Spoken Tutorial
IIT Bombay

SUMMER FELLOWSHIP REPORT 2022

Infographics

Submitted by

Prince

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Under the Guidance of

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Chemical Engineering DepartmentIIT Bombay

25th April - 27th June

Acknowledgement

I would like to thank and express my gratitude to **Prof. Kannan M. Moudgalya,** IIT Bombay, for making it possible for me to workon this project. I would like to appreciate the noble cause of FOSSEE, IIT BOMBAY, in promoting the use of freely available tools to improve the quality of education in our country and making it more accessible. I extend my sincere gratitude to **Ms. Sonal Khurana (Ex-Faculty, MAIT),** for making me aware about this wonderful fellowship.

I would like to express my deep and sincere gratitude to my senior project advisor and mentor, Mr. Khushalsingh K. Rajput, Project lead (FOCAL) & Sr. Software Engineer (FOSSEE), IIT Bombay, for the enthusiasm and continuous support and guiding me throughout the project. His round the clock support and patience in sharing his immense knowledge without any limits or boundaries is admirable. His fatherly approach towards students combined with outstanding problem-solving and management skills are a euphoric treasure worth experiencing first hand. I also extend my thanks to my colleague from this fellowship, Ms. Syankita for her cooperation during the fellowship.

I extend my heartfelt thanks to my family who supported me and believed in me. Lastly, all my hosteller friends who helped me throughout the fellowship by reminding me of taking a break from time to time.

With Regards,

Prince

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Introduction

About Fellowship

I was selected as a 2D Graphic Designer in the Graphics and Animation categoryof the fellowship under FOCAL, and was placed under the mentorship of Mr. Khushalsingh K. Rajput.

FOCAL encourages the use of free and open source software for creating infographics. These infographics are then placed over the website under creative commons license thus, making the art available to everyone.

This series is created on class 12th Physics syllabus, with intentions to clarify important concepts through infographics that are otherwise difficult to understand and remember.

Duration of Fellowship

I chose the part time(6hrs per day) FOSSEE Summer Fellowship 2022 which spanned from 25th April 2022 to 27th June 2022.

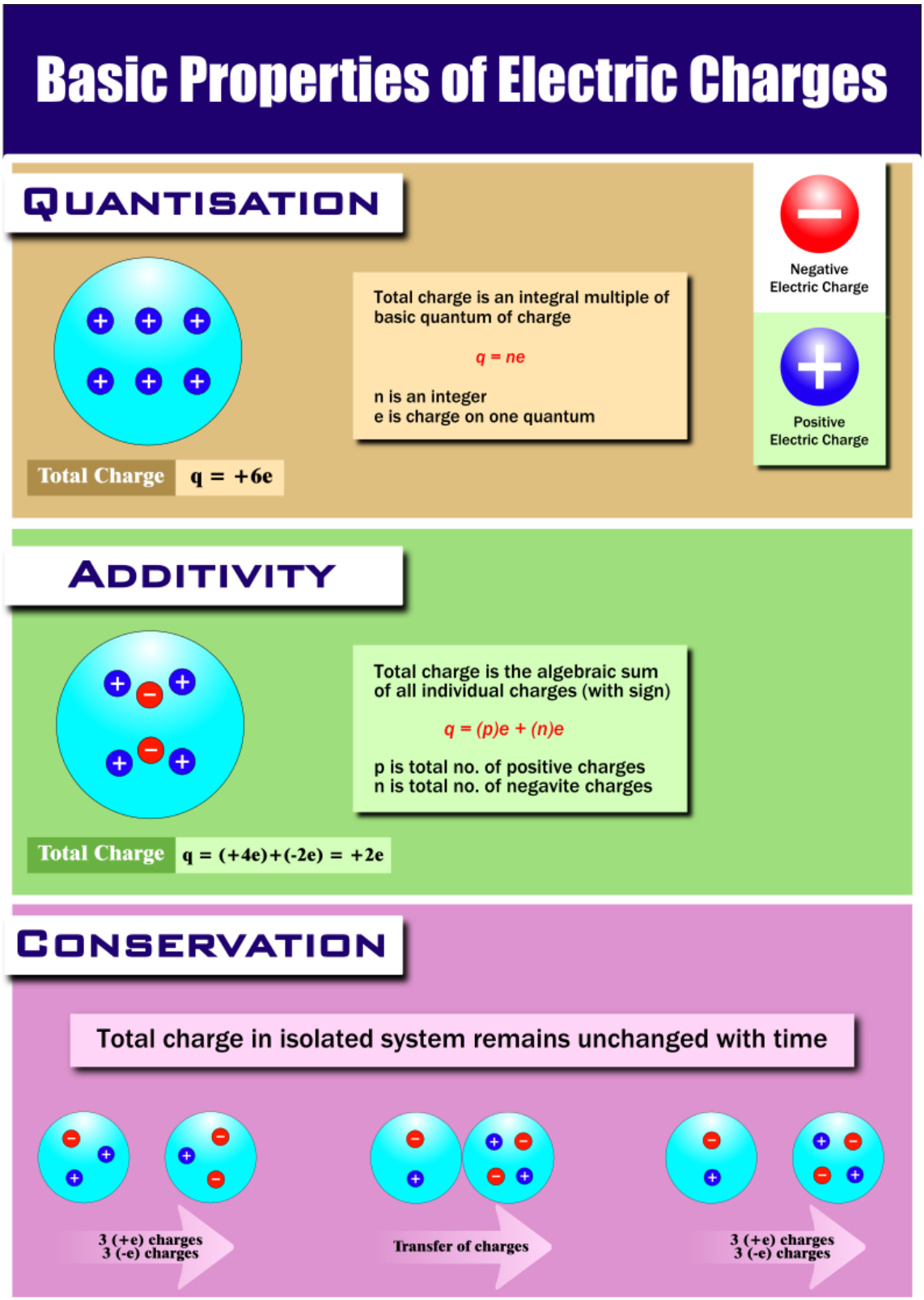
Aim

To create Infographics on topics from class 12th Physics syllabus using software like Inkscape and Gimp.

