

## 11 Fisheries Protection Plan

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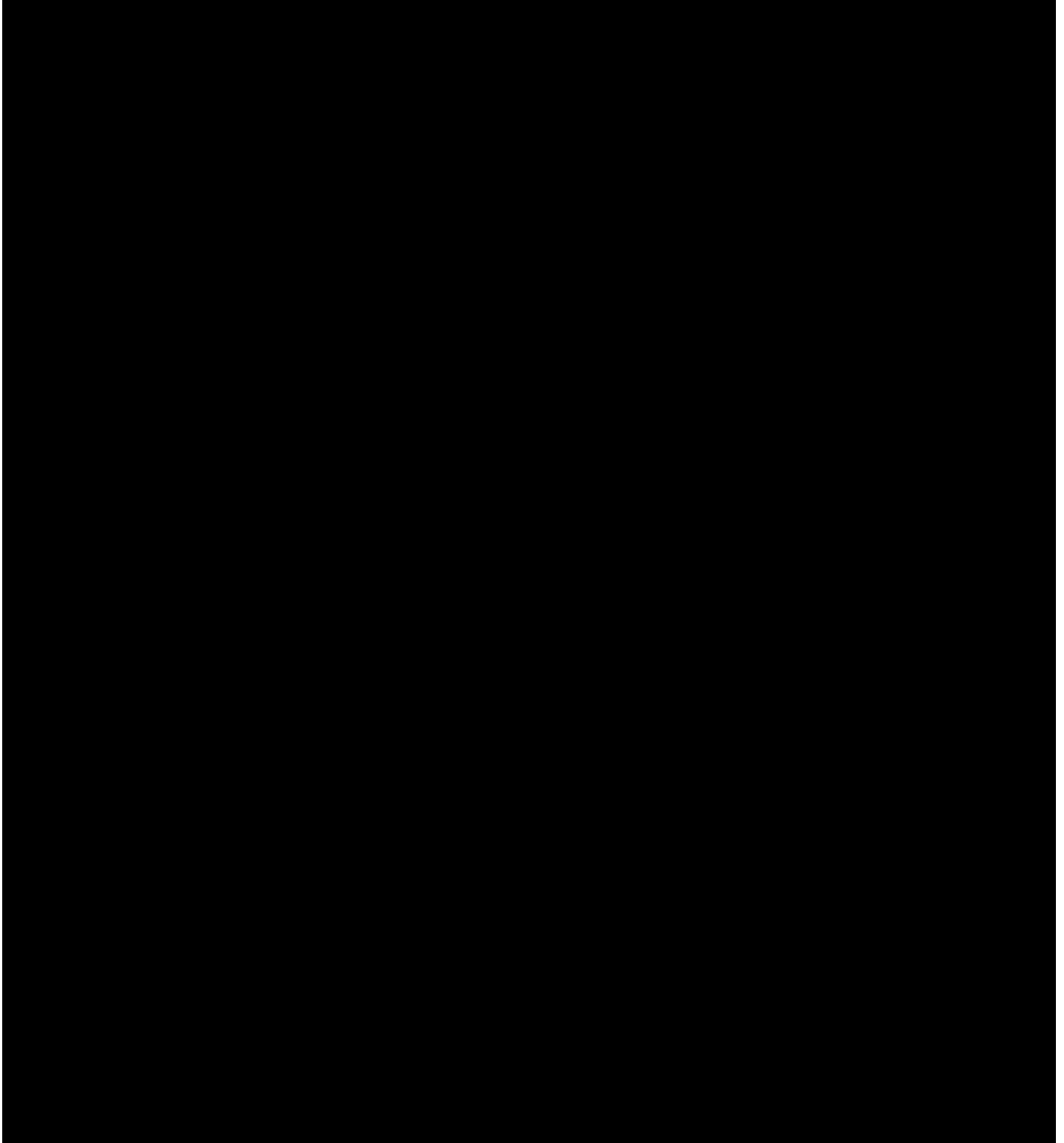
