

Position Paper on Genetic Technology/Bioengineering

The topic of your paper must be chosen from the field of genetics, bioengineering or other related sciences. Some possible topics are listed below. Because new information is added to this area so rapidly, people are confused about how and where or sometimes, if, the new ideas should be used. Sometimes important decisions need to be made before many people understand what is at stake. In this paper you will do research on your topic and take a position based on your findings.

Your paper should be one to two pages in length, typed and double-spaced. You are writing in the first person. You should use “I” to explain your thoughts. The following must be included:

1. One or two introductory paragraphs that explain the technology or science. The information should be taken from at least 3 sources. Be sure and list references you use. Look for magazines, the Internet, newspapers or interviews with knowledgeable people to use as references.
2. Choose a position to start your next paragraph. You should either support using this technology/science or not. Support your position with logical arguments and inferences. An inference takes an observation and draws a conclusion or extends the observation into the future or other situations. Do not say “I think” in this paragraph.
3. The next paragraph should take the opposite position. Once again, support this position with logical arguments.
4. Your final paragraph can NOW include your conclusions and opinions. You may start a sentence with “I think”. In the process of writing this paper, you may lean more toward one argument than the other. Tell why. If not, discuss in this paragraph why both arguments have merit to you.
5. List your references.
6. Have a parent or another student edit your paper.

Possible topics

- Should people live longer? (research on aging)
- Should humans be cloned?
- Should food crops have genetic changes?
- Should human genes be altered? (gene therapy)
- Should people know what genes they carry? (genetic counseling)
- Should animals carry human genes? (genetic engineering)
- Should people be required to have a genetic screening test before getting a job, insurance, marrying, having children?
- Should human growth hormone be available to whoever wants it?
- Should human organs/tissues be grown for replacements?
- Should parents know the genes of the offspring before birth? (pre-natal testing)
- Should parents be able to choose the sex of their offspring? (sex determination)
- Should genes from one animal be transplanted into other animals or plants? (transgenic research)

- Should new species be developed?
- Should stem cell lines be expanded and used?

6 Traits Rubric

Trait	3	2	1
Voice	Student has effectively used first person.	Student has partially used first person.	Student shows little evidence of speaking in their own voice.
Ideas and Content	Introductory paragraph clearly explains technology/science. Pro and con paragraphs contain supporting details. Final paragraph thoughtfully sums up and supports student conclusions.	Introductory paragraph explains technology/science but is not detailed. Pro and con positions are not well supported. Final paragraph is an opinion with little support.	Technology/science is poorly explained in introduction. Pro and con positions are not present or unsupported. Final paragraph doesn't contain students reasoning that led to conclusion.
Organization	Effective, creative sequencing. Easy to follow. Strong beginning and effective conclusion. Good transitions.	Clear sequencing, details fit where placed. Some effective transitions, some supporting details are present.	Poorly developed ideas and explanations. Lack of transitions, random details.
Word Choice	Accurate and specific words energize the writing. A broad range of words have been chosen.	Words chosen work but do not capture the reader's interest. Some words are used incorrectly.	Language is vague or limited in range. Message is unclear because of poor word choices.
Conventions	Few errors in punctuation, grammar and spelling exist and do not detract from message. Text is one page long.	Errors in punctuation, grammar and spelling do not obscure message but are noticeable. Text is somewhat too short or too long.	Many punctuation, grammatical and spelling errors. Message is obscured by poor conventions. Text is not nearly to one page long.
Sentence Fluency	A fluent sound, one sentence flows easily into another. Meaning is enhanced through flow of ideas.	A natural sound, but lacks grace and impact.	Significant portions of the text are difficult to follow or read aloud.