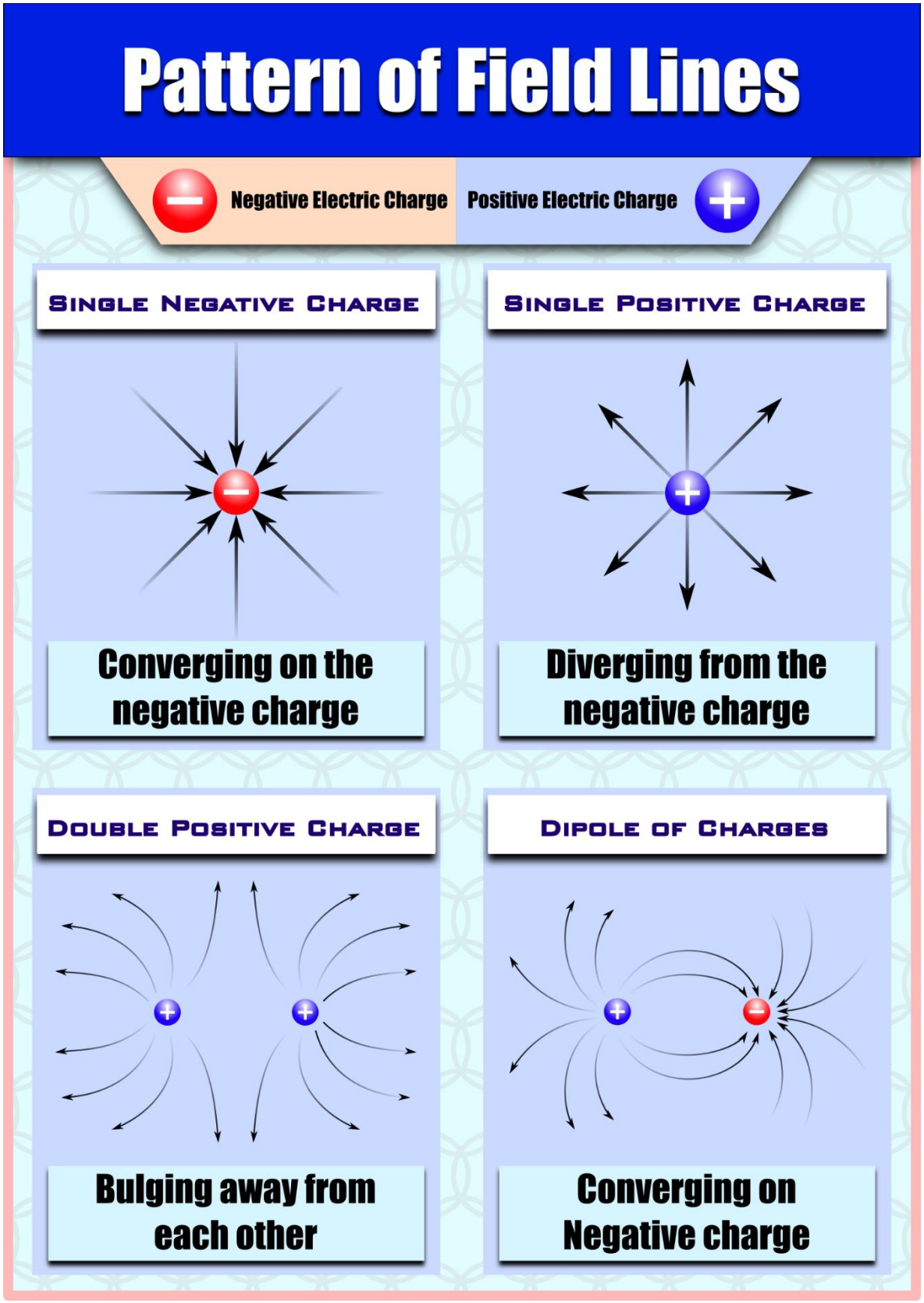
Software Used

- Inkscape - a professional quality vector graphics open source softwareGimp- a professional
- quality graphics editing open source software

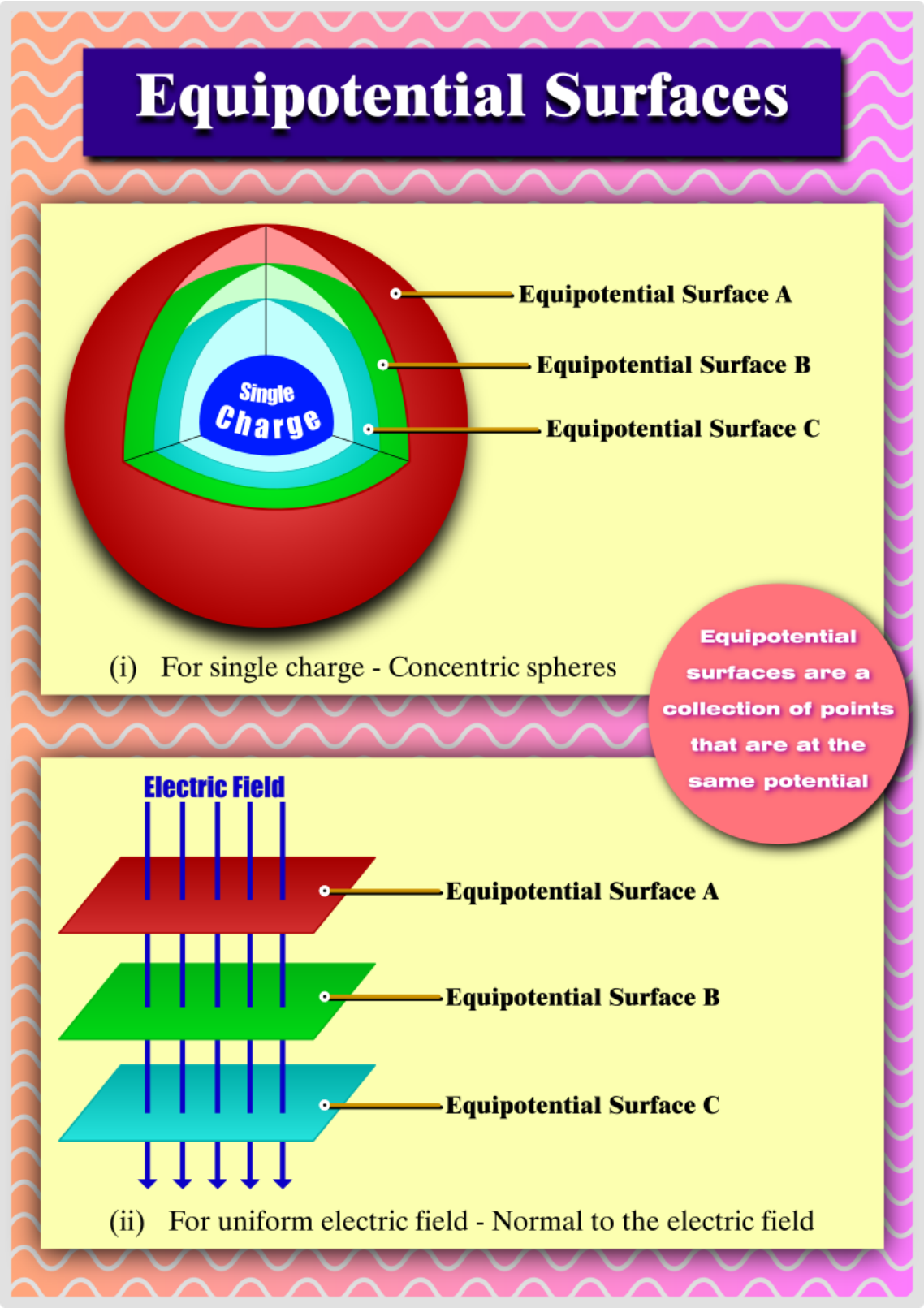
Artwork 1 – Basic Properties of Electric charges



