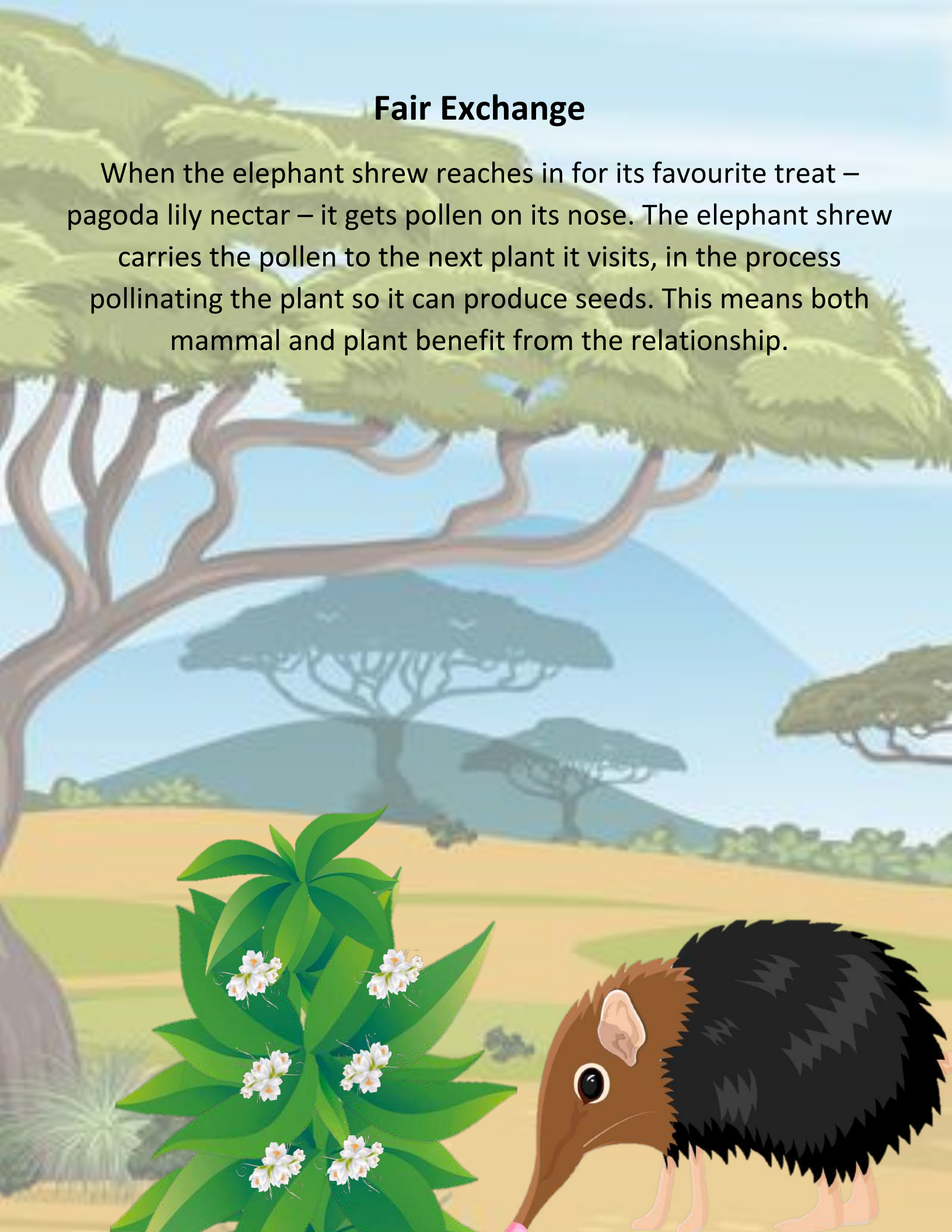
The elephant shrew got its name because its long nose reminded people of an elephant's trunk. Coincidentally, scientists later found out that this shrew-like creature isn't a shrew at all – it's actually more closely related to elephants.





## Fair Exchange

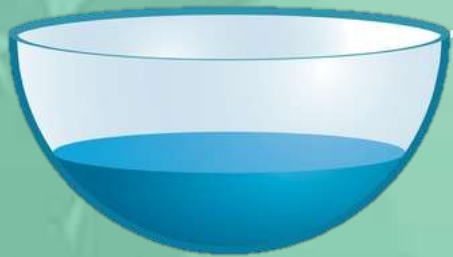
When the elephant shrew reaches in for its favourite treat – pagoda lily nectar – it gets pollen on its nose. The elephant shrew carries the pollen to the next plant it visits, in the process pollinating the plant so it can produce seeds. This means both mammal and plant benefit from the relationship.