Appendix 11-5: Letter of support from [REDACTED]

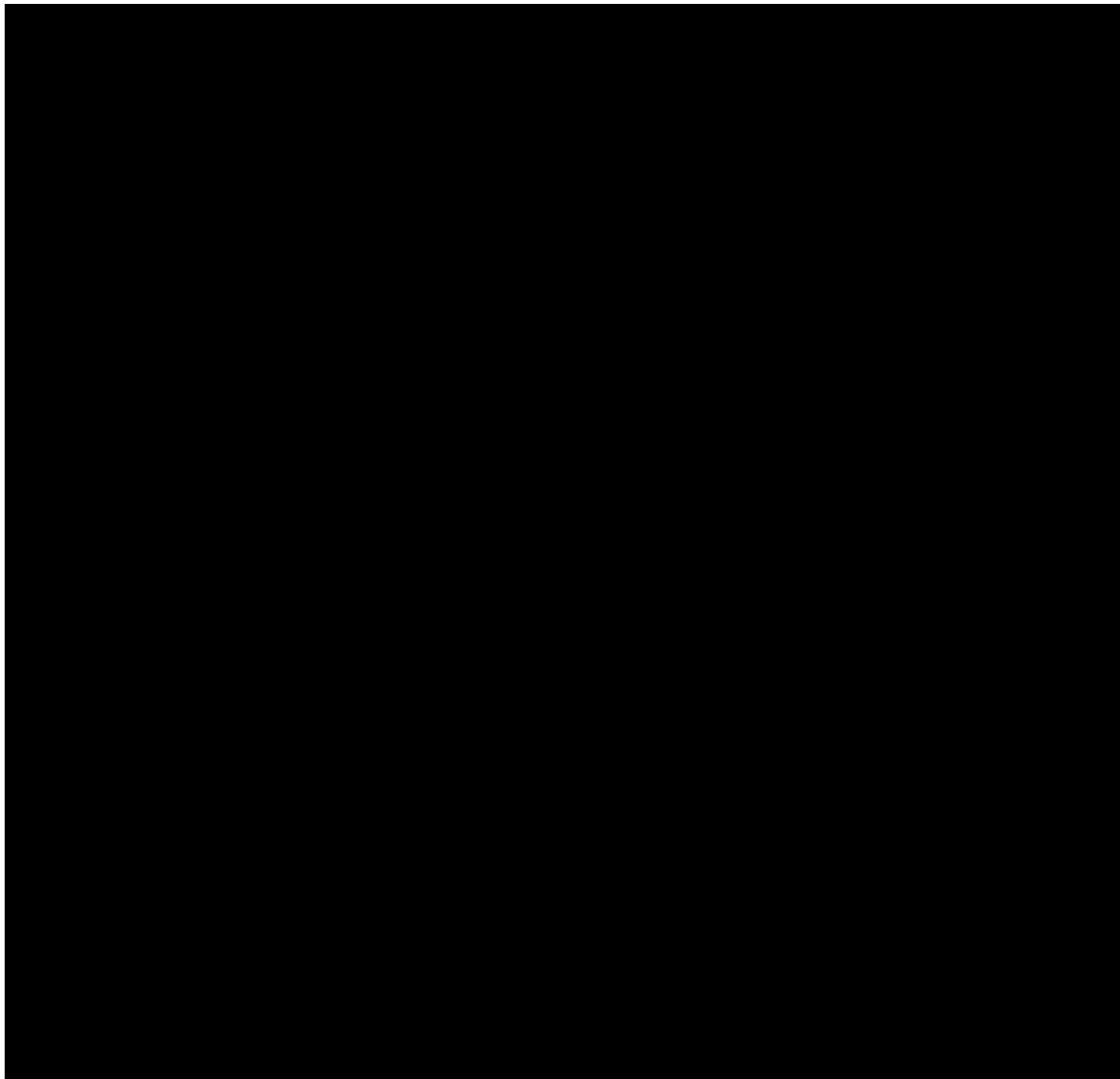
