

GENETICS MINI-PROJECT 2020

1. Choose a specific genetics topic that is interesting to you. Examples: identical twins, a specific trait (e.g., eye color, blood type), a specific genetic disorder (e.g., trisomy 21, sickle-cell anemia), a specific issue (e.g., genetically modified organisms, cloning, stem-cells)
2. Research your topic. You need to find:
 - a. the definition of your topic
e.g., "Identical twins are...."
 - b. the genetic foundation of your topic THIS NEEDS TO BE VERY SPECIFIC
e.g., "Identical twins result when....", "Eye color is controlled by the genes..."
 - c. if there are different ideas or theories on your topic or if it is straight-forward
3. Prepare a 3-5 minute presentation on your topic to present to the class. If pictures would make your presentation more clear, get pictures together for your presentation. Pictures may include but are not limited to: photographs, diagrams, handouts

We will have class-time on March 2, Mar 3/4, and Mar 6 to work on the projects.

These presentations are due March 9. Students will be randomly selected to present. If you are not ready to present when you are selected, your work habits grade will drop one number.

Rubric – Genetics Mini-Project

| AREA | Advanced - 4 | Proficient - 3 | Partially proficient - 2 | Developing - 1 | Absent - 0 |
|--|--|---|---|---|------------|
| Topic defined | Explanation is clear, complete, and correct. | Explanation is correct. Could be more clear and/or complete | Explanation is correct or mostly correct. Explanation is confusing and/or lacking needed details. | Explanation has major errors or omissions. | |
| Genetic foundation – content Counts double | All content is correct and all important details are present. | All content is correct. A few details are absent or could be more specific. | Content is correct or mostly correct. Important details are absent that make the explanation incomplete or vague. | Content has major errors or omissions | |
| Genetic foundation – clarity Counts double | An average 7 th grade student can understand the material. Exceptional use of visual aids. Explanation is clear, easy-to-follow, and interesting. | Some 7 th grade students may not understand the material because the explanation is somewhat difficult to follow and/or confusing and/or uninteresting. Visual aids need to be more neat and/or informative. | The teacher can understand the presentation because she already knows the information you are trying to present. Needs visual aids that add to the understanding. | The teacher is not sure what you are trying to say, probably because you are not sure what you are trying to say. | |
| Differing ideas | Specific points about which scientists disagree OR for which there are different possible explanations are mentioned and explained. | Specific points about which scientists disagree OR for which there are different possible explanations are mentioned. | General reference is made to points about which scientists disagree or different possible explanations. | Vague statements are made about what scientists do not understand or about other possible explanations. | |

In explaining the genetic foundation of your topic, BE SPECIFIC. This means include details such as chromosome number, gene names and location, specific processes, etc.

Your grade on the rubric will be a weighted average of the four areas. It will end up as some number out of 4. This will convert to a percent using this rubric conversion scale:

- 4.0 =100%
- 3.5 = 90%
- 3.0 = 80%
- 2.5 = 70%
- 2.0 = 60%
- 1.0 = 30%.

Your grade in Power School will be the percentage multiplied times 30 points. Please, ask if you have questions.