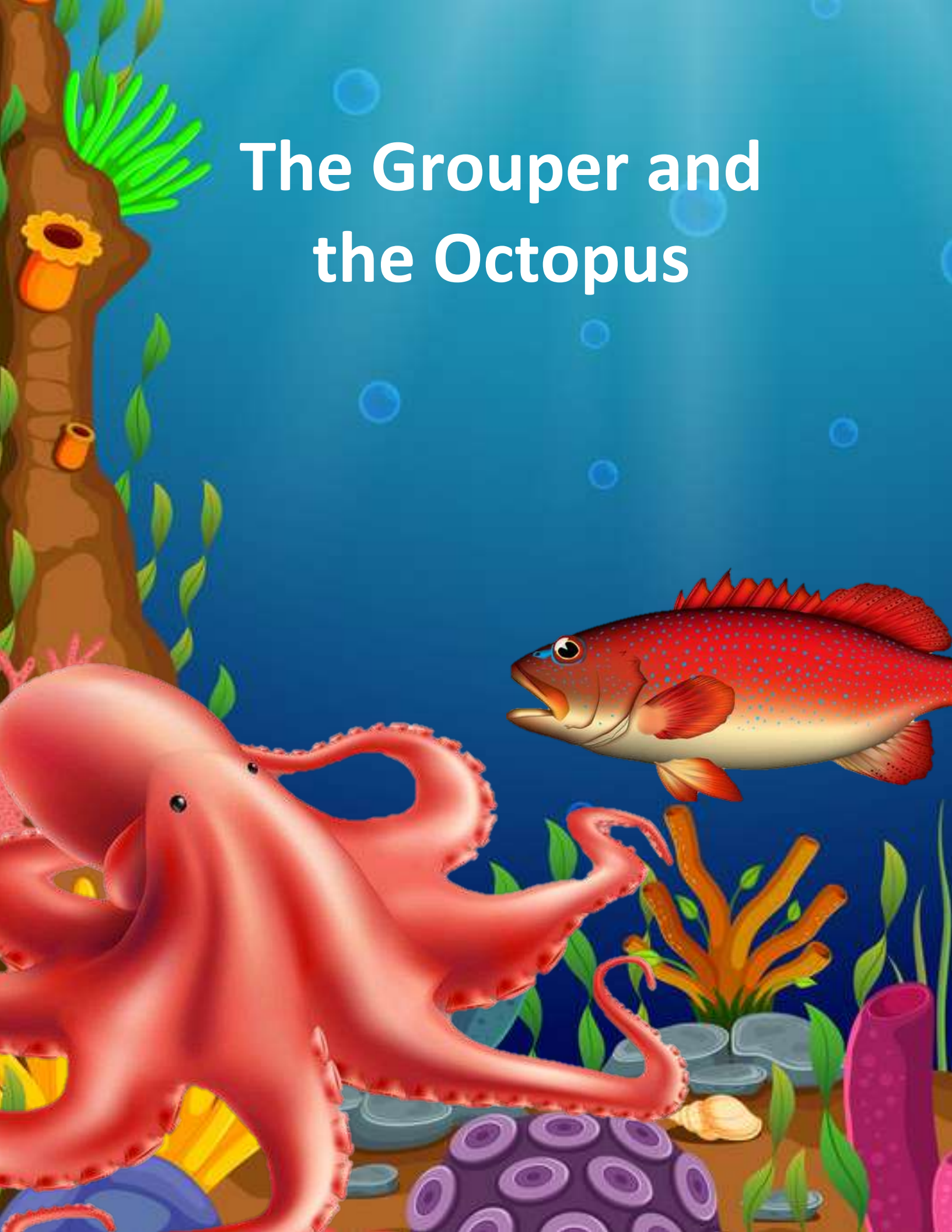
# The Best Item on the Menu

Scientists have tried to find a food that the elephant shrew prefers. They offered it water, peanut butter and apples, but it always went for the pagoda lily.





# The Grouper and the Octopus





This duo may not look like they'd be friends, but the octopus and a fish called the grouper discovered a mutual interest. Both animals love to eat fish and on this sliver of common ground a fearsome hunting party was born.