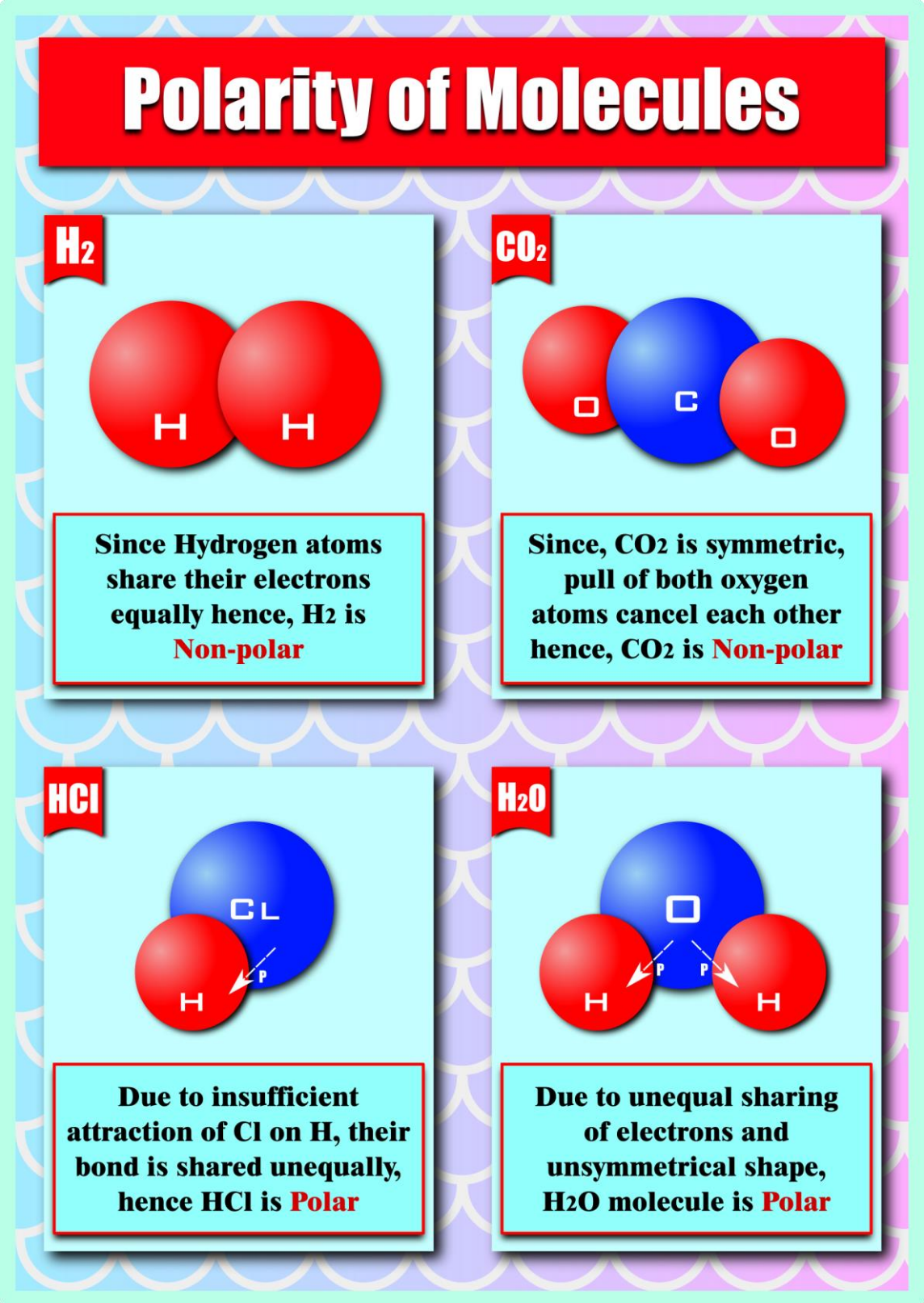
Artwork 2 – Pattern of Field Lines



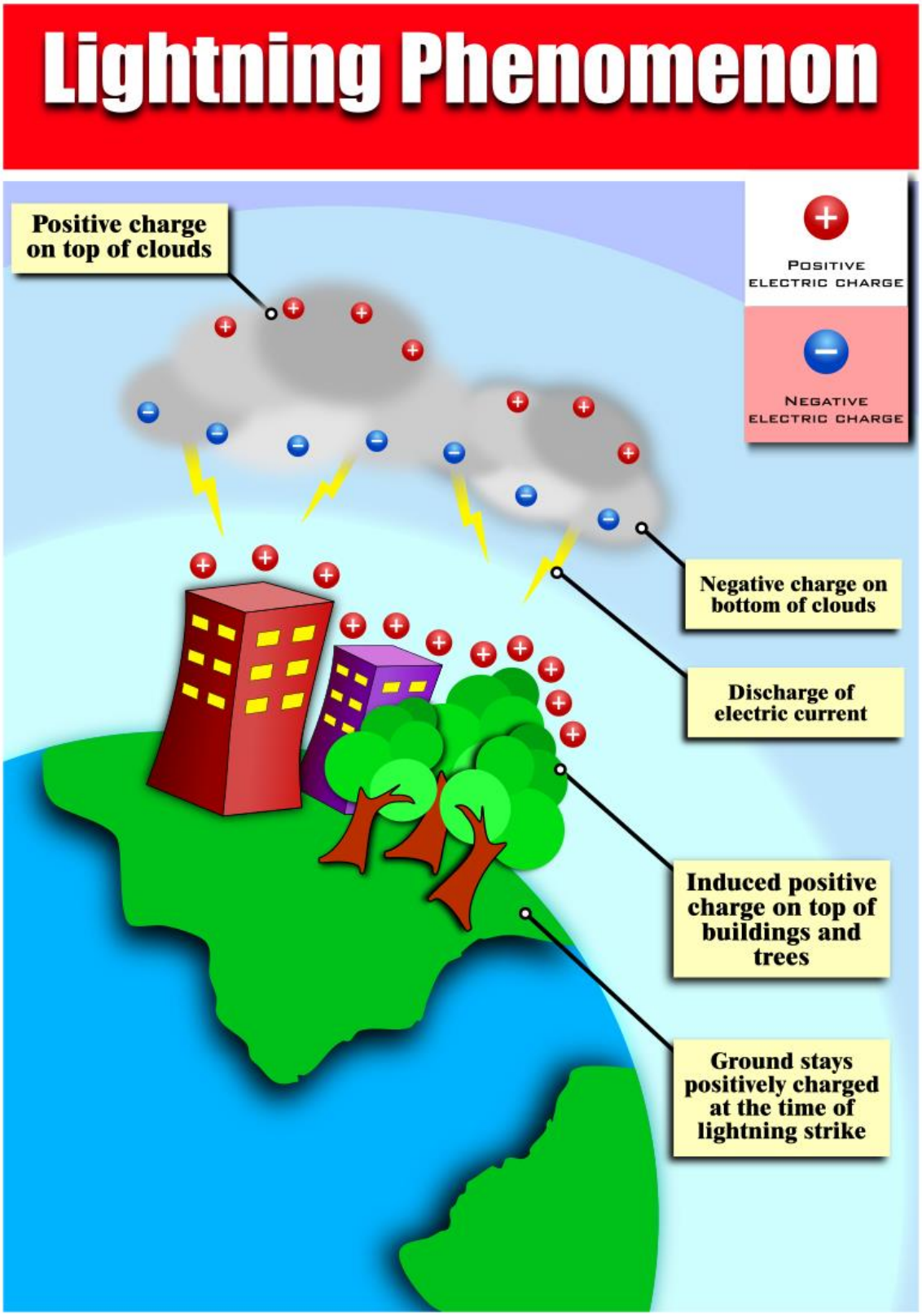
Artwork 3 – Equipotential Surfaces



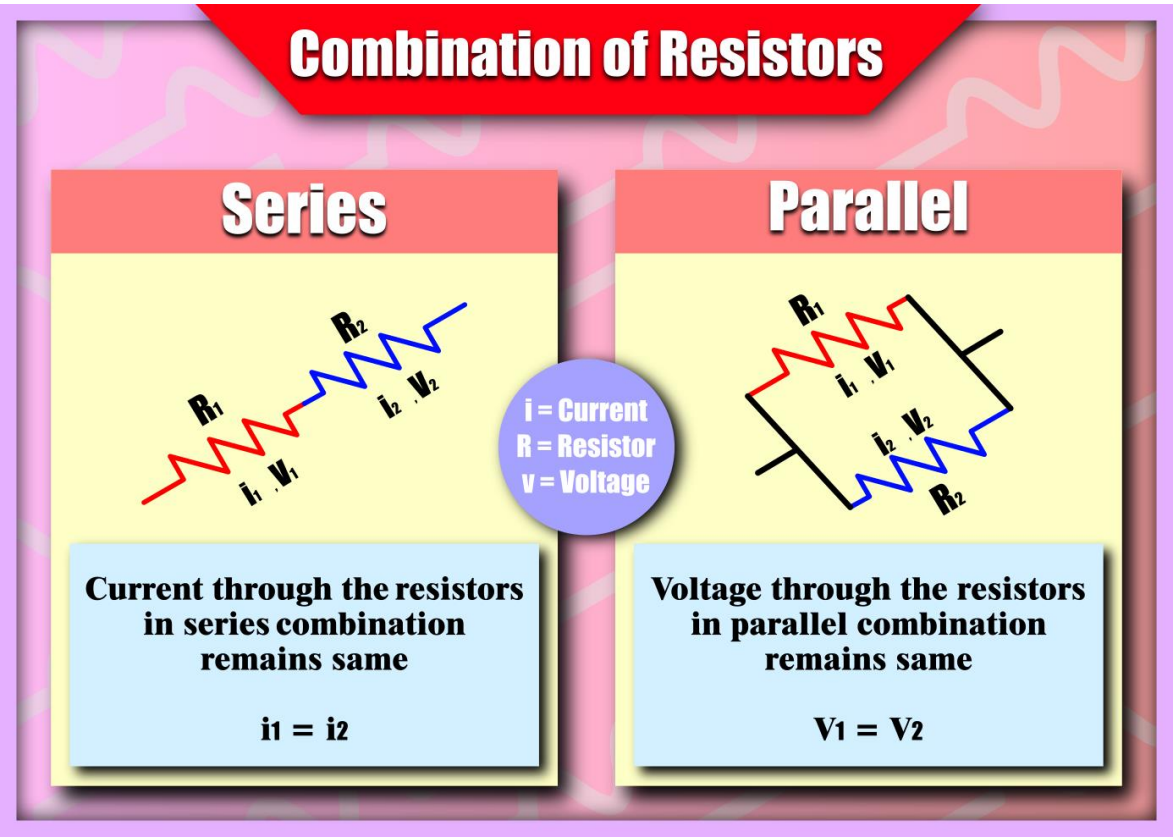
