Directions: Answer the following questions using the information provided. Show your work. If additional space is needed, please attach a separate piece of paper and correctly identify the problem it correlates to. If you are creating a table or graph, be sure to include titles and labels.

1) Many animals are active at night and sleep during the day. They are called nocturnal animals. Since zoo visitors do not want to watch animals sleep, we must design an exhibit where it is light at night and dark during the day.

   a. Zookeepers turn on lights so that the animals think that it is daytime at 11:00 at night and turn them off at 9:00 in the morning. There are two clocks below. Show the times that the lights need to be turned off and turned on.

      ![Clocks](image.png)

   b. How many hours are in one day?

      24 HOURS

   c. How many hours of pretend daylight will the animals have?

      14 HOURS

   d. How many hours will the animals spend in the darkness at this exhibit?

      10 HOURS

2) Most of the animals at the zoo sleep at night in their own special holding area (like a bedroom). We have two boy and three girl Amur Tigers. How many sleeping areas do we have for the tigers?

   5
NAME _____________________________

3) The temperature in the tropics area never goes below 72 degrees.

![Temperature Gauge]

a. Find out what the temperature is outside right now.

**ANSWER WILL VARY**

b. Is it higher or lower than the temperature in the tropics exhibit?

**ANSWER WILL VARY**

c. What instrument is used to measure temperature?

**ANSWER WILL VARY**

4. The Coral Reef tank has a huge window that is 6 inches thick and 55 feet long. How many people could stand in front of the window and watch the fish if there were 4 people standing for every 10 feet of window? Use this picture to help you solve the problem by drawing a line for each person. Then count the total number of lines!

**52**

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