

What you have to do at the zoo can be summarized as follows; you must see the detailed instructions on the next pages for more info about each step:

BE PREPARED: STUDY instructions and readings **BEFORE** you go. **Allow 4 hours** at the zoo. **You MUST bring and use an audio recorder – tape or digital;** practice using it first. Be serious about what you are doing -- this is not a recreational event.

SUMMARY OF WHAT TO DO AT THE ZOO:

Get a Zoo Map from the information station (# 29 on map: Gateway Pavilion); you can get a map in advance from the zoo web site.

RECORD time, date and weather when you arrive, and the time of day and length of time during which you make each observation.

PART 1: Go to Helen Brach Primate House (# 6 on map: “Monkeys”)

A. Choose ONE species of New World Monkeys, describe them and do a 10 minute unstructured observation of that troop, looking particularly at locomotion and feeding

B. Choose ONE species of Old World Monkeys, describe them and do a 10 minute unstructured observation of that troop, looking particularly at locomotion and feeding

PART 2: Stay in Helen Brach Primate House

A. Describe the gibbons & identify/distinguish all the members of troop

B. Observe that troop in detail, using a scan survey for 30 minutes

C. Write your conclusions about your scan survey

PART 3: Go to Regenstein African Ape Center (# 13 on map, “Chimpanzees, Gorillas”)

A. Tour the inside quickly, and study the signs. (Not to be a part of written report)

B. Choose an active troop and do a 20 minute focal animal study of one individual ape, looking at feeding, locomotion, social interactions, and special senses, too

MOST OF YOUR WRITTEN REPORT SHOULD CONSIST OF YOUR OBSERVATIONS AT THE ZOO OF THE ANIMALS THEMSELVES

The primary criteria for grading your written reports are the completeness, quality and detail of your descriptions and observations (can I visualize the animals and activities you are talking about?), and how well you followed the instructions; clarity of writing, use of formal English grammar, and correct spelling are expected. Neatness and appearance count, so that typing the report and organizing the material both help your grade, but photos and other inclusions (such as Xeroxed pictures and website printouts) are optional and add very few points. I caution you: **DON'T STUDY AN OLD ZOO REPORT;** these instructions are quite different from any previous ones, even the animals are new.

Before you head for the zoo, be sure to read the entire instructions, including the preliminary stuff and the “how to write it up” stuff.

Written reports are DUE Tuesday July 22, 2008. You must hand in your tapes and field notes with your report. Do not put your name anywhere on your report or tapes, use your student ID number instead so I will not know whose report I am reading. Put everything in a large brown envelope with your ID # on the outside.

YOU MUST GO TO CHICAGO'S LINCOLN PARK ZOO -- 2200 North, in the park just across Lake Shore Drive from Lake Michigan (about 3 miles north of the Loop and just south of Fullerton Ave); more info at: <http://www.lpzoo.com>. (This zoo report instruction book is on the web with live links at: <http://www.iun.edu/~anthronw/ZOO.htm>). It gets really crowded in and near the zoo on warm weekends. Weekdays can be much less crowded, so go on a Monday, Wednesday, or Friday if you can. The zoo is open every day from 9:00 am to 5 pm; the buildings that house primates don't actually open until 10:00 am and close at 4:30 pm. Certain weekend days have later closing times. Admission to the zoo is free, but parking is about \$20 per car in the lot along the east side of the zoo, accessible from a stoplight on Fullerton Ave. There is a smaller lot that is on Stockton, the street that is the western border of the zoo, just south of Fullerton and may be marked "Nature Museum" and is a bit cheaper. If the main parking lot is full, there are two larger lots on Stockton about a half mile south of the zoo. Best chance for free parking is on the north-south streets such as Stockton or Lincoln Park West (both just west of the zoo), or Lincoln Ave or Halsted St, a half mile to a mile west of the zoo. Because the parking is shared with beach and event traffic, I highly recommend you take the South Shore, or even park at a Metra station in Illinois and take that train. <http://www.metrarail.com/>

DRIVING DIRECTIONS (allow one hour from the IUN campus):