Artwork 4 – Polarity of Molecules



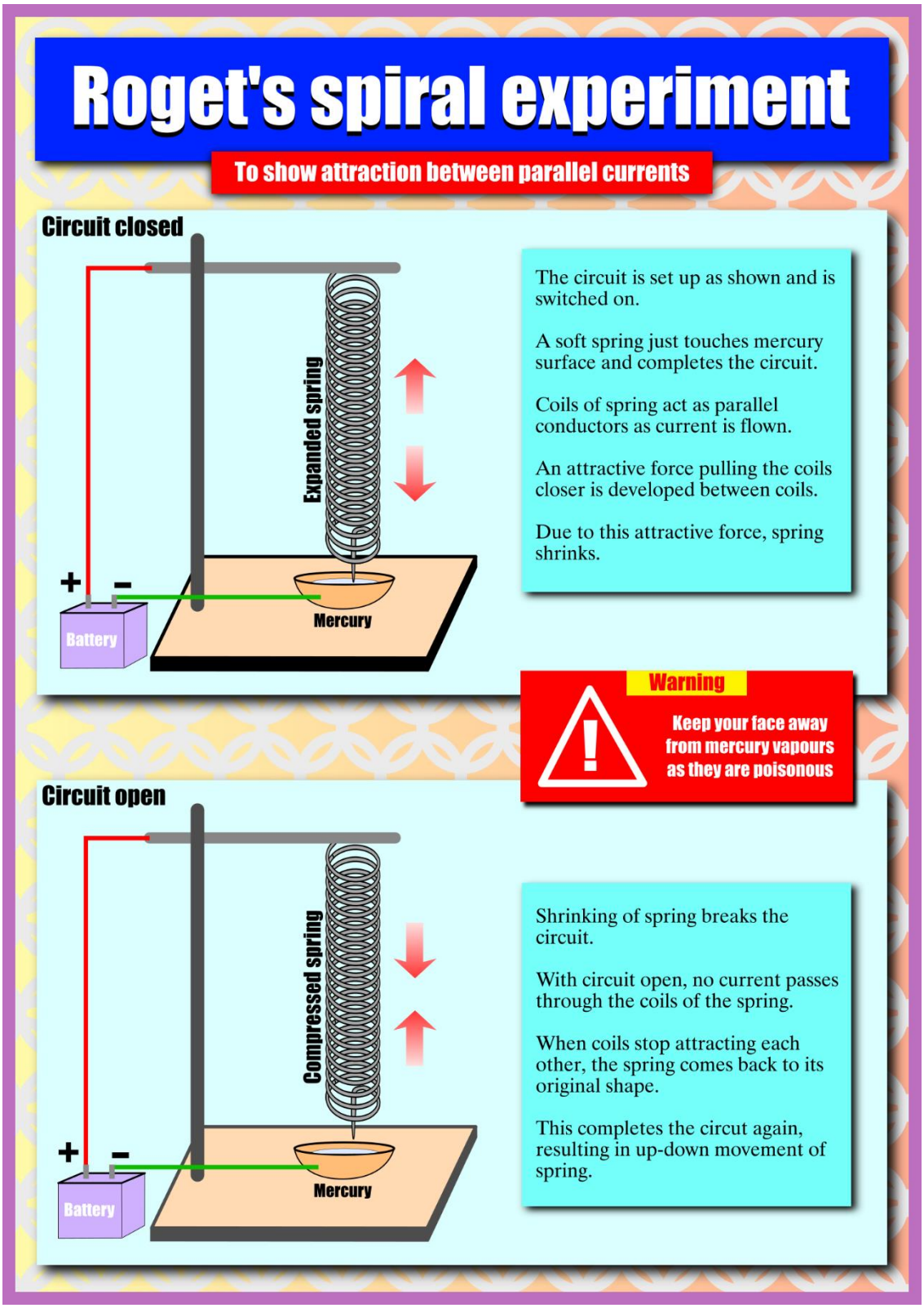
Artwork 5 – Lightning Phenomenon



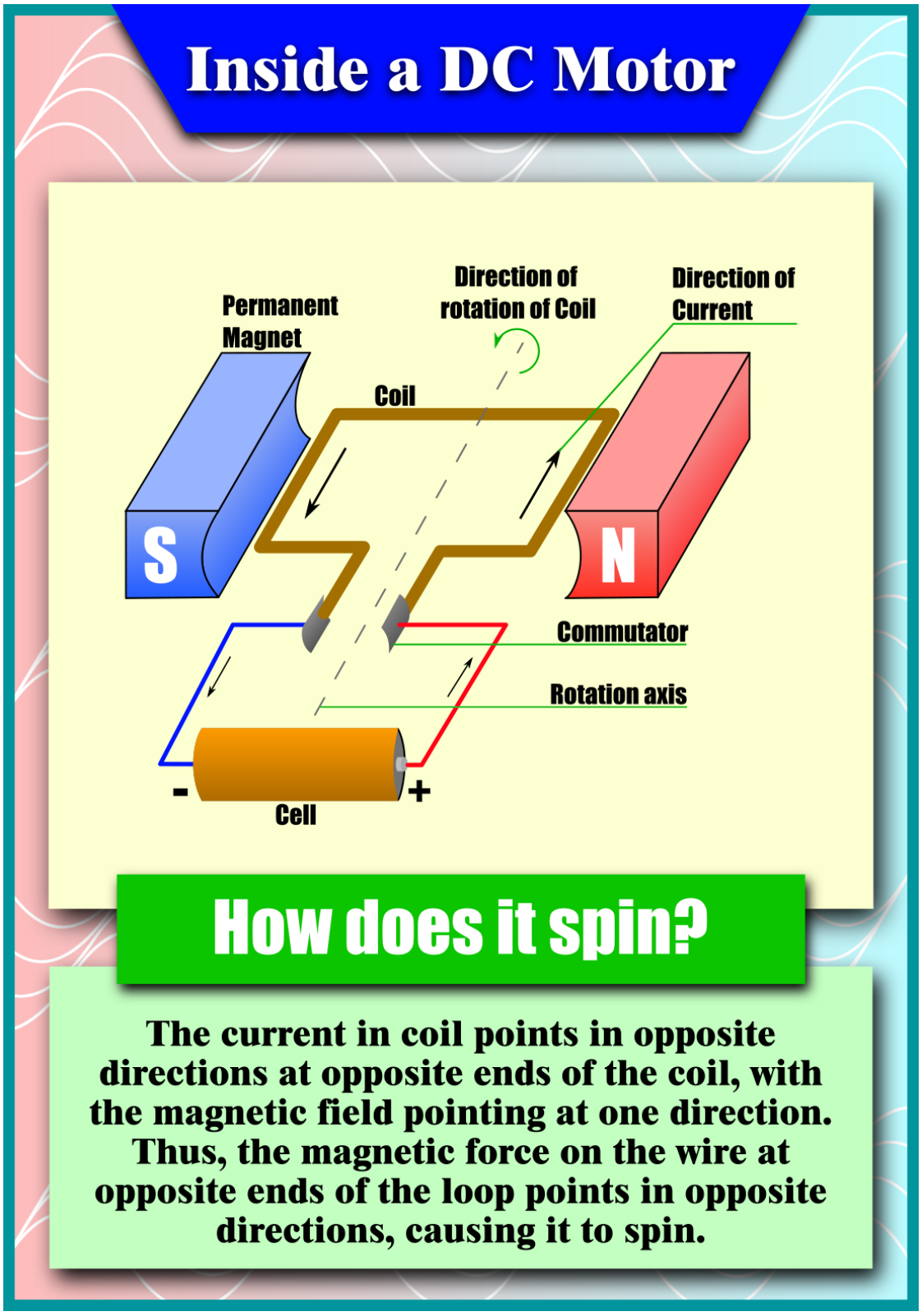
Artwork 6 – Combination of Resistors



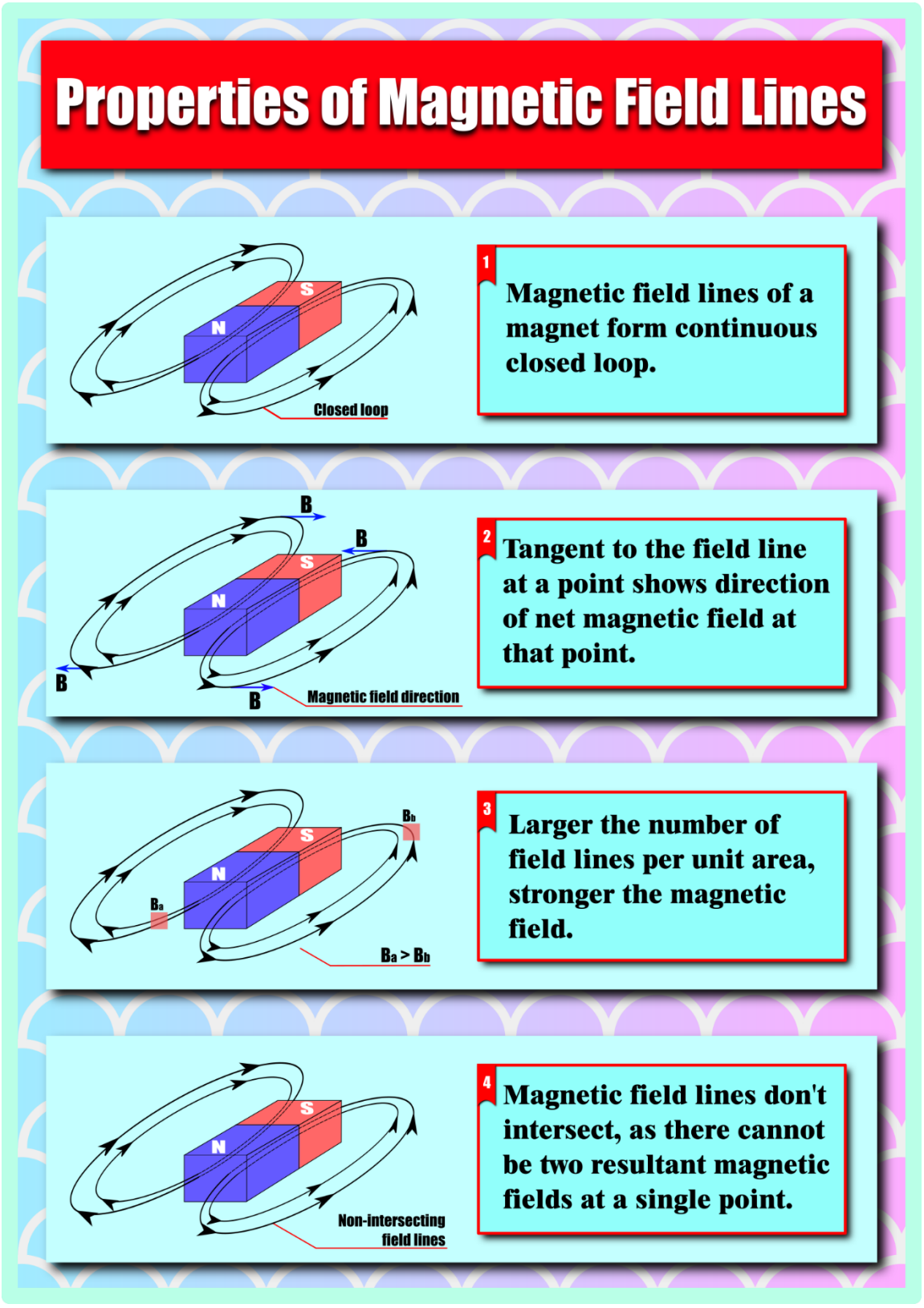
