

A REPORT ON
COLOR BLINDNESS AS AN INHERITED CONDITION.

A PROJECT WORK

Submitted to Department of Science

Gandaki Boarding School, Lamachaur, Pokhara-16

In Partial Fulfillment of Requirements of

Practical Work for Biology of 10+2 science



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RECOMMENDATION

It is certified that Sampada Gautam, Menaka Bhujel, Prabesh Thapa, Aayush Shrestha, Suresh Acharya, Samyog Shrestha, Sangharsa K.C. and Adhip Pandey have carried out the project work on “A REPORT ON COLOUR BLINDNESS AS AN INHERITED CONDITION” under my supervision and guidance. I recommend the Project work for the partial fulfillment for Biology practical of Grade 12.

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ABSTRACT

Color blindness is a common hereditary (inherited) condition seen especially in males and generally carried by females.

The most common cause of color blindness is an inherited problem in the development of one or more of the three sets of the eyes' cone cells, which sense color. Among humans, males are more likely to be color blind than females, because the genes responsible for the most common forms of color blindness are on the X chromosome. Females have two X chromosomes, so a defect in one is typically compensated for by the other. Non-color-blind females can carry genes for color blindness and pass them on to their children. Males only have one X chromosome and therefore always express the genetic disorder if they have the recessive gene. Color blindness can also result from physical or chemical damage to the eye, the optic nerve, or parts of the brain. Diagnosis is typically with the Ishihara color test; other methods include genetic testing.

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APPENDIX- QUESTIONNAIRE FOR DATA COLLECTION

Questionnaire

Please answer the following questions with true data from your family. This data won't be misused.

Name (optional):

1. How many members are there in your family?

.....

2. Have any of them done test for color blindness?

Yes ☐

No ☐

3. If test was done, how many of them got color blindness positive?

.....

4. If the test was positive, have you taken any medication or treatment?

Yes

No

The test was not done

The test was negative

5. Was there any family history of color blindness? Explain, if yes.

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Thank you for your support!

REFERENCES

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