A) Basic route: Follow I-80/94 westbound into Illinois, then stay on I-94 north/west (Bishop Ford/Dan Ryan). Note that the ramp to I-94 has been moved a couple of miles to the east from where it used to be; in fact it is right after you cross the state line into Illinois and before the Torrence Ave exit. On the way in you can listen to am radio 780 for traffic reports every 10 minutes; if the westbound traffic on I-80/94 (or northbound on the Ford or Dan Ryan) is heavy, or you live near East Chicago, you might want to consider the I-90 Indiana Tollway/Chicago Skyway route, it costs \$3. Either way you end up northbound on the I-90/94 Dan Ryan Expressway. Stay on I-94 three miles past downtown Chicago and exit at Fullerton Ave; go east two miles to the zoo. As you pass the Zoo on your right, turn right into the parking lot (if you miss this turn, you'll end up on Lake Shore Drive, and if you miss Lake Shore Drive you will be *in* the lake). When you leave the zoo parking lot after your visit, follow the signs to North Ave, and take that west to I-94. Bring a Chicago and vicinity map in case you get lost. (Remember, in Chicago the lake is always to the east.) If Fullerton Ave is backed up as you get to the DePaul University area, I suggest you park wherever you can and walk to the zoo, it is less than a mile; or if you see one of the free Chicago brown trolleys, that will take you to the zoo.

B) Faster route: If you are familiar with Chicago, you can save a few minutes coming and going with the following shortcut: before you get to downtown Chicago on I-90/94 Dan Ryan, exit I-55 North and take it a mile to Lake Shore Drive northbound; go four miles to Fullerton, exit (turn left at the light at the end of the ramp) onto westbound Fullerton, then turn left at the first traffic light into the parking area. When you leave the parking area after your zoo visit, you have two choices: 1) go west for a block and take Stockton back north to Fullerton, and turn right and take Lake Shore Drive south to I-55, which brings you back to I-94; or 2) go west at the zoo exit and follow the signs to North Ave, and take that west to I-94. Do not use this route before Monday July 6 because of Taste of Chicago, and do not use it after 12 noon on any Saturday or Sunday, and the exit at Fullerton will be way backed up.

C) "Avoid the Dan Ryan" route: An alternative route that I often use is to follow US 41, which becomes Lake Shore Drive and goes right to the zoo, a beautiful view of the lake and good if you hate the Dan Ryan; it usually adds about 20 minutes to the trip, but might be faster if the Ryan is backed up. US Rt 41 is slow going thru Hammond, so what I do is take Cline Ave (Rt 912) to Rt 41 Calumet Ave North before the state line and pick up US 41 there. Or take the Indiana Toll Road to the Indianapolis Blvd Rt 41 exit. In any case follow Rt 41 north all the way to Fullerton Ave and zoo. Exit and turn left onto Fullerton, left again into the parking lot as in B) above.

D) Public transit: You can get to the zoo by taking a South Shore Line train to Randolph Street Station in Chicago and taking the CTA #151 Sheridan Road bus right to the zoo. The bus stops near the corner of Michigan Ave & Randolph St near an exit from the South Shore station; ask the Metra

staff if you do not see a sign during station construction. Call 1-888-968-7282 or 1-312-836-7000 for route, schedule, and fare info; or web sites with maps at: <http://www.transitchicago.com/> and <http://www.nictd.com/>. The train/bus takes maybe 1½ hours each way as opposed to one hour driving, but it is a pleasant trip and you can study on the train, and there will be no parking hassles. South Shore has a weekend excursion fare.

THE PURPOSE of your visit to the zoo is to acquire a general familiarity with the Order Primates as well as to learn OBSERVATION, the principal research method of anthropology and all other sciences as well. Going to the zoo sooner will better prepare you for the class sessions and give you more time to write up the report, but waiting longer will give you more time to study the books and become fully prepared for the zoo observations, so it is up to you. Take notes by speaking into the tape recorder about what you see, as well as getting the names of the primates and other info from the signs by reading them aloud. You may want to write down the species names to get the spelling right. You can bring picture books to help identify primates, especially the *Monkeys & Apes* book. All of you should be able to tell primates from other animals, and the four kinds of primates from each other.

Be familiar with the FOUR major groups of non-human primates before you go to the zoo: Prosimians (and the similar tarsiers), New World monkeys, Old World monkeys, and Apes.

