1. [8] (7.6) Fill in the missing labels for the nodes in the tree below. Where a node is the maximal projection of a lexical item, indicate it with the standard “X-bar” notation (e.g., NP for the maximal projection of a noun, v’ for an intermediate projection of v). The sentence is *Ned must always wear slippers with bells near Chuck*. The arrow is for use in question 4.

Some notes here: I took the word always out of the tree and didn’t remove it from the instructions. A few people put a V’ where I have written “This is not V’”—this couldn’t be V’. The label of a nonterminal node has to come from one of its daughters. Also, the PP near Chuck is adjoined, so the sister of PP should be vP (not v’).

2. [6] In the sentence for which the structure is given above:

The main point to make here is that everyone (just about) said in (2e) that *with bells* is the complement of *slippers*. *With bells* is adjoined to *slippers*—if it had been a complement, then the label of its sister would have been N, not NP. Lastly, the answer to (2f) depends on what you wrote in the tree. You may have gotten a point for saying “No” to (2f) if you lost a point in (1) by writing the wrong node name for the sister of <M>.

a. Draw an arrow to the node in the specifier of vP. (draw above) (0.76)
b. Is *with bells* a constituent? Y (0.93)
c. Is *wear slippers* a constituent? N (0.98)
d. Is *slippers with bells near Chuck* a constituent? N (0.82)
e. Is *with bells* the complement of *slippers*? N (0.13)
f. Does vP dominate the NP *Chuck*? Y (0.82)
3. [2] (1.96) Circle one: The verb shown in the structure above is
ditransitive / transitive / unergative / unaccusative

4. [2] (1.89) Circle every node in the tree above c-commanded by the node designated by the arrow.

5. [2] (2.00) Name the θ-role that [slippers with bells] has: Theme

6. Suppose we start building a structure for a sentence, and at a certain stage we wind up with a vP as shown (abstractly) below.

```
vP
  \ NP\(^1\) \\
  v'
  V+\(v\) \\
  V'
  NP\(^2\) \\
  NP\(^4\) PP <V> PP
  P NP\(^3\) P NP\(^5\)
```

a. [2] (1.96) Name the θ-role that the NP\(^2\) will have. Theme

b. [2] (1.60) If NP\(^5\) were an anaphor, which NPs could serve as an antecedent? (That is: Which NPs could potentially bind NP\(^5\)?)

<table>
<thead>
<tr>
<th>NP(^1)</th>
<th>NP(^2)</th>
<th>(NP(^3) and NP(^4) don’t c-command NP(^5))</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>One</th>
<th>(on V, selecting the Goal)</th>
</tr>
</thead>
</table>

c. [2] (1.73) How many [uP] features were there, total, in these lexical items initially?

<table>
<thead>
<tr>
<th>One</th>
<th>(on V, selecting the Goal)</th>
</tr>
</thead>
</table>

d. [3] (2.67) Which of the following three sentences might plausibly include this kind of vP?

1. I put mittens with tassles on Tommy.
2. I introduced Mary to John on Thursday.
3. I mail flowers to people with influence.

In the sentences above, only #1 has the PP modifying the Theme—like in the tree. There was no partial credit on this one, you either got it or you didn’t.

7. [2] (2.00) Circle one: The verb shown in the structure above is
ditransitive / transitive / unergative / unaccusative
8. **Binding Theory.** The sentence below is “trying to mean” *John told Mary that his mother admires her* (Mary). Two questions, **about the sentence below:**

*He*$_i$ told Mary$_j$ that [John$_i$’s mother]$_k$ admires herself$_j$.

a. [3] (2.36) Explain what is wrong with *John*$_i$ here.

*John is bound by he, in violation of Principle C.*

It was important to mention Principle C by name. Also: Terminological note: *John* binds *he, He* is bound by *John*. NOT “*John* and *he* are bound, *John* is bound to *he.*” This is not a symmetrical relation. Saying that “they need to be different people” or that *John* was used where a pronoun should have been used wasn’t enough.

b. [2] (1.73) Which Principle of Binding Theory is **not** violated in this sentence?

**Principle B**

9. Suppose you had a sentence with the following abstract structure. I have provided two lexical items (the NP *Frosty* and the verb *melt*). Fall 2009 note: You will need to change the verb form in part (c) to whatever is appropriate, “melt” here is intended to represent the basic uninflected form. Assume too that the *T* is a present tense (nonpast) *T*.

\[
\begin{array}{c}
\text{TP} \\
\text{NP} \\
Frosty \\
\text{[N]} \\
\text{Perf+T} \\
[\ldots \text{pres} \ldots] \\
\text{PerfP} \\
\langle \text{Perf} \rangle \\
\text{vP} \\
V + v \\
\langle V \rangle \\
\text{VP} \\
\langle \text{NP} \rangle
\end{array}
\]

d. [2] (1.73) What was the motivation to Merge *T’* and NP?

*T* has a [uN] feature that must be checked. The Hierarchy of Projections is not involved, and if you said HoP (first), you lost a point.

e. [2] (1.58) What was the motivation to Merge *v* and VP?

The Hierarchy of Projections. No features are checked here. However, in order for the [uV] feature of *v* to eventually be checked, *v* and VP need to be Merged. That was not the answer, but saying that did not count against you, unless you didn’t mention HoP first.

10. [3] (2.36) What makes the following sentence ungrammatical, in terms of the system developed in class?
*Patricia should have put candles.

There is a [uP] feature on put that was not checked.

One thing that was not good enough here was to just say “it needs a PP” or that it needs to assign three θ-roles. What actually makes this bad is the unchecked [uP] feature. Interestingly, absolutely everybody who provided an example of a PP that might serve to turn this into a sentence chose “on the table” as that PP.

This does not violate the UTAH. There are no θ-roles in the wrong place. The UTAH just says how you interpret things based on where they are in the structure.

A couple of people thought that actually, this was supposed to be something like placed, and took the problem to be in the agreement between have and the verb form. This wasn’t what I had anticipated originally, but it works (assuming that placed is taken to be a transitive verb).