

Premise, Conclusion and Conditional Indicators

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One way to help improve students' reasoning skills is to improve their understanding and use of various groups of words that have important argumentative functions, such as premise and conclusion indicators, discount expressions (e.g., 'but', 'however'), guarding (e.g., 'can', 'may') and assuring (e.g., 'necessarily', 'evidently') qualifiers, quantifiers (e.g., 'most', 'all', 'some'), and conditional indicators (e.g., 'only if', 'when'). The worksheets below have helped my students to identify and use premise and conclusion indicators, and the various words that express conditional statements. Textbooks usually give only a short list of these groups of words, and as a result students fail to realize the variety of expressions that exist in the English language. My lists include more examples, but they are not exhaustive.

You will see that I have included in each worksheet expressions that are not premise or conclusion indications, or conditional indicators. My goal is to help students to be more linguistically alert, for they can easily fall into a mental rut with these kinds of worksheets.

According to my experience, the most effective steps to follow when using these worksheets is to do a few examples in class in order to make sure that all the students understand how to do the exercises, secondly, have them work in small groups on a portion of the worksheet, and thirdly, go over that portion as a class. Students seem to learn better when we spend about fifteen minutes per class on a few consecutive classes, than if we do everything in a single class. Rather than just have students give their answers, have them also give examples of the application of these expressions. For this will help you to see how they are thinking, and thus allow you to make corrections at that deeper level rather than just at the level of their outward performance; the variety of examples will make the activity more interesting, and facilitate the transference of these skills to different contexts.

Of course, the successful completion of these worksheets is definitely not sufficient to give students the mastery they need. In order to reinforce their learning I assign a project in which they are supposed to hand in five arguments and

five causal explanations from their own readings (e.g., textbooks used in their other courses, magazines, movies), diagram the reasoning (labeling each arrow in a diagram as either an argument or a causal explanation, for some passages contain both arguments and causal explanations), circle conclusion indicators, box in premise indicators, underline conditional indicators, and use different parentheses to identify discount expressions and qualifiers. If they get anything wrong in a particular passage, they do not get their point, but they may submit a new passage, and use my feedback to avoid repeating their mistake. Until the deadline, students may submit any quantity of new examples at any time. This flexibility (mastery learning) allows the slow learners to get the practice and feedback they need, and to get a good grade. This project is usually worth ten percent, and many students who start working on the project as soon as it assigned succeed in getting their ten out of ten. This project will also give you a chance to accumulate examples of arguments and causal explanations that you can later use in quizzes, tests, exams, assignments. If any of your students are learning any other languages, suggest to them to construct similar lists in the languages they are learning: this will help them to reason more effectively in that language.

Premise & Conclusion Indicators

Instructions: The purpose of this assignment is to help you to become aware of a variety of words that have the important function of indicating whether statements are used as reasons or as conclusions. Let the letters “P” stand for a premise/reason, and “C” for a conclusion. Insert these letters in the appropriate positions. For example, the correct insertion of these letters in “___ therefore, ___” is “P therefore C”. Since ‘therefore’ introduces a conclusion, it is a “conclusion indicator”. The correct insertion of these letter in “Since ___, ___” is “Since P, C”. As ‘since’ introduces a premise, it is a “premise indicator”.

Note: (a) Not all of the following expressions are either premise or conclusion indicators. *If you identify an expression that we typically do not use as a premise or a conclusion indicator, do not insert any letter, leave the expression blank.* (b) If you are going to use the same argument to determine the function of all or most of these expressions, then you will sometimes have to rephrase your argument.

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| 1) ___, consequently, ___. | 2) ___ entails that ___. |
| 3) As shown by the fact that ___, ___. | 4) ___. This ¹ is shown by ___. |
| 5) As ___, ___. | 6) ___ shows that ___. |
| 7) ___. From this we can deduce that ___. | 8) ___. However, ___. |
| 9) ___. Accordingly, ___. | 10) ___. I conclude that ___. |
| 11) ___. From this it follows that ___. | 12) ___ follows from ___. |

¹ Impersonal pronouns sometimes refer to earlier statements.