IN ANY CASE DON'T GO TO THE ZOO UNTIL you have studied all of the reading assignments about primates in the textbook, the *Monkeys & Apes* book, and the 08/09 AE book. Don't forget to carefully read all of this instruction booklet before you go, especially the part at the end about writing it up. You may also want to look at some detailed primate picture books before your trip; Time-Life Nature and other picture books are easy to find at local libraries, and there are several on reserve in the IUN library under *Mucci*, including the big one by Rowe that I use for illustrations in class. If you go unprepared, you won't come back with enough observations to write a good report. Get to the zoo early enough in the day so that you won't feel rushed and thus can enjoy yourself. The primates are now fed several times a day, so you can see some activity around these times; they tend to nap out for a while after eating, so you may have to come back later in the day to see those particular animals active. But they don't feed all the species at once, so observe others at that time. When you get tired and/or hungry yourself, TAKE A BREAK and your energy will return — the most common flaw I see in papers is that many start out fine, but they have very little on the apes because the students were getting pooped out. In any case, if you become tired, do rest, eat, or do something else for a few minutes. Another hint: if you bring family members or a date or friend along, be sure they will leave you alone so you can get your work done; better yet, put them to work taking pictures--see below.

It will take FOUR HOURS at the zoo to study the primates; it will take LONGER than that if you are not prepared. Get there EARLY (before eleven am) so you can find a close parking place and avoid the crowds in the buildings, as well as not feel rushed to finish before they close. You can buy food at the Park Pavilion in the center of the zoo (it's actually the old reptile house); it's like a food court in a shopping mall, with several food stalls.

WHAT TO BRING: Money for parking and food, and some extra just in case; a Chicago area map in case you get lost; lunch and snacks if you don't want to be caught without food or pay Chicago prices; paper and pencils; a watch; picture books and the *Monkeys & Apes* book; binoculars are useful, too. **I require that you bring an audio tape recorder or digital recorder,** as it is the only practical way to record your observations; you can take "notes" while keeping your eyes on the animals and even read the signs into the mike. Tape recorders that use full size cassettes (music size) work better than ones that use microcassettes. If there is a choice, use the *faster* tape speed; it uses up more tape, but the playback will be clearer to hear. Various digital audio recording devices work fine too at music sampling settings; then you can give me a CD-R. If you don't have your own portable tape recorder, we have set

it up so that you can borrow one from the IUN Department of Sociology & Anthropology Main office in Lindenwood 214; bring a \$20 cash deposit between 9 am and 5 pm any day Monday thru Thursday and until 2 pm on Friday and show secretary your student ID, and she will issue you one, and refund your \$20 when you return it. You have to provide your own batteries and tapes. Be sure to test the recorder and practice with it before you go to the zoo so you know how it works, and bring lots of spare batteries and tapes; also replay the first few things you record while at the zoo to be sure you are using it properly.

Learning to use the audio recorder is part of the assignment; reports submitted without sufficient data on tape lose lots of points! If you want to bring a camera, be forewarned: DON'T EVER USE FLASH; it is very upsetting to the animals and your pictures will be ruined by reflections from the glass anyway. (Don't tap on the glass, either; remember we are guests in their house.) Digital cameras work best in these conditions. Most automatic focus cameras will be fooled by the glass in front of the cages, so the glass will be in focus and the animals not. For film cameras, I suggest a fast film (high ASA number like 400 or 1000), a Zoom lens with a polarizing filter, and a steady hand (or if you bring a friend, bring a photographer type). Sometimes a rubber lens shade can be pushed right onto the cage glass. But do remember to spend most of your time on observations, not photography, as pictures are not required and don't really add points to your paper – the purpose is so you can look again at the animals you observed while writing up the report. Some students who have the skills have used a video camera with great success, especially for viewing locomotion; but you still have to record your spoken observations, too, so talk into the mike while shooting — then you won't need an audio tape recorder at all. If someone else is doing the video for you, you will still need to record your notes on an audio recorder. It is worth the trouble to use a video camcorder ONLY IF: 1.) you are already very familiar with using it (otherwise you will waste too much time fumbling), and 2.) you also go back over the tape at home to “re-observe”. **You must hand in all tapes or CD's and field notes with your paper.**

