

Student Worksheet ANSWERS Taipan Level

Name:

The answers can be found by exploring the dome, watching the snake show, and using your brain!

SAFARI ROOM (located in the center of the Skydome)

- 1. What is the scientific name of the ornate box turtle? Terrapene ornata
- 2. Compare and contrast the tortoises vs. the turtles in this room. What's different or the same about their shells, legs, and heads? The tortoises, adapted to live on land, have stumpy legs, higher domed and heavier shells, and blunt heads. The turtles, better suited to life in the water, have webbed feet with long claws, flatter & lighter weight shells, and more streamlined heads. Both types have shells, beaks, and scaly legs.
- 3. Is there a food web in this room? Draw a food web with at least 6 Safari Room organisms in it. (PS you might not see them, but there are crickets) Many possible answers

MEZZANINE (upstairs level of the Skydome)

- 4. Where is the Anaconda native? How about the King Cobra? <u>Anaconda: tropical South America</u>. King Cobra: Southeast Asia, India, China
- 5. Why do you think very large snakes occur in the tropics, but not here in the Midwest?

 (Answers may vary, there is no direct answer written in the displays) In tropical areas,
 the temperature is higher (and stays so year-round), which can support larger snakes –
 as ectotherms, they need to get their heat from the environment, and larger things take
 longer to heat up (like in a microwave). In the cooler Midwest, a very large snake
 wouldn't be able to maintain an optimum temperature and would survive poorly. An
 abundance of prey in tropical areas may also play a role.
- 6. How long can the fangs of a Gaboon Viper get? Up to 2 inches long
- 7. What is strange, and useful, about the eyes of the Asian Vine Snake? <u>It has horizontal</u> pupils. Combined with its head shape, it allows to snake to see with binocular vision (like humans). It may have the most acute vision of any snake.
- 8. What is the maximum length of a Black Mamba? 11 feet long
- 9. List 3 native South Dakota snakes that are on display: <u>Our display may include the Prairie Rattlesnake</u>, <u>Bullsnake</u>, <u>Smooth Green Snake</u>, <u>Eastern Yellow-Bellied Racer</u>, Wandering Garter Snake, Plains Garter Snake, and Pale Milk Snake

LOWER RING (downstairs level of the Skydome)

- 10. How toxic is the venom of the black widow compared to the venom of most rattlesnakes? It is about 15 times more toxic than most rattlesnake venom
- 11. Where in the world could you find a two-toed amphiuma? The southeastern US
- 12. How long can Cuban crocodiles get? 12 feet

- 13. Prior to the development of antivenom, what percentage of Death Adder bites in Australia were fatal? 50%
- 14. What is the largest freshwater turtle in the US? Alligator snapping turtle
- 15. Maniac, the Australian Saltwater Crocodile, is currently estimated to weigh 1250lbs. Our young American Alligator, named "Fluffy," weighs about 2 lbs. How many Fluffies would it take to weigh the same amount as Maniac? 625 Which would you rather have chasing you, 625 Fluffies or one Maniac? A compelling argument could be made either way, though I'd personally take on the Fluffies.

SNAKE SHOW

- 16. Why do snakes flick their tongues in and out? Snakes use their tongues for smelling.

 They capture particles in the air, then bring the tongue into the mouth, where the roof houses the Jacobson's (or Vomeronasal) organ, which can "smell" those particles. As far as why they are forked, the presenter may or may not mention it, but it can help the snake decide which direction to move in. If one side of the fork has more mouse-scented chemicals than the other, then their prey is likely in that direction.
- 17. How do you think rattlesnakes can benefit humans? They eat a lot of rodents, which helps with pest control, since rodents can damage crops and spread disease. Snake venom is also turning out to be helpful in developing drugs to combat certain diseases and maladies.

18. TRUE OR FALSE

- a. All snakes are carnivores. TRUE
- b. Cobras have excellent hearing. FALSE
- c. Prairie rattlesnakes can get up to 12 feet long. FALSE
- d. Some snakes can swallow prey bigger than their heads. TRUE
- e. Snakes that have round pupils are nonvenomous. FALSE

BONUS QUESTION: VERY HARD!!!

What kind of snake is good at math? An Adder!