Artwork 7 – Roget's Spiral Experiment



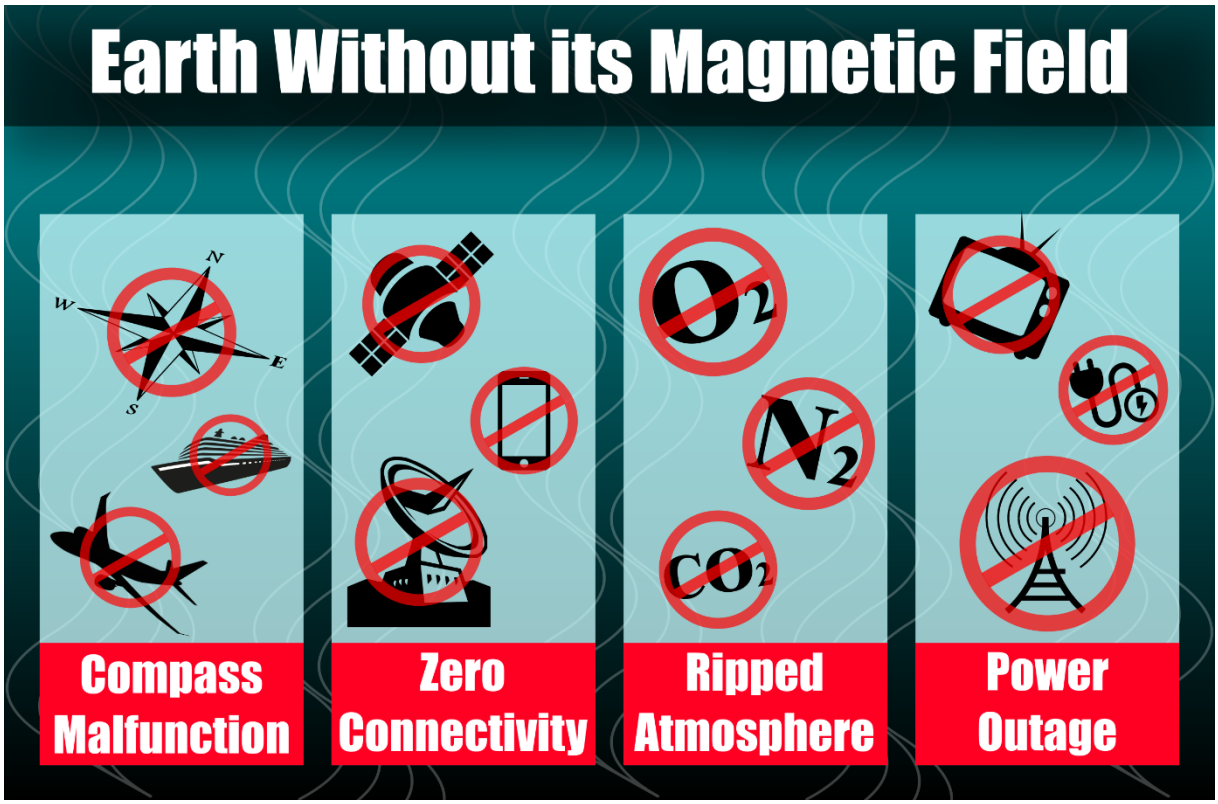
Artwork 8 – Inside a DC Motor



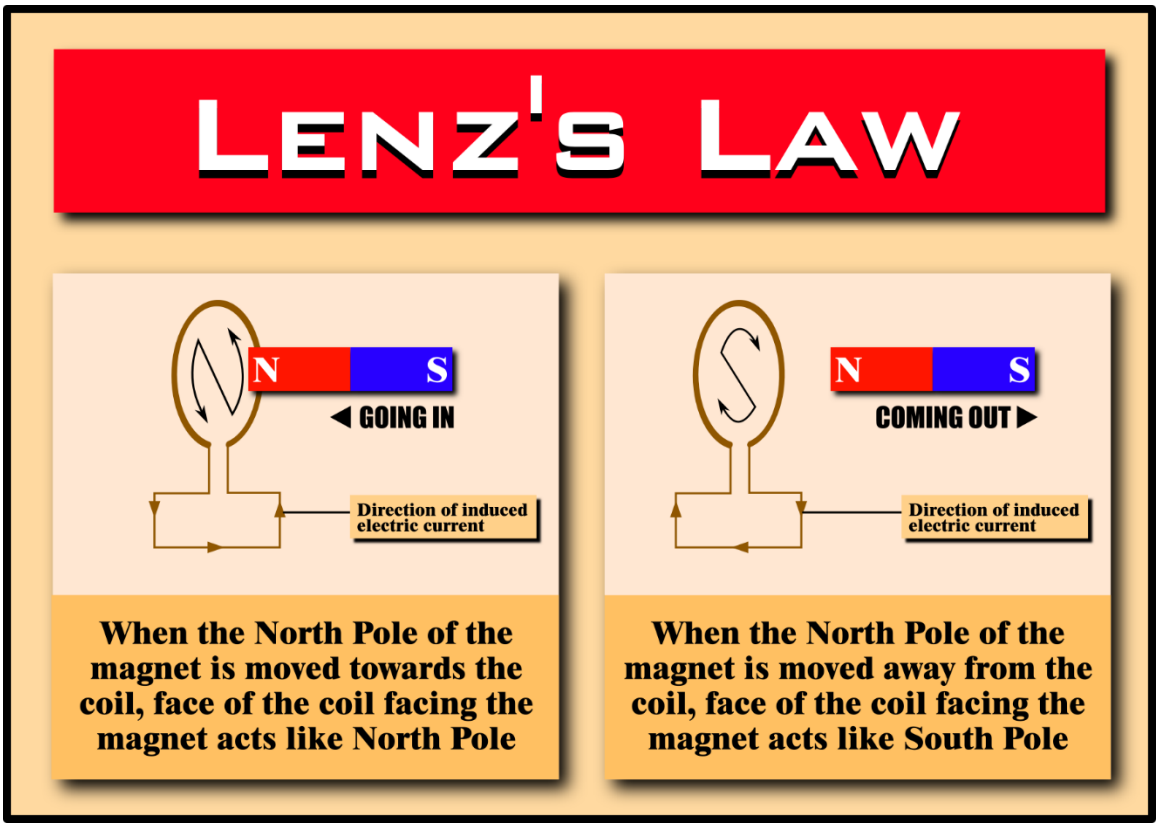
Artwork 9 – Properties of Magnetic Field Lines