DETAILED INSTRUCTIONS: The assignment has specific instructions; these instructions may seem overly long, but they will tell you exactly what to do, along with some helpful hints gained from my 25 years of experience in sending students to the zoo. I do expect you to consider all of the topics as you look at all of the species of primates at this zoo, but obviously your observations cannot encompass all possibilities; you will only have time to observe and record a few species in great detail. Even then you will have to rely on your own preparation and judgement – to determine what to observe, audio record, and later write down. You may go in groups and help each other out, but your written report must be ENTIRELY YOUR OWN WORK and based on YOUR OWN OBSERVATIONS and recordings. I require that if you go with another student(s), **you must not make the same observations at the same time** (either choose different species or rooms to observe, or do the parts in different order — what I do not want is two students observing the same animals at the same time). Reports similar to those of others are scrutinized carefully; to plagiarize is to fail. **Looking at old zoo reports is not recommended**, as these instructions are completely new this semester and there are a lot of new animals; in addition they are platooning some animals on and off of display -- you will see different animals if you go on different days, or even from morning to afternoon. If you really cannot go to the zoo in the next few weeks, see me to get an okay for a late paper, then study up on primates and try to go to the zoo before the mid-term exam, or see me and we will arrange an alternative library project for you — but library papers are more work, less fun, and you won't learn as much. I suggest — but do not require — that you do the parts in this order if possible (that is, if the animals are active and you came by yourself); if you actually conduct your observations in a different order, you still must write up your paper **IN THIS ORDER WITH THE PARTS NUMBERED LIKE I HAVE**; I will be able to tell your actual order from the times you have recorded for each observation.

AT THE ZOO: DETAILED INSTRUCTIONS

Get a Zoo Map from the information station that is near the east entrance, by the parking lot (# 29 on map: Gateway Pavilion); if you park on the street or arrive by bus, it is only a short walk from the west entrance to the east gate. You can get a map in advance from the zoo web site.

Then record the time, date, and weather conditions to make this a scientifically useful observation (I learn a lot from reading them), and include that info in the first part of your written report. (Also tell me which other students you came with!) Don't be afraid to ask questions of the zookeepers and docents and the "regular" visitors throughout the day; include and identify any useful information that you get from them.

NOTE: There are four buildings at the zoo that house primates, but you will only visit two for this project. If you have time, you may want to visit the primates at the Regenstein African Journey, (# 4 on the map); they are in the first couple of rooms there. Even better is the Regenstein Small Mammal & Reptile House (# 10 on map: "Snakes, bats, tamarins"), where there is a slow loris and also the Gallmeier monkey. If the assigned buildings are closed that day, you may have to use the primates in the other buildings as substitutes.

Try to stick to the estimated times or you might not finish.

PART ONE: Go to the Helen Brach Primate House (# 6, "monkeys" on map). Estimated time to complete this part: one hour.

For the first 20 minutes, take a tour of the building and the various species of primates it contains. Go to the southwest door and read the wall chart about New World and Old World Monkeys, then go from cage to cage to get a feel for the different kinds of primates (note that only primates are housed here). While you are doing this, be sure to read all the signs. There should be about 10 species on display; sometimes two species share the same enclosure. As you stop in front of each species, try to figure out if you are looking at prosimians, Old World Monkeys, New World monkeys, or Apes by looking at their anatomy and postures; refer to your picture book and the primates chart handout from class. Do not include this tour in your written report. This tour also gives you the chance to pick the species of Old World Monkeys and of New World Monkeys that you are going to observe next. The tour itself is NOT part of your written report.

PART 1A. New World Monkey Description: This all goes in the written report. Choose ONE species of New World Monkeys and describe the cage and the animals themselves. Describe what the animals look like in general terms so that I can verify what species you are looking at; one suggestion is to describe them as if you are speaking to someone who cannot see them (pretend you are on the phone — after all, you are talking into a tape recorder). Describe basics such as body size, color, fur, face, hands, noses, etc. Also look for these sorts of things: Is there sexual dimorphism? How would you describe their overall body shape and proportions, including limbs? (ex: long or short arms?) Would you describe them as "flat-faced" or "snouty"? Do they have rump pads? Cheek pouches? Do they have tails? If so, are they prehensile? — and if so, can you see a touchpad on the tail? Are any of them displaying estrus? Then try to identify them as individuals — how are they different from each other in appearance? There may be a sign (or a keeper) that tells you the names of the individual animals.

What can you actually see about their anatomy and posture that allows you to tell that they are New World Monkeys and not prosimians, apes or Old World Monkeys?

