

Environmental Changes

Desert Dan

Estimated Time: 25 minutes

Age range: 3rd grade

What you need: Pencil

We are going to be helping Desert Dan the tortoise use their **adaptations!** There are **adaptations** that Desert Dan has that help him survive in the dry, hot, desert environment that is his **habitat**.



New Words

Habitat – a natural home for living things that has everything an organism needs to survive

Adaptations- specific behaviors or body parts that help an organism survive in its environment

Drought- a very long period of time where an area gets less rain than normal

As we follow Dan through his adventures below, can you help identify which of these **adaptations** will help Dan survive in each situation?

Dan is making his way across the Mojave Desert in search of something to eat. He comes across a large canyon filled with sand. It looks like many other animals have chosen to go around the pit to avoid struggling through the sand.



Mojave Desert Photo by Fred Morledge

What adaptation will help Dan make his way through the sandy canyon and how will he use it?

Dan has thick stumpy hind legs, and flattened front legs, along with sharp claws. The shape of his legs, as well as his claws, helps him walk in sand and dig his burrows.

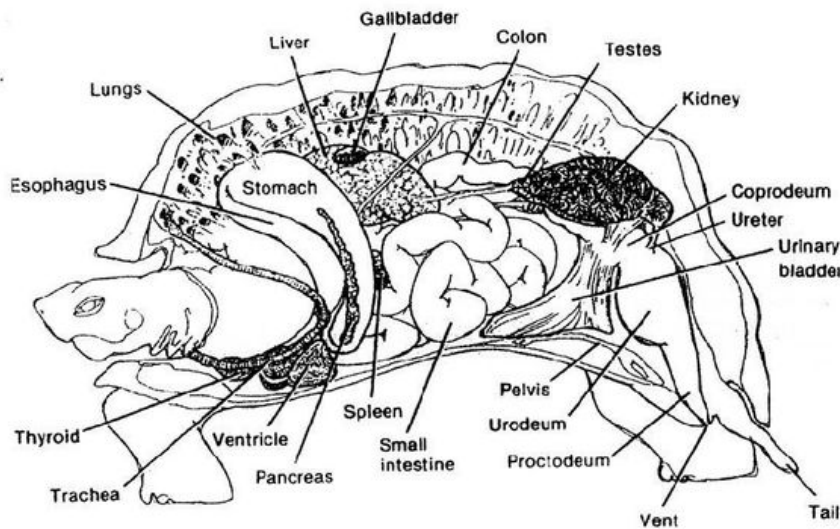


Oh no! Dan has accidentally run into a Gila monster! The lizard is mad after being woken up from his nap, and is now chasing Dan!

What adaptation does Desert Dan have that will help him stay safe from the Gila monster and how will he use it?

Dan has a sturdy domed shell, which helps hide from the heat as well as many various predators that might try to eat him.

Dan has entered the final stretch of his journey back to his burrow! The last final stretch is the driest and hottest. There is no water between his last stop and his burrow. A desert mouse has told Dan that there is an intense **drought** going on right now and that it will not rain for at least the next four days. Dan isn't worried! He has an adaptation to help with that!



What adaptation would Dan use to survive and how will it help him?

He can store extra water in his unusually large bladder, which helps him go for long periods of time without needing to drink water.

Reflection Questions:

- 1) Would you be able to survive the trek(trip) across the desert? What could you bring that would help you get across the desert and adapt to the hot, dry environment?

- 2) Do you think Dan would be able to survive in the Arctic? (a cold, icy, wet climate). What different adaptations would Dan need to survive in a cold climate? (Think about animals who live in snowy, cold areas!)

Gila monster photo by Jeff Servoss: <http://www.fws.gov/southwest/es/arizona/Reptiles.htm>