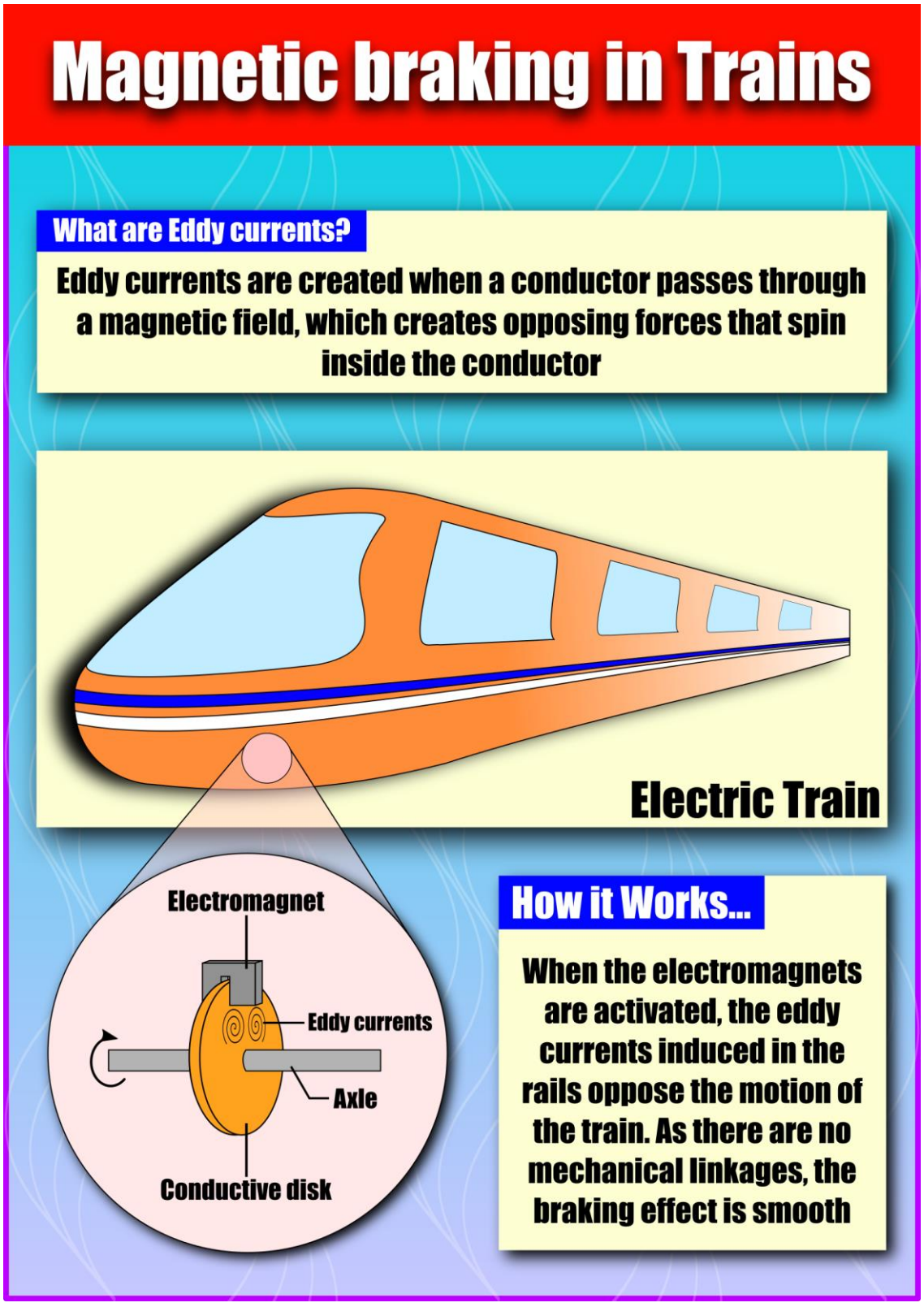
Artwork 10 – Earth Without its Magnetic Field