While you are doing this, be sure to read all the signs; also get the common name and the Latin name. You can read the signs into the recorder, but **don't copy the sign info into your final written report**; your report should be mostly about your observations of the animals themselves – I know what the signs say.

PART 1A continued: New World Monkey Unstructured Observation: Now observe the activities of these animals for 10 minutes for your written report. In this observation we are especially interested in two things: locomotion and feeding.

LOCOMOTION: As you watch your animals, consider items like this: How do the animals in the cage move around? Do they stay high up or spend most of the time on the ground? How do they use limbs, hands, and feet for moving about? Fast or slow, leap around or move carefully? Do they stay on top of the branches, or hang underneath them? Support on one branch, or several at a time? What is their posture when resting/sitting? Describe how they climb higher up, and down. Are their backbones parallel to the ground, or what? Are they flexible animals? In what ways is their anatomy appropriate for their locomotion? (consider body size and body posture, and relative sizes of limbs). Do they try to walk bipedally? If so describe it. Try to describe specific movements and postures of specific individuals. Your observation might read something like this: “the youngest one jumped down from the branch to the ground, landed on all fours, and walked quadrupedally over to the viewing window.”

FEEDING: If you are lucky, you may be able to observe them eating. If so, consider: What are they eating? How do they eat it? Eat at the bowl or carry some away? Use hands to eat? Describe use of hands. Biting. Chewing. What can you tell about teeth? Any food sharing with other individuals? How do they tell food from not-food? Write down everything you see that is interesting, and while you must at least mention all the animals in the troop, you can concentrate your descriptions on the active and interesting individuals. Your observations might read something like: “the male pulled out a carrot from the food dish with one hand; he then sat on his rump and held the carrot in both hands, taking small bites and chewing each bite thoroughly.”

If you see anything else interesting and unexpected, you can include it in your report even if it is not a suggested observation topic, but still be complete on describing the animals and on locomotion. Also look for the newborn babies and how the mothers take care of them.

Part 1B. Old World Monkey Observation: Now choose the one species of Old World Monkey in the building that you are going to observe. Describe them and their cage just as you did in Part 1A (look back at those instructions).

What can you actually see about their anatomy and posture that allows you to tell that they are Old World Monkeys and not prosimians, apes or New World Monkeys?

Part 1B continued: Unstructured Observation: Now observe the activities of your species for 10 minutes for your written report. In this observation we are especially interested in the same two things: locomotion and feeding, so refer back to the instructions for “1A continued”: locomotion and feeding.

At this point you might be feeling the frustration that is common among primatologists in the jungle: you want to observe, but the animals won't cooperate. Hang in there, you're almost half done at the zoo; take a break if you're tired. Get a cola or coffee, eat if you are hungry; there is a food court in the middle of the zoo.

PART TWO: stay at the Helen Brach Primate House Estimated time to complete this part: one hour.

Part 2A The Gibbons. Describe the animals like you did for the earlier parts. What can you see about gibbons that allows you to decide if they are prosimians, Old World Monkeys, New World Monkeys, or Apes?

Part 2B. Scan Survey Observation of Gibbon SOCIAL BEHAVIOR.

If for any reason the gibbons are not on display, go on to the Great ape house and do the scan survey there on a troop other than the one you use for Part 3.

NOTE: this part is the most complex of the whole project; as your first experience in this kind of observation, it will be far from perfect. All I expect is that you will give it a good try and record what you can. The gibbons can go inside and outside; you can choose to stay outside or inside for the scan, wherever most of them are. You do not need to be running in and out of the building.

First, find out the names of the individual gibbons from signs or zookeepers (I know the largest male is called Caruso); if you can't find out, just make up names for now.

Now get out some paper and a pencil and draw a full page floor plan of that troop's space or enclosure, and locate each animal on the drawing.

Now you are going to observe them for exactly 30 minutes. In general look for the interactions between the youngsters and adults, and among adults and among juveniles too. Describe any grooming you see in detail, as well as parenting behavior. Try to view them as unique individuals with different personalities, but interacting within a basic social structure. Does one behavior come right after any other behavior, such as affection after a chase? Note which ones are keeping an eye on what others are doing. Also be sure to describe the instances of locomotion in detail -- both arboreal and terrestrial.

