Witch’s Trial Handout – Logical Fallacies & Booby-traps in Argumentation

1. What is the argument being offered in the video clip? Write down each premise as a separate line. Keep in mind that sometimes a larger argument might contain smaller sub-arguments. Tip: Look at a statement and then ask yourself, “Why should I believe that?” Then read the rest of the argument. If no other statement provides a reason for believing the one you just read, then the statement you’re looking at is probably a premise. If there is another statement that offers an answer to the why question, then the statement answering the why question is a premise, and the one you’re looking at is a conclusion.

Overall argument:

Breakdown of the argument: Break down the argument into the nine points provided (premises and conclusions).

1. All witches are things that can burn.
2. All things that can burn are made of wood.
3. Therefore, all witches are made of wood. (from 1 & 2)
4. All things that are made of wood are things that can float.
5. All things that weigh as much as a duck are things that can float.
6. So all things that weigh as much as a duck are things that are made of wood. (from 4 & 5)
7. Therefore, all witches are things that weigh as much as a duck. (from 3 & 6)
8. This thing is a thing that weighs as much as a duck.
9. Therefore, this thing is a witch. (from 7 & 8)

2. Look at each conclusion. Now assess the reasons (premises) being offered for that conclusion. Ask yourselves two questions about those premises. (1) Do I have any cause to believe that the premises are true? (2) Do the premises logically support the conclusion?

Various responses here based on student discussion.
3. Analyze the arguments. There are actually four arguments being made with the nine premises and conclusions.

Argument #1: Line 3 – All witches are made of wood. From premises 1 & 2.

Argument #2: Line 6 – All things that weigh as much as a duck are things that are made of wood. From premises 4 & 5.

Argument #3: Line 7 – All witches are things that weigh as much as a duck. From premises 3 & 6.

Argument #4: Line 9 – This thing is a witch. From premises 7 & 8.

4. Assess the arguments for fallacies. Do any of the arguments make logical errors?

Argument #1: This is a valid argument. That is, conclusion 3 above really does follow logically from premises 1 and 2. That’s not to say that it is a convincing argument because premise 2 is obviously false. Still, if 2 were true, then the conclusion would have to be true as well. So this step is valid but unsound.

Argument #2: This argument commits the fallacy of the undistributed middle. The structure of the argument is:

- All A is C.
- All B is C.
- Therefore, all A is B.

Argument #3: This is also an undistributed middle.

Argument #4: This is also an undistributed middle.