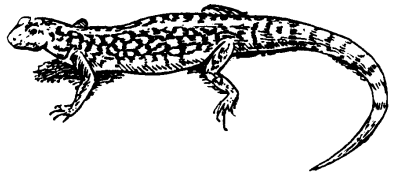
WHAT ARE HERPTILES?



1. Vertebrates are animals that have _____
2. Complete the following chart of vertebrate groups:

	SKIN COVERING?	GILLS OR LUNGS?	EGGS LAID WHERE?	ENDOTHERMIC OR ECTOTHERMIC
Fish				
AMPHIBIANS	Naked			
REPTILES				
Birds				Endothermic
Mammals		Lungs		

3. HERPETOLOGY means _____

WHO ARE HERPTILES?

1. List the major groups of herps found in the Sonoran Desert.

AMPHIBIANS

a. _____

b. _____

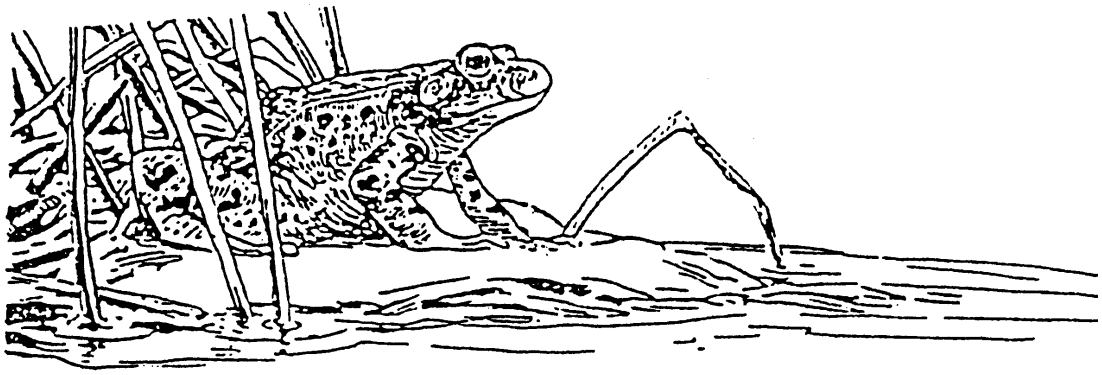
c. _____

REPTILES

a. _____

b. _____

c. _____



WHICH IS WHICH?

SKIN

1. Examine a live amphibian and answer these questions:

   a. Do amphibians have a protective covering over their skin? _____
   b. Why must amphibians live in or around water? _____

2. Examine a live reptile and answer these questions:

   a. What are reptile scales made of? _____
   b. What advantage do scales give reptiles over the amphibians?
   _____

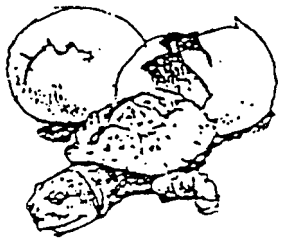
3. Examine a snake shed.

   a. Are a snake's eyes covered with scales? _____
   b. Why do reptiles shed their scales? _____

GROWING UP

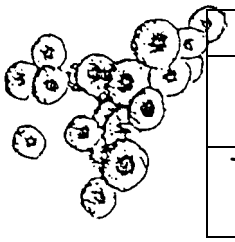
1. Compare an <u>amphibian egg</u> and a <u>reptile egg</u>.

   a. What is the purpose of the jelly-like coating around the amphibian egg?
   _____
   b. List 2 ways reptile eggs differ from amphibian eggs:
   _____

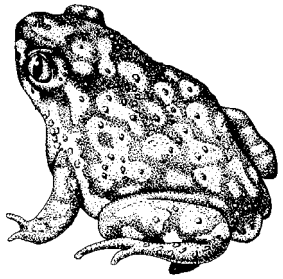


2. Compare a young amphibian and a young reptile.

   a. Which one goes through METAMORPHOSIS? _____
   b. What are larval frogs called? _____
   c. Compare a young and adult frog and circle the words that apply:



	lives where?	breathing	food	legs?	tail?
ADULT	land & water only water	lungs gills	plants insects	yes no	yes no
TADPOLE	land & water only water	lungs gills	plants insects	yes No	yes no



3. Study the life cycle of a spadefoot toad:

   a. What is unusual about its life cycle? _____
   b. Why does it develop so fast? _____
   _____

AMPHIBIANS – DOUBLE LIFE FOR LAND AND WATER

LIVING IN WATER

1. Watch a live spadefoot and salamander swim and tell which body parts are used for swimming.

   a. Spadefoot: _____
   b. Salamander: _____
   c. What is the job of the NICTITATING MEMBRANE? _____

2a. Where are the spadefoot's sense organs located? _____
2b. How is this an advantage for living in the water? _____

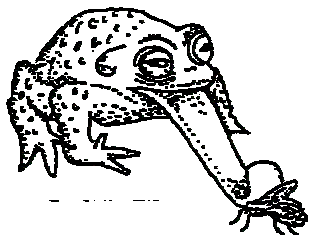
LIVING ON LAND

1. a. What does a spadefoot do when the water its living in dries up?
   _____
   b. What adaptation does it use to do this?_____
2. Where might you find you find salamanders in the Sonoran Desert?
   _____

LIFESTYLES OF THE SONORAN DESERT TOAD

1. How does the Sonoran Desert Toad protect itself from predators?

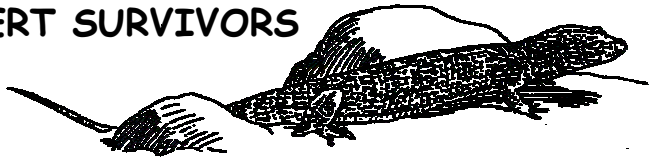
_____
_____
_____



2. What are some of the foods that it eats?
   _____

3. Describe how these bodyparts are used when a toad eats:
   a. Tongue: _____
   b. Teeth: _____
   c. Eyes: _____

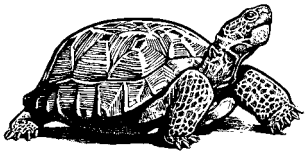
REPTILES – DESERT SURVIVORS



GETTING AROUND

1. Examine a snake, lizard and tortoise skeleton.

   a. Do all reptiles have ribs? _____ Where are a tortoise's ribs? _____
   b. What are some advantages to having clawed feet? _____
   c. What is an advantage to being legless? _____



2. a. What is a tortoise shell made of? _____

   b. Besides a shell, how else might a desert tortoise protect itself from predators?
   _____
   _____

3. Watch a live snake crawl and describe how these parts are used:
   a. Belly scales_____
   b. Body loops_____

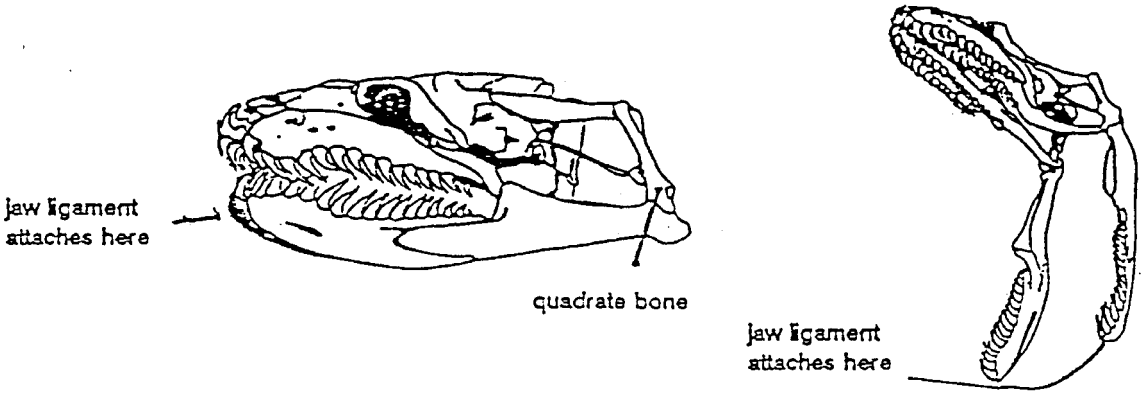
4. What senses does the snake use to find prey? _____

EATING DINNER

1. Examine turtle, lizard and snake skulls:

   a. Do turtles have teeth? _____
   b. Why are RECURVED teeth an advantage to snakes? _____
   _____

Find these parts on a snake skull:



3. How do these structures enable a snake to swallow prey whole?

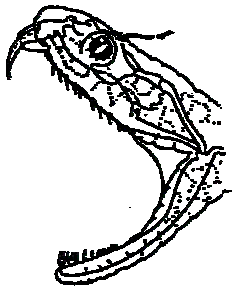
   a. Jaw ligament _____
   b. Quadrate bone _____

4. Do all snakes kill their prey before eating? _____List two ways snakes kill their prey:
   a. _____ b. _____

5. Check which of the following are advantages to using venom:

( ) Saves time and energy in killing prey ( ) No need to chase prey
( ) Prey less able to fight back and hurt snake ( ) Venom helps to digest prey

6. Observe the fangs of a venomous snake skull and describe how they work:
_____



STAYING ALIVE

1. Describe how these desert reptiles protect themselves from predators:

   a. Horned lizard _____
   b. Mountain kingsnake _____
   c. Chuckwalla or desert iguana _____

THE HUMAN CONNECTION

(When you return to school, discuss the following questions and fill in the correct answer. Some of these questions will stimulate value judgement.)

1. How is snake venom beneficial to human health?

_____

2. Are snakes a better alternative to ridding a house of rats than using poisons? Why or why not?_____

3. Groundwater levels a dropping bout 4 feet a year in southern Arizona. How might this affect a population of amphibians?_____

_____

4. Some people take reptiles from the desert to sell as pets. What do you think about this practice?_____

5. Some states hold annual "rattlesnake roundups" in which hundreds of snakes are killed. Is this practice good or bad? _____ Why? _____