The SCAN: Describe where each animal is, and what it is doing at the start. Then proceed to record everything they are doing every five minutes for the next 30 minutes: posture, locomotion, looking, sniffing, eating, and especially social behavior (interactions of any kind with other primates). **Every five minutes** you will record what every animal is doing: SCAN the room and list/describe activities. Make note of the time every five minutes as you record where each animal is and what it is doing. (You DO NOT need to record things that happen between the scans, but you can make note of significant events like a fight.) When you write this up, include all your scan observations in five minute intervals.

Include locomotion and feeding, but also especially look at the FIVE SENSES and how the individuals use touch, smell, hearing, vision, and taste. How are the senses used to get information about the environments (including other animals)? Also consider how does it **interact socially and communicate** to others? Look for facial expressions, gestures, sniffing and scent marking (or the absence of it), use of calls and hearing; licking; touching to explore and groom, etc.

Part 2C. Conclusions of scan survey. What conclusions can you make from your scan survey observations? Which relationships are guarded, which are friendly? Who are concerned with the kids? Who bosses whom? What can you say about this species' patterns of behavior and interactions? How do they use facial expressions, gestures, threats, scents, calls, touching, grooming, etc., for communication? What messages are they communicating? Are any of the females in estrus? If so, does that seem to affect behavior? When you write this up, clearly distinguish between what you observed and how you interpreted it. You will probably add more to this conclusion as you review your notes and tapes at home, but remember that if you add anything from books or lectures or people at the zoo or signs, identify it as such.

PART THREE: go the Regenstein/Fisher Center for African Apes (“Chimpanzees, Gorillas” on my map.), by going out the south door of the monkey house. Estimated time: one hour

Part 3A. Signs and displays. There are information signs that comprise a tour of the African Ape house; the tour signs begin outside the primate house south door and are labeled “Pupil Station”. Spend about a half hour outside and inside looking at all the Pupil Stations, signs, sculptures, and the animals themselves; learn what you can about the apes, ape house history, endangerment, research, care, etc. **Do not write anything in your final report about Part 3A..**

NOTE: It seems reasonable to expect that the social behavior of nonhuman primates might tell us something about the evolution of social behavior in the human lineage. The Ape House provides a unique opportunity to play primatologist. Notice that there are three large “rooms” in the Ape House which are connected by doors to three outside yards, plus a couple of “hidden” cages that you can only see through the doorways. There are two gorilla troops and one of chimpanzees.

Part 3B. Focal Animal Study: Choose one of the three troops to study; it should have at least three active animals in it. Describe the enclosure and the animals in your chosen troop in general as you did in Parts 1 & 2; then list the adults and juveniles in the cage by name. There are signs with their pictures and names both inside and outside the building, use those names and use the pictures to help identify them. Now choose one single individual animal (that’s your FOCAL animal); juveniles, babies, and mothers with babies often work best as focal animals, but it is your choice. Once you have chosen an individual as a focal animal, refer to him/her by the name you learned from the sign.

Now describe any specifics about this one animal’s physical appearance that allows you to distinguish it from the other animals in the cage – is it larger or smaller, different in color or fur, how is its face unique, etc? (The signs may help.)

Now record everything your focal animal does for the next 20 minutes. Be aware that they can move freely from the inside to the outdoor areas, and in this case you may have to follow. Include locomotion and feeding in your observation, but also especially look at the FIVE SENSES and how the individual uses touch, smell, hearing, vision, and taste. How are the senses used to get information about the environments (including other animals)? Also consider how does it **interact socially and communicate** to others? Look for facial expressions, gestures, sniffing and scent marking (or the absence of it), use of calls and hearing; licking; touching to explore and groom, etc. Does one behavior come right after any other behavior, such as sniffing after a fight, or licking before eating? What connection do you see between use of the senses before, during, and after an encounter with another animal? How does your animal explore other objects and animals?

When you write this part up, it should read something like this: “Then at 10:05 Stinky sat on the branch on his rump, swung his feet for a minute, then slid off to the ground and approached an older female (walking bipedally). At 10:09 he sat on his rump and started grooming her back with his left hand. Then he” That’s a focal animal study!

You are done with the assigned observations at this point.