- 13) ___. Moreover, ___.
- 14) ___. That is proven from ___.
- 15) ___. This proves that ___.
- 16) Granted that ___, ___.
- 17) ___. Furthermore, ___.
- 18) Supposing that ___, ___.
- 19) ___. Hence, ___.
- 20) ___. For ___.
- 21) ___. Then ___. [find exceptions]
- 22) ___ because ___. [arg./expl.]
- 23) Because ___, ___. [arguments/explanations]
- 24) ___. Nevertheless ___.
- 25) ___. That is why ___.
- 26) This is why ___, ___.
- 27) ___. Here is why, ___.
- 28) Here is why ___, ___.
- 29) ___. Obviously ___.
- 30) ___. This being so, ___.
- 31) ___ implies that ___.
- 32) As indicated by ___, ___.
- 33) ___ due to the reason that ___.
- 34) On account of the reason that
_____, ___.
- 35) Despite the fact that ___, ___.
- 36) ___. In view of that, ___.
- 37) In view of the fact that ___, ___.
- 38) ___. In addition, ___.
- 39) ___ may be deduced from ___.
- 40) ___. One can deduce that ___.
- 41) ___ may be inferred from ___.
- 42) ___. One may infer that ___.
- 43) ___. Also ___.
- 44) ___, thereby showing that ___.
- 45) ___, thus, ___. [identify exceptions]
- 46) ___. Still, ___.
- 47) It can be derived from ___ that ___.
- 48) ___. That is derived from ___.
- 49) ___. This bears out the point that ___.
- 50) ___. Besides, ___.
- 51) ___ establishes that ___.
- 52) ___ justifies that ___.
- 53) ___ proves that ___.
- 54) ___. Its proof is that ___.
- 55) ___. This is proven from ___.
- 56) ___. Finally, ___.
- 57) ___ supports that ___.
- 58) ___ is supported by ___.
- 59) In support of ___, consider ___.
- 60) ___ lends credence to ___.
- 61) ___. Evidently, ___.
- 62) ___ leads me to believe that
_____.
- 63) Inasmuch as ___, ___.
- 64) ___. As a result, ___.
- 65) On the hypothesis that ___, ___.
- 66) ___ demonstrates that ___.
- 67) ___ indicates that ___.
- 68) ___ signifies that ___.
- 69) ___ guarantees that ___.
- 70) ___ is based on ___.
- 71) On the basis of ___, ___.
- 72) ___. In that case, ___.
- 73) In light of the fact that ___, ___.
- 74) Even if ___, ___.
- 75) ___. You just need to consider that ___.
- 76) ___. But comes down to ___.
- 77) ___. That makes me believe that ___.
- 78) ___. To say that is to say ___.
- 79) ___. In conclusion, ___. [find exceptions]
- 80) ___. This comes from ___.

- 81) _____. That authorizes me to say that _____. 82) I'm convinced from _____, that _____.
- 83) _____. This marshals in favor of _____. 84) _____. For this reason, _____.
 85) _____. On this account, _____. 86) Seeing that _____, _____.

Identify or invent three other premise indicators.

Identify or invent three other conclusion indicators.

Conditional Statements

Instructions: The purpose of this assignment is to help you to become aware of a variety of words that have the important function of expressing conditional statements. Where are the sufficient condition [S] and the necessary condition [N] located in the following conditional statements? *Example:* 1. If _____, then _____.
Answer: If S, then N.

Note: (1) These expressions are not always used in the same way by everyone.
 (2) If an expression is not typically used to assert a conditional statement, then do *not* insert any letter, leave the expression blank.

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| 2. _____ <i>only</i> if _____. | 3. Each time _____, _____. |
| 4. Whenever _____, _____. | 5. Every time _____, _____. |
| 6. When _____, _____. | 7. _____ <i>only</i> when _____. |
| 8. _____ provided that _____. | 9. _____ <i>only</i> provided that _____. |
| 10. No _____, unless _____. | 11. Unless _____, there's no _____. |
| 12. _____ is necessary for _____. | 13. Supposing that _____, _____. |
| 14. _____ is required for _____. | 15. _____, supposing that _____. |
| 16. _____ is indispensable for _____. | 17. Assuming that _____, _____. |
| 18. _____ is needed for _____. | 19. _____, assuming that _____. |
| 20. _____, is requisite for _____. | 21. Admitting that _____, _____. |
| 22. There must be _____, for _____. | 23. _____, admitting that _____. |
| 24. _____, inescapably _____. | 25. Providing that _____, _____. |
| 26. _____, inevitably _____. | 27. _____, providing that _____. |
| 28. Postulating _____, _____. | 29. Positing _____, _____. |
| 30. Hypothesizing _____, _____. | 31. Conjecturing _____, _____. |
| 32. Presuming that _____, _____. | 33. Venturing that _____, _____. |
| 34. _____ presupposes that _____. | 35. Presupposing that _____, _____. |
| 36. In the case that _____, _____. | 37. In the event that _____, _____. |
| 38. _____ is enough for _____. | 39. _____ is adequate for _____. |

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| 40. ____ is satisfactory for ____. | 41. ____ is suitable for ____. |
| 42. ____ is ample for ____. | 43. ____ is plenty for ____. |
| 44. As soon as ____, ____. | 45. Once ____, ____. |
| 46. Until ____, there's no ____. | 47. No ____, until ____. |
| 48. Without ____, there's no ____. | 49. No ____ without ____. |
| 50. In the event that ____, ____. | 51. ____ On these terms ____. |
| 52. ____ on the condition that ____. | 53. ____ <i>only</i> on the condition that ____. |
| 54. ____ <i>only</i> on the assumption that ____. | 55. On the condition that ____, ____. |
| 56. Granting that ____, ____. | 57. Granted that ____, ____. |