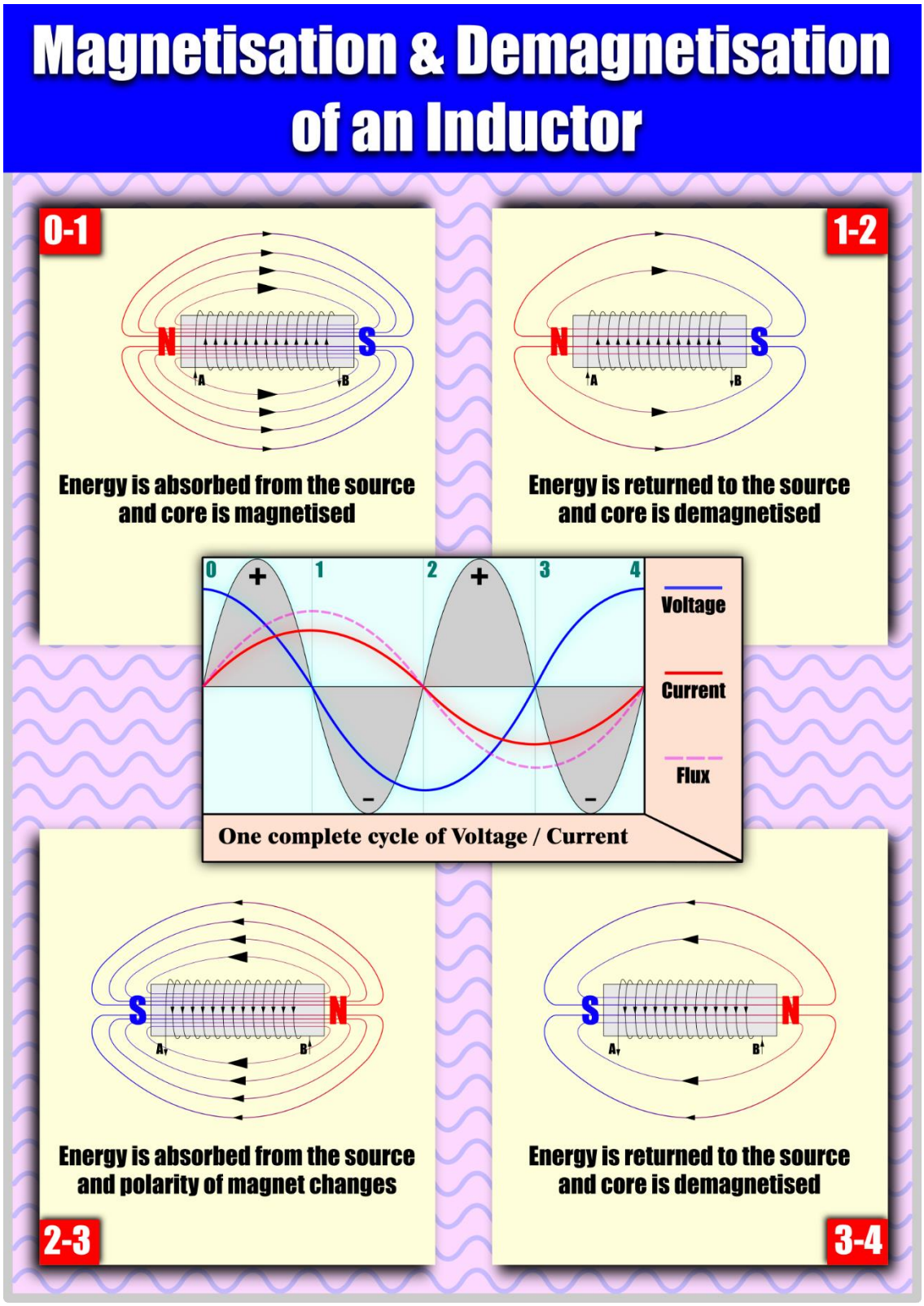
Artwork 11 – Lenz's Law



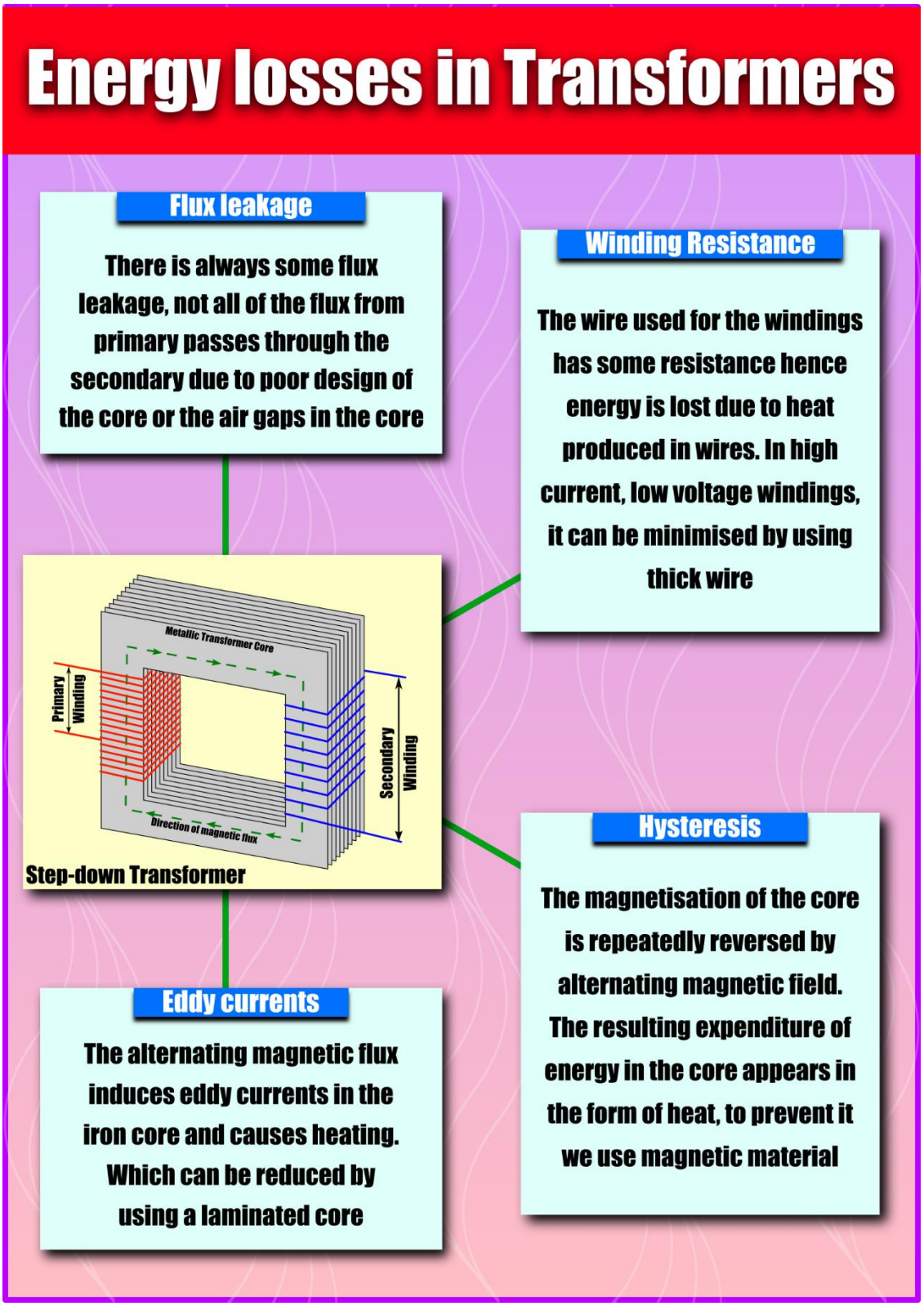
Artwork 12 – Magnetic Braking in Trains



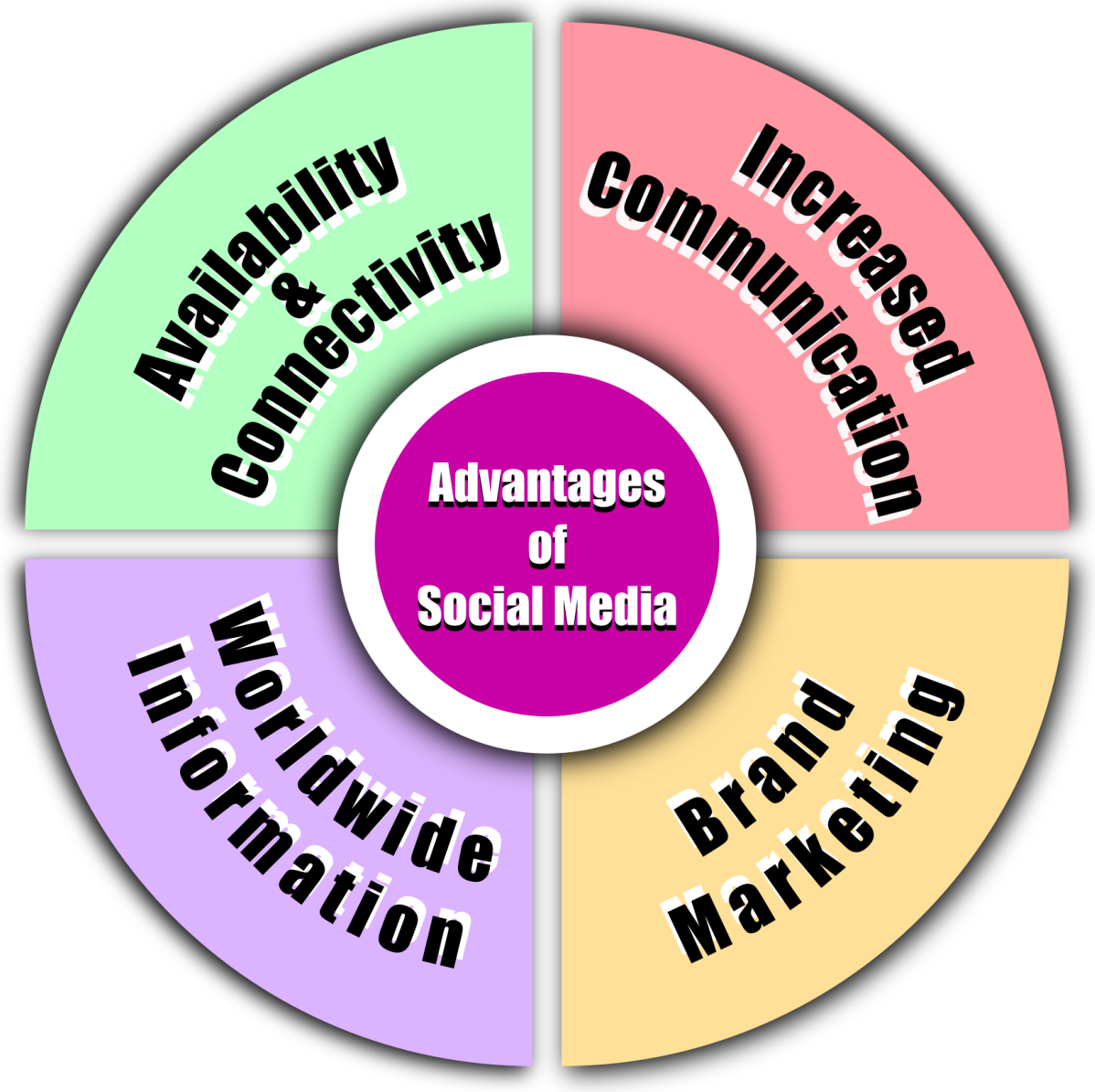
Artwork 13 – Magnetisation and Demagnetisation of an Inductor



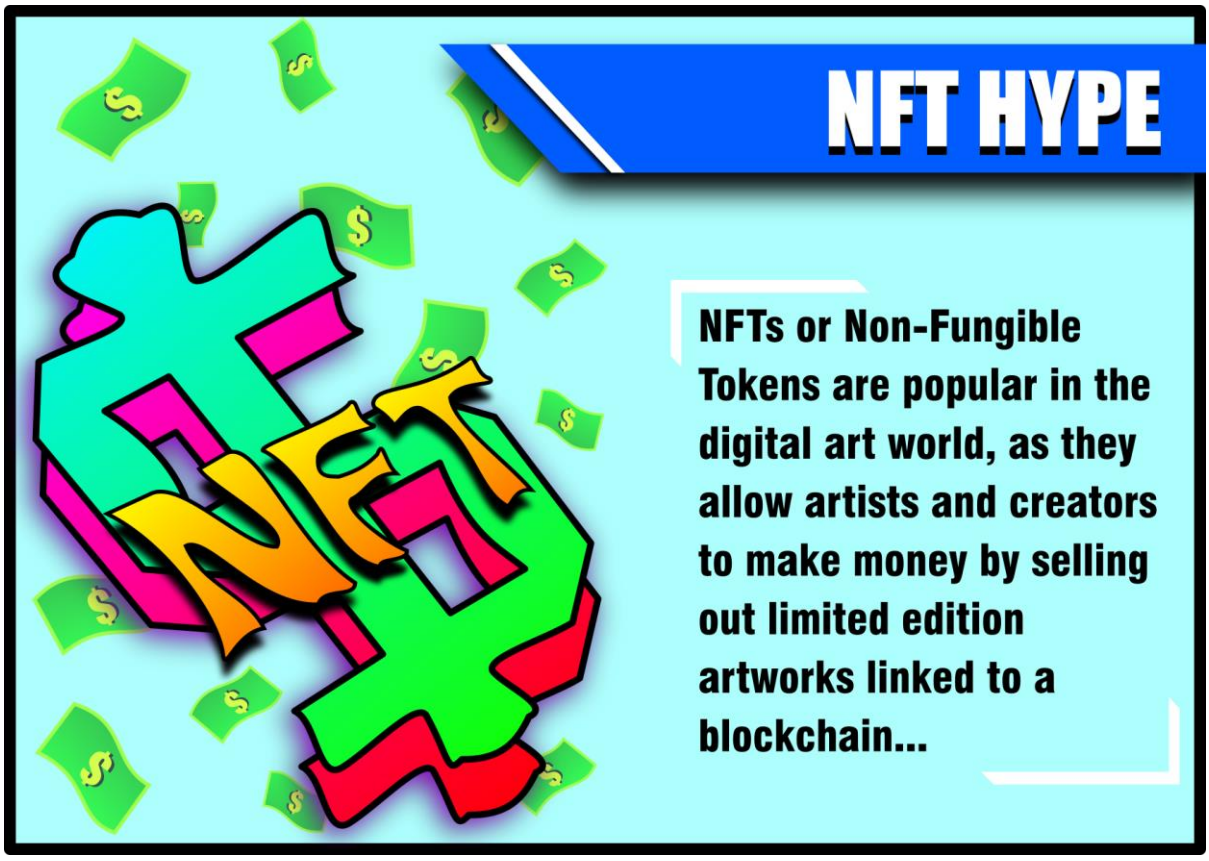
Artwork 14 – Energy Losses in Transformers