NOTE: This entire zoo report project is a long, complex assignment; NO ONE gets all the data needed for a perfect paper. Lots of students get enough, and write it out well enough, to get an “A” on the report; most students manage to make even fewer observations, but if they go to the zoo and make a good try, they will get credit for this required project, and a decent grade.

Now go home and write it up; For your written report, write up what is on your tape for each part, with the times and observations and details. Do not include the tours and the signs. Make sure you indicate the time of day you observed each species; also include the Latin and common names of your observed animals, the basic category (of the four major groups), and the number of individuals in the cages you observed.

Your report should be a record of your visit and observations It should be in the order and numbering of the parts in the instructions, even if you actually observed things in a different order. Any observation that you made in addition to the assigned ones **can** be included in the written report (that doesn't mean it **has** to be included). Don't just transcribe your tape, but rephrase things to be a readable report (at least leave out most of the sign info and the "uhs" and "oh yeahs" and other things that won't make sense to someone reading the written report). Don't forget to include your interpretations of social organization and behavior for the conclusion in the third project.

I want to be able to tell that you went to the zoo well prepared, followed the instructions, observed intelligently, and learned about primates. Review these notes as you are writing, especially the hints. It is not required, but you can add material from the class and from books as needed, but **MAKE IT CLEAR** what is based on your zoo observations and what is from other sources. Late reports will be accepted for a while after the due date, but you lose points. It is required that you type your report; typing/word processing does give you another chance to rewrite and edit. General presentation **IS** a part of the grading, so you can lose points for poor writing, confusing organization, odd formatting, and of course spelling and grammatical errors.

Be sure to **NUMBER** your pages, and do **NOT** put your **NAME** on the paper & tapes, only your **ID #**; put everything together in a big brown envelope to hand in.

The primary criteria for grading your written reports are the completeness, quality and detail of your descriptions and observations (can I visualize the animals and activities you are talking about?) and how well you followed the instructions; neatness and appearance count somewhat, also — good writing and organization help your grade, but photos and other inclusions add only a little more, not really worth the trouble. You must hand in your original audio tapes (or a CD or DVD copy) and any notes you took at the zoo along with your finished report; put everything together in one big envelope. I do **NOT** want your rough drafts, only your field notes, final paper, and tapes/CD's. The best papers in previous years were about 10 typed pages long, but length itself does not affect your grade. Any alternative project must be approved by me before you begin.

An aside for you to read before you go:

COMMENTARY: WHY DO WE GO TO THE ZOO TO LEARN ABOUT HUMAN EVOLUTION?

When I was a beginning anthropology student I did not see any point in the primate studies we were dragged through. I wanted to study fossils--human fossils. I didn't see any relevance and importance in studying living primates, especially in all the baboon social behavior movies we watched. When I finally got to study the most ancient hominids and get into the different arguments about interpretation, I didn't realize for a while how much the interpretations were based on observations of living primates, and how much my own understanding was in light of my knowledge of primates.

I now know some paleontologists who work with fossils of extinct animals that have NO living relatives or analogies; they don't know much about what their animals were like, even whether they were solitary or social. They may not even know how to fit the bones together, how the limbs are positioned relative to the body, nor how the jaw fits on the skull. Behavior, habitat, food, social organization — forget it; they cannot tell because there are no living animals similar to those extinct ones. We are so lucky to be able to study living primates in the wild to get some idea of how ancient primates (including early humans) might have lived, as well as to see how we ourselves are one of them.

We may not realize how much we use primate analogies when we think about human evolution; yet we cannot study humans unless we know what characteristics are shared with other primates and which are unique to humans. Even asking how humans became bipeds assumes we know that the ancestral condition was quadrupedal, and answering it involves detailed study of the anatomy and locomotion of primates who are quadrupeds, brachiators, vertical clingers and leapers, slow climbers, knuckle-walkers, etc., to interpret the bones and joints of fossils. We cannot understand the process of evolution by looking at one species in a vacuum, but only in the context of an adaptive radiation, and identifying the unique and shared attributes of each species, in this case the human; we have learned more about human evolution from studying living primates than from studying the fossils of early humans. I am presenting you with a highly structured opportunity to learn some important things through observation, as well as learning that observation isn't easy and has many disappointments as a procedure. Whenever you have a project like this, follow the instructions so that you can take full advantage of the opportunity presented to you. Good luck, and enjoy yourselves.