



NAME _____

Directions: In order to complete some of these problems you may need to visit the exhibit at the Minnesota Zoo or research the information. If you are creating a table or graph, be sure to include titles and labels.

TROPICS TRAIL

1) Gibbons are a type of ape with extremely long arms. They move through the tropical forest 100 feet above the ground by swinging from branch to branch.



a. If one story in a typical building is ten feet high, how many stories off the ground do the gibbons live in the wild?

100 FEET / 10 FEET/STORY = 10 STORIES

b. With each swing a gibbon can travel as much as 30 feet. How many swings would one have to make to travel one mile?

(1 mile = 5280 feet)

5280 FEET / 30 FEET/SWING = 176 SWINGS

2) Look at the sign for the Malayan Tapir. The term 'gestation period' means the length of time it takes a baby to develop inside its mother.

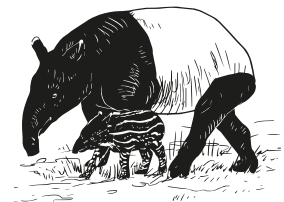
a. What is its gestation period?

13 MONTHS _____

b. The tapir's gestation period is what percent of a human's gestation period?

13 MONTHS / 9 MONTHS = 1.44% _____

c. Given that the adult female can weigh **800LBS** lbs and the tapir calf can weigh **20** lbs at birth, we can say the tapir calf is **2.5** % of mother's weight.





NAME _____

DISCOVERY BAY

- 1) In the Shark Reef, look for a Sand tiger shark. As it swims with its mouth open it displays roughly 94 teeth in about 5 rows of teeth. How many teeth are in one upper row of teeth?

94 / 5 = 18.8 OR APPROXIMATELY 19 TEETH



- 2) Sea turtles are ocean migraters. They travel long distances between their feeding grounds and their sandy nesting beaches.

a. How many miles does the green sea turtle travel to its nesting beach?

1200 MILES _____

b. Circle the city we would need to travel to that would equal this distance.

New Orleans, LA=1226 miles
 Chicago, IL=406 miles
 Fargo, ND=234 miles

- 3) Hawaiian monk seals are air breathing mammals but can stay underwater for a long time while sleeping.

a. How long can they stay underwater for?

20 MINUTES _____

b. How long can you hold your breath for?

ANSWERS WILL VARY. MOST STUDENTS ARE UNDER A MINUTE _____

c. How many times longer can a Hawaiian monk seal hold its breath than you?

20 TIMES LONGER _____



NAME _____

MINNESOTA TRAIL

- 1) Raccoons are curious, clever, nimble and adaptable, and eat just about anything. As they prepare for the winter months, they can store 1/3 of their body weight as fat.

If a raccoon weighs 18 lbs, how much fat can they store for the winter months?

18 X 1/3 = 6 LBS.

- 2) The black bears hibernate for 7 months. In the wild they can live 20 years. How many months do the black bears sleep in their lifetime? In years?

7 MONTHS X 20 YEARS = 140 MONTHS

140 MONTHS / 12 MONTHS/YEAR = 11.66 YEARS

- 3) There are 8 species of bears worldwide. Black bears are a medium size bear.

a. Look for the scale in the black bear den and record what black bear you most closely match.

ANSWERS WILL VARY. MOST STUDENTS ARE ABOUT THE SIZE OF A SMALL ADULT FEMALE

Cub Yearling Small adult female Small adult male Large adult female Adult large male

b. So what would be the weight of that bear in that stage of its life?

50-100 LBS

c. Given a young black bear cub weighs only 3 lbs at birth, how many more pounds does it need to gain to match your weight?

ANSWERS WILL VARY BUT RANGES MIGHT BE 47-97 LBS





NAME _____

NORTHERN TRAIL / RUSSIA'S GRIZZLY COAST

1) Playful sea otters thrive in the frigid waters of the Pacific Ocean. Sea otters survive the cold and wet with dense fur and active lives fueled by large amounts of seafood.

a. What percentage of their body weight do they consume daily?

_____ **1/4 OF THEIR BODY WEIGHT** _____

b. If you had a sea otter's diet, how much would you consume daily?

_____ **ANSWERS WILL VARY BUT SHOULD 25% OF THEIR WEIGHT** _____

c. If all you ate were quarter pound hamburgers, how many would you eat daily?

_____ **ANSWERS WILL VARY BUT SHOULD BE 4 X WEIGHT IN PREVIOUS ANSWER.** _____



2) Amur leopards are powerful hunters. They rely mostly on small deer (sika and roe) for food. They carry their kill to a high point for safe storage. One carcass can feed an adult most of a week.

a. An Amur leopard can lift a _____ **150** _____ lb. deer _____ **15** _____ feet up a tree.

b. What is the average weight of an Amur leopard?

75 LBS + 155 LBS / 2 = 115 LBS

c. Is the deer lighter or heavier than the average weight of the leopard?

_____ **HEAVIER** _____