Animal Adaptations

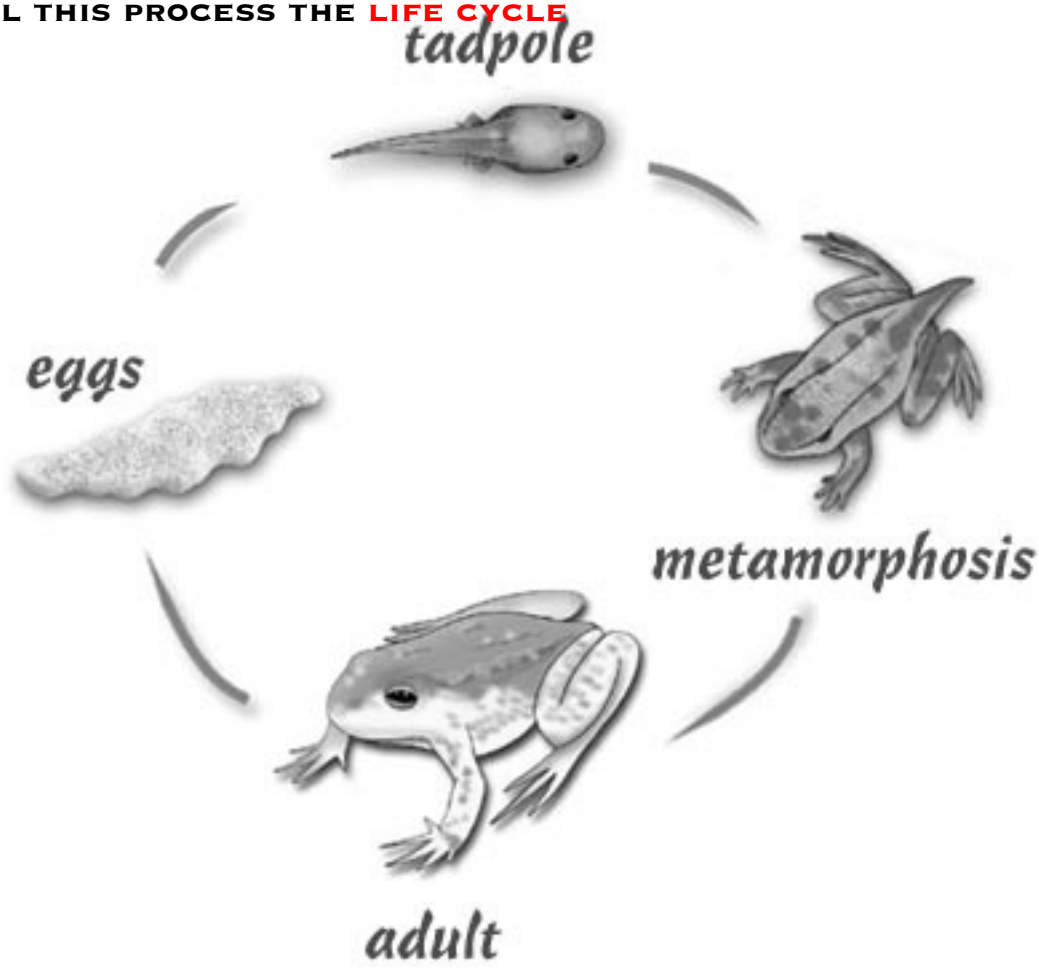
#	TERM	DEFINITION
1	Adaptation	A body part or behavior that helps an organism survive in its environment. Ex. White fur helping a rabbit blend in with the snow.
2	Vertebrate	An animal with a backbone. (Opposite: Invertebrate – An animal with a backbone.)
3	Life Cycle	All the stages an organism goes through from beginning of life to death

AMPHIBIANS

Frogs, Toads, Salamanders

Amphibians spend the 1st part of their lives, and the 2nd part on land, so they need special adaptations.

- In the beginning, Frogs live in water and need to be able to get oxygen as fish do, so they have **Gills**
- They also need to swim as fish do, so they have **Tails**
- As the frog grows older, it begins to develop **Legs** to be able to move on land, and **Lungs** to breath air
- We call this process the **life cycle**



BIRDS

Robin, Finch, Cardinal, Eagle, Hawk

- ___BONES__ ARE VERY LIGHT
- HAVE _____WINGS_____ FOR FLIGHT
- FEATHERS HELP BIRDS STAY IN THE AIR AND CHANGE __DIRECTION___
- __FEATHERS_ HELP BIRDS KEEP WARM IN COLD ENVIRONMENTS
- WATER BIRDS GIVE OFF _____OILS_____ FROM THEIR SKIN WATERPROOFING THEIR FEATHER TO PREVENT THEM FROM GETTING HEAVY WITH WATER
- WATER BIRDS HAVE _____WEBBED FEET___ THEY USE AS PADDLES TO SWIM

1_____(Water Bird, ie. Duck) strainer

2__Hummingbird/ the probe for sipping nector_

3_Insect eaters/ hammering into trees or soil

4_(Tropical Bird) fruit eaters // Birds of prey: meat eaters

5_____small birds: finch the cracker for seeds

1_____webbed/swimming_____

2_____raptor/prey____

3_____wading in water_____

4_____grasping/perching_____

REPTILES

Snakes, Lizards, Chameleons, Turtles…

- *Reptiles are covered with Scales , which help them hold in water_. This is a*
- *physical adaptation*
- *Reptiles are cold-blooded, which mean they cannot control their own body temperature as mammals do. In really hot temperatures, they are more active at night and do all their hunting then. Animals that do this are called nocturnal_.*
- *During the day, they stay in the shade like under a rock. When they need to get warm, they lay out in the _sun_. This is a behavioral_ adaptation.*

FISH

Perch, Sharks, Tuna, Beta, Salmon

- Fish live in water so they have no need for arms or legs. Instead, they have fins_ to help them swim.
- Just like other animals, fish need oxygen to release energy. However, they do not have lungs so they have gills that enable them to separate the oxygen from the water they take in.
- Some fish live in very cold water, but do not freeze because they produce a special chemical substance that prevents their fluids from freezing.
- These are all physical adaptations.

MAMMALS

Humans, Killer Whales, Dolphins, Mice, Rabbits, Horses, Dogs, Tigers, Gorillas, Chimpanzees, Bats, Kangaroos, Koala, Opossums, Bears

- **Mammal adaptations differ depending on _their type of environment_.**
- **Polar bears live in the Arctic where it the climate is very cold. Their fur appears __white despite the fact that it is really clear! It appears this way so that they blend into the snow and seals cannot see them hunting for them.**
- **Most Arctic animals have ___thick__ fur that helps hold in heat close to the skin.**
- **Whales & seals that swim in Arctic waters have a layer of fat called __blubber_ just under their skin to keep heat from escaping their bodies.**
- **Mammals in hot, dry areas like the __desert__ have adaptations too.**
- **Both jackrabbits that live in this area, and elephants that live in hot grasslands called _____savannas____ , have very large ___ears____ that flap in the wind to allow heat to escape.**
- **Kangaroo rats live these hot, dry regions as well and drink almost no water. They get all the water they need from the ____food____ they eat and their ability to conserve water.**

EXAMPLES OF ADAPTATIONS: