

Science Standards Correlation:

SC06-S1C2-05, SC07-S3C1-07, SCHS-S3C1-05, SC07-S4C3-07, SC04-S4C4-04

HERP SURVEY: FACT OR FICTION

Instructions: Ask students to take out a sheet of paper and number it 1- 15. Read each statement to the class and ask students to write true or false on their paper next to the corresponding number. Review and discuss the answers as a class.

1. Horned lizards squirt blood from their eyes.

True. The blood comes out of a large sinus behind the eye, then spurts through a pore in the eyelid. It can squirt up to a few feet. This is used as a defense to repel foxes and other predators.

2. Some frogs eat other frogs.

True. Bullfrogs and the Brazilian horned frog are two examples.

3. Toads give you warts

False. However, toads produce toxins in the bumpy glands on their skin, which they use for defense. These toxins are mild in most species; however, the Sonoran Desert toad secretions are quite toxic. These are produced in greater amounts in the two raised parotoid glands behind the eyes, which should not be touched. It's a good idea to wash your hands after handling toads (or any animal,) especially before eating.

4. Counting the number of rattles on a rattlesnake will tell you how old it is.

False. A rattlesnake adds a rattle every time it sheds its skin. The frequency of shedding depends upon how fast the animal grows. It could shed many times in a year or only once in a few years, depending upon available food and age.

5. Some frogs produce a more powerful venom than some snakes.

True. A few tropical frogs produce very potent poisons from special skin glands, which native people use as coatings on their darts and arrows. In a few cases, these poisons are more potent than the venom of the most poisonous snakes.

6. All lizards have legs.

False. Some lizards, including the European legless lizard and California's legless lizard, lack legs. Like other lizards, they do have external ear openings and moveable eyelids, which snakes lack.

7. All lizards eat bugs.

False. Although most lizards are carnivores and eat insects as well as other invertebrates, some lizards such as chuckwallas are vegetarians and eat only plants. Gila monsters and Mexican beaded lizards eat small birds, lizard eggs, and small rodents.

8. The Gila monster and the Mexican beaded lizard are the only venomous lizards in the world.

True. The venom is used in defense and for subduing some prey. The venom glands are located in the lower jaw and venom is injected through grooves in the teeth while the Gila monster bites or chews. These Sonoran Desert natives spend much of their time in burrows and rarely bite humans unless handled or disturbed.

9. Some snakes are vegetarians.

False. All snakes are carnivores. Depending on the species, a snake's diet might include insects, other invertebrates, fish, amphibians, reptiles, birds, or mammals.

10. Some snakes eat other snakes.

True. The king snake will eat other snakes including rattlesnakes.

11. Carving into a turtle's shell can seriously harm the turtle.

True. Their shells are made of living tissue – bone, skin, blood and nerves – and if it is cut, it hurts. A cut shell allows for infections to pass into the turtle's body cavity, and this could lead to the animal's death. The shell should never be painted either.

12. Only a few reptiles and amphibians are Threatened or Endangered.

False. The U.S. Fish and Wildlife Service's "List of Endangered and Threatened Wildlife and Plants" lists more than 100 species of herps as endangered or threatened. The desert grassland massasauga is Arizona's only Endangered snake. However, several other species of native amphibians and reptiles are listed as "candidates" of concern due to population declines.

13. Most kinds of herps become endangered because people kill them for food and other products.

False. These things do endanger some herps, but habitat loss and habitat fragmentation is the most serious problem endangering wild animals and plants.

14. Lizards and snakes are slimy.

False. Reptiles have dry, scaly skin. Many amphibians are slimy.

15. Reptiles and amphibians are scary and creepy.

There is no right or wrong answer here. Many people feel that herps are ugly, frightening, weird, etc. But negative feelings tend to subside once people learn more about these and other "scary" animals.

