

Plants and Animals- United They Stand, Divided They Fall Worksheet

Group Names:

Hour:

Directions:

- You have been given the task to design a zoo exhibit for an animal. First, you will learn about how zoos design exhibits and then you will research an animal to learn about their needs. Based on this information, you will design and draw a floor plan of an exhibit for the animal that you researched.
 - Two useful web sites for exhibit designs are:
 1. Minnesota Zoo Information on Designing a Zoo Exhibit Using Tigers:
<http://www.mnzoo.com/education/ticadventures/handbook/c1.htm>
 2. Information on Exhibit Design from the San Francisco Zoo
<http://www.sfzoo.org/education/pdf/ZDLP.pdf>
 - If desired, you can access other sites also using a search engine.
- A. Notes on Zoo Design-Record information from the above websites under to correct label below.
1. Size

 2. Visibility

 3. Security

 4. Environment

 5. Care

B. Next, your small group will pick an animal. Choose from the following animals:

- 1) White-Cheeked Gibbon
- 2) Komodo Monitor
- 3) Ring-Tailed Lemur or the Red Ruffed Lemur (These are at the same location.)
- 4) Sun Bear
- 5) Tree Kangaroo
- 6) Clouded Leopard
- 7) Amur Tiger

The animal we have selected is a _____

C. Use the Minnesota Zoo information and other internet sites to determine the needs of the animal you selected. The Minnesota Zoo web address is http://www.mnzoos.com/animals/animals_a-z.asp
Search for the animal using the A-Z list. Be sure to click on the “more information icon at the bottom of the first page of information on the animal.

1. What does the animal eat and how does it get its food?
2. Does the animal live and/or hunt in groups or alone?
3. How large does the exhibit need to be to allow for movement, feeding and exercise based on its natural territory? (Use the zoo design information and the natural habitat information to estimate the amount of room the animal will need.)
4. In what ways does the animal use water? What are the accommodations for this need?
5. Does it need special nesting and/or sleeping areas?

6. Is the animal dependent on any plants for survival?
7. Does it need plants or tree limbs?
8. Does the animal need special features to raise its young?
9. Does the animal need shelter or camouflage from plants?
10. Does the animal have any special adaptations that need to be accommodated (e.g. arboreal animals being provided trees to climb in)?
11. What climates can the animal survive in? Could it survive a Minnesota winter outside?
12. How will animal wastes be managed?
13. How will you encourage animals to be seen by visitors?

D. Now you are ready to design the exhibit for your selected animal by:

- 1) Creating the exhibit layout including the four basic requirements for animals and sanitation needs.
- 2) Making sure the animal is unable to escape from the exhibit.
- 3) Allowing zoo keepers to tend to the animal.
- 4) Providing for the vegetation requirements for the animal.
- 5) Adding important features the animal would need based on the answers from above.

Draw your sketch on a separate piece of paper. Have another group check to make sure you have included to the above requirements. You should keep your sketch and worksheet so you can bring them to the zoo and compare it to the actual exhibit at the zoo.