## Out and About

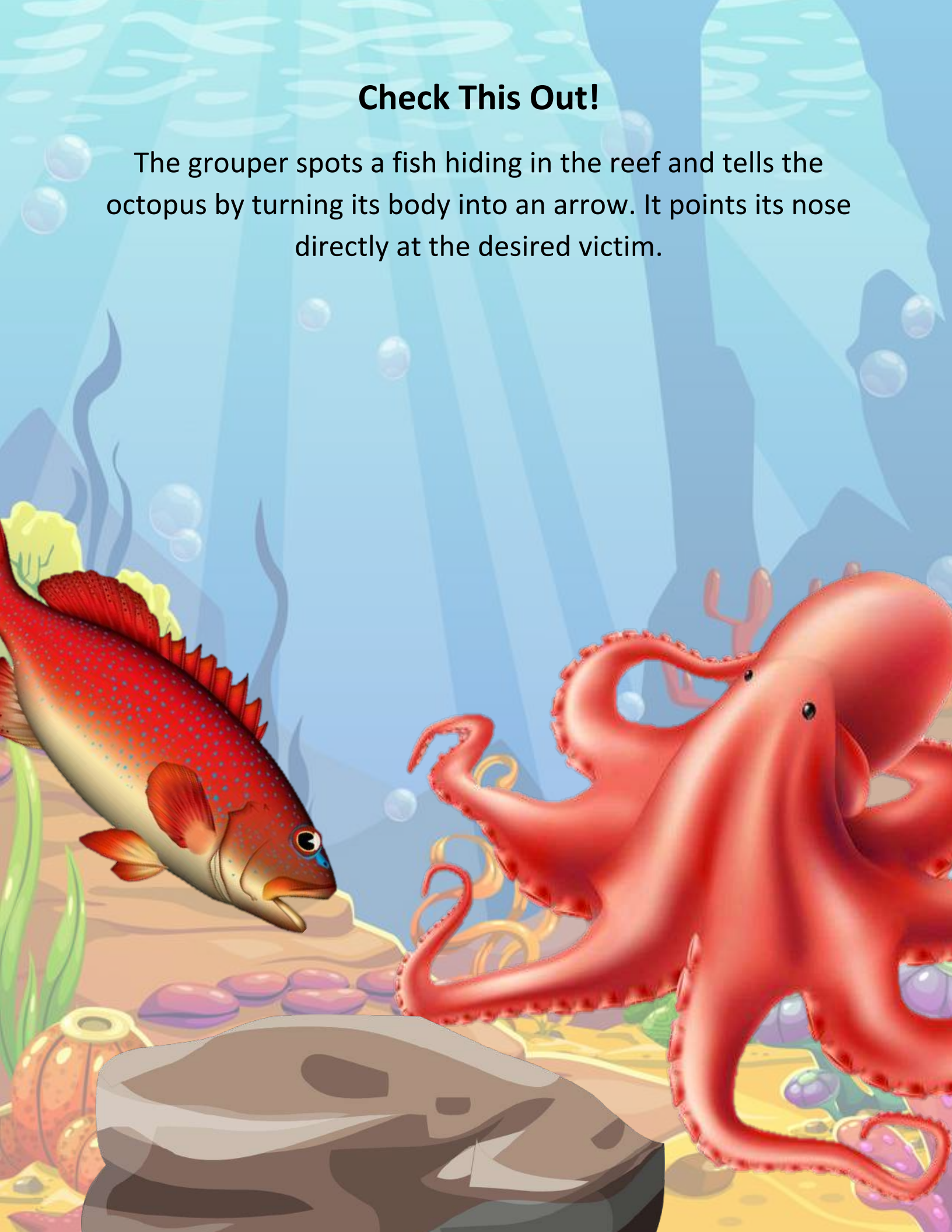
The octopus and the grouper cruise the neighbourhood, scouring the seafloor for potential prey.





## Check This Out!

The grouper spots a fish hiding in the reef and tells the octopus by turning its body into an arrow. It points its nose directly at the desired victim.



## Flush 'em Out ...

This grouper may have figured out how to point without arms, but it can't reach into crevices without the help of its octopus friend. The octopus reaches its tentacles into every entrance in the reef until the fish is scared out of hiding.

Dinner is served for the one who can catch it first.







THINK  
DIGITAL ACADEMY