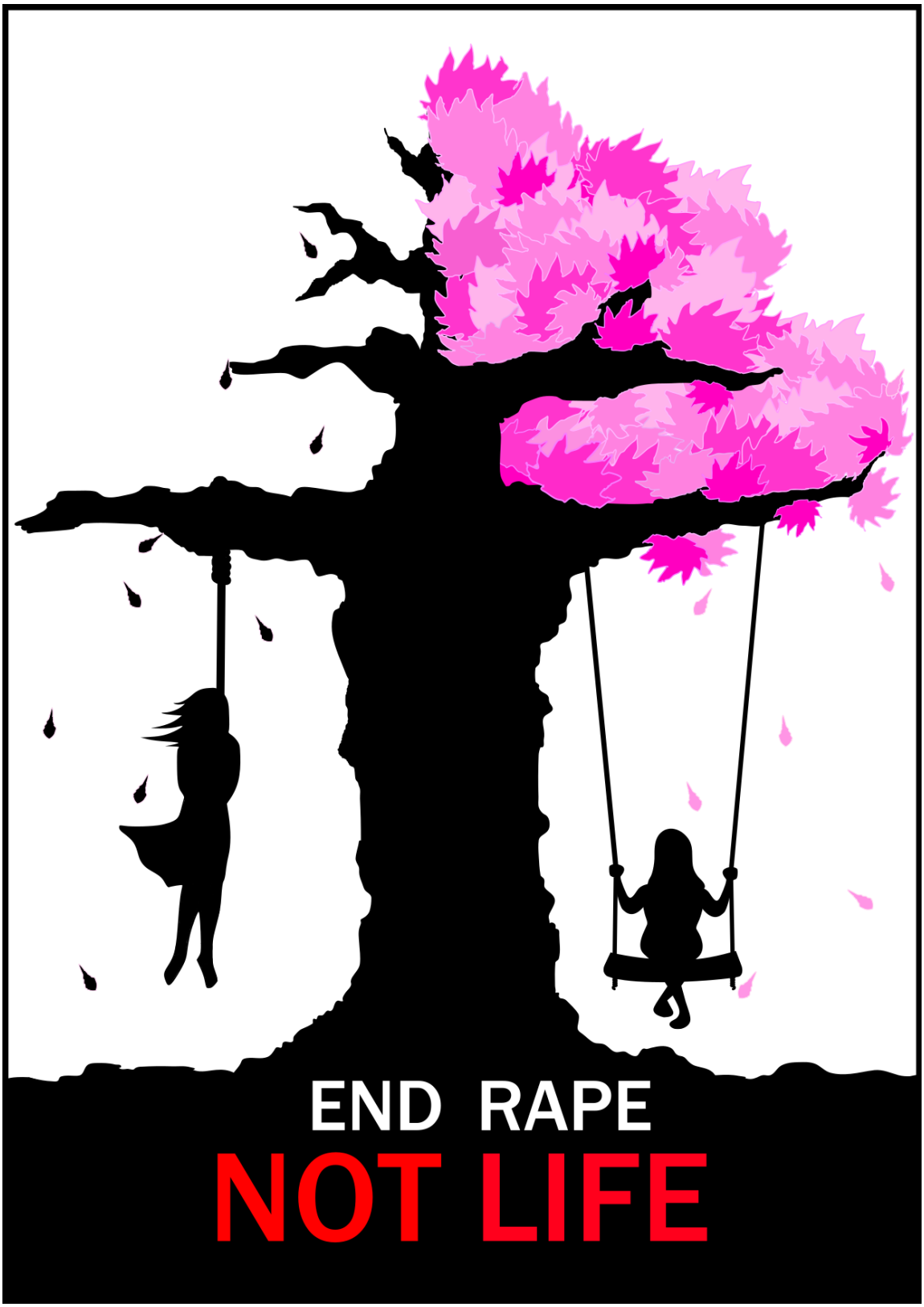
Artwork 15 – Advantages of Social Media



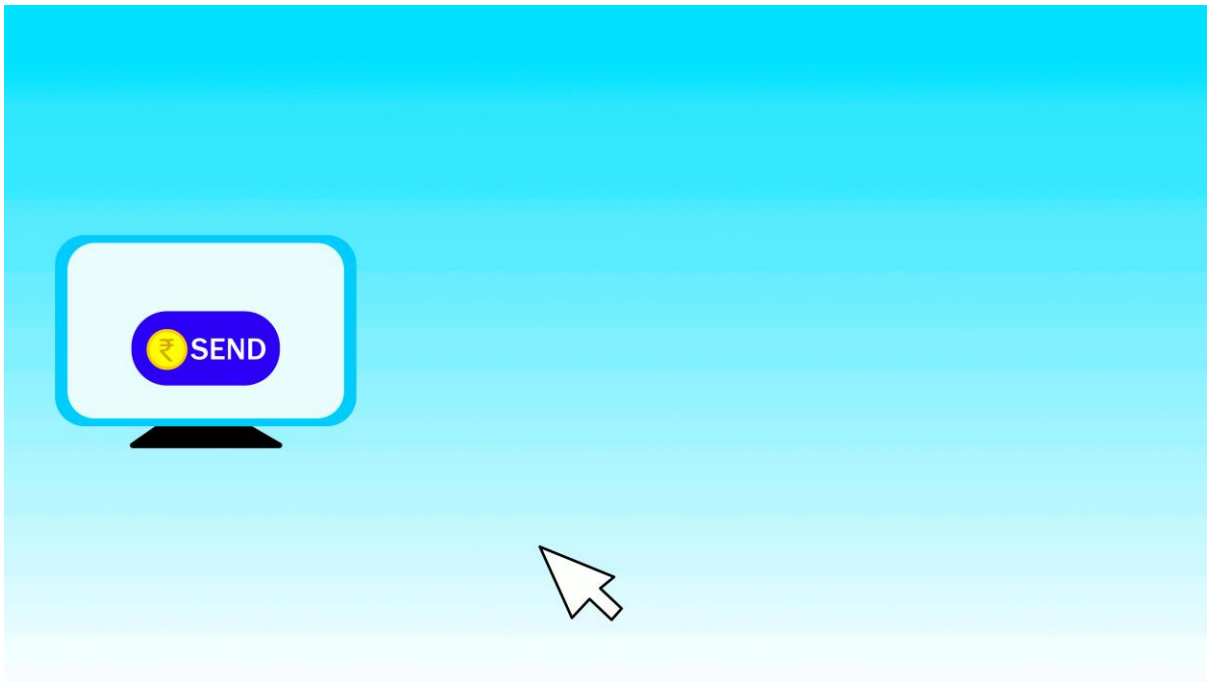
Artwork 16 – NFT Hype



Artwork 17 – A4 Poster



Artwork 18 – Secure payment GIF for websites



Artwork 19 – App Icons

Artwork 20 – Social Media Post (Advertisement)

What Lies Ahead.....

Future Plans and Follow up

This has been a big milestone in my life. Being a student, I plan to combine the skills gained from the FOSSEE project with knowledge to encourage more and more people to use the free alternatives. The skilled that I learned during my fellowship will be very useful in my engineering career ahead.

I see many possibilities with this. I am always glad to join hands and work for FOSSEE projects in future. I admire the FOSSEE team as well as their initiative to make knowledge accessible for all.

Thank You

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End of report