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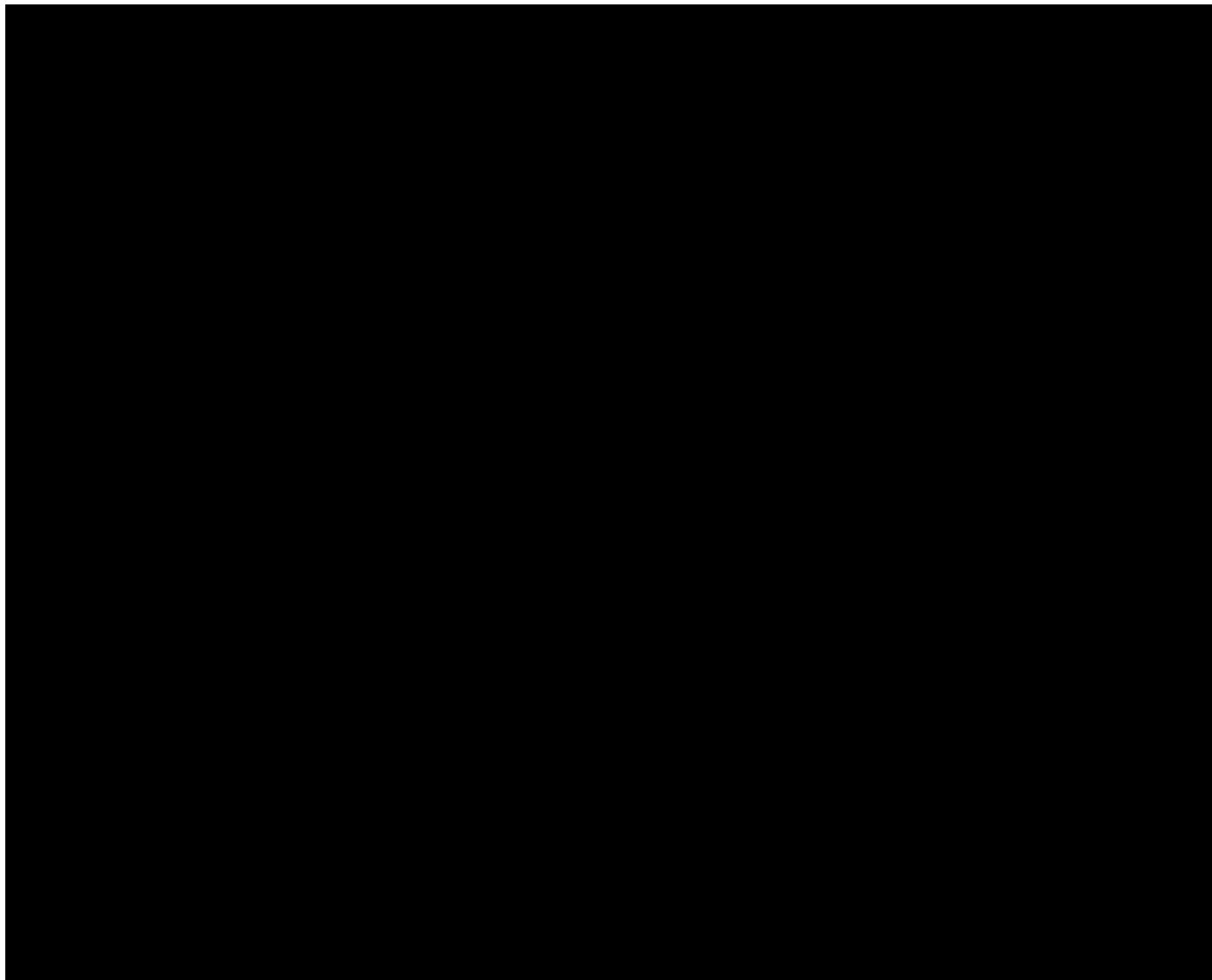
Appendix 11-7: Letter of support from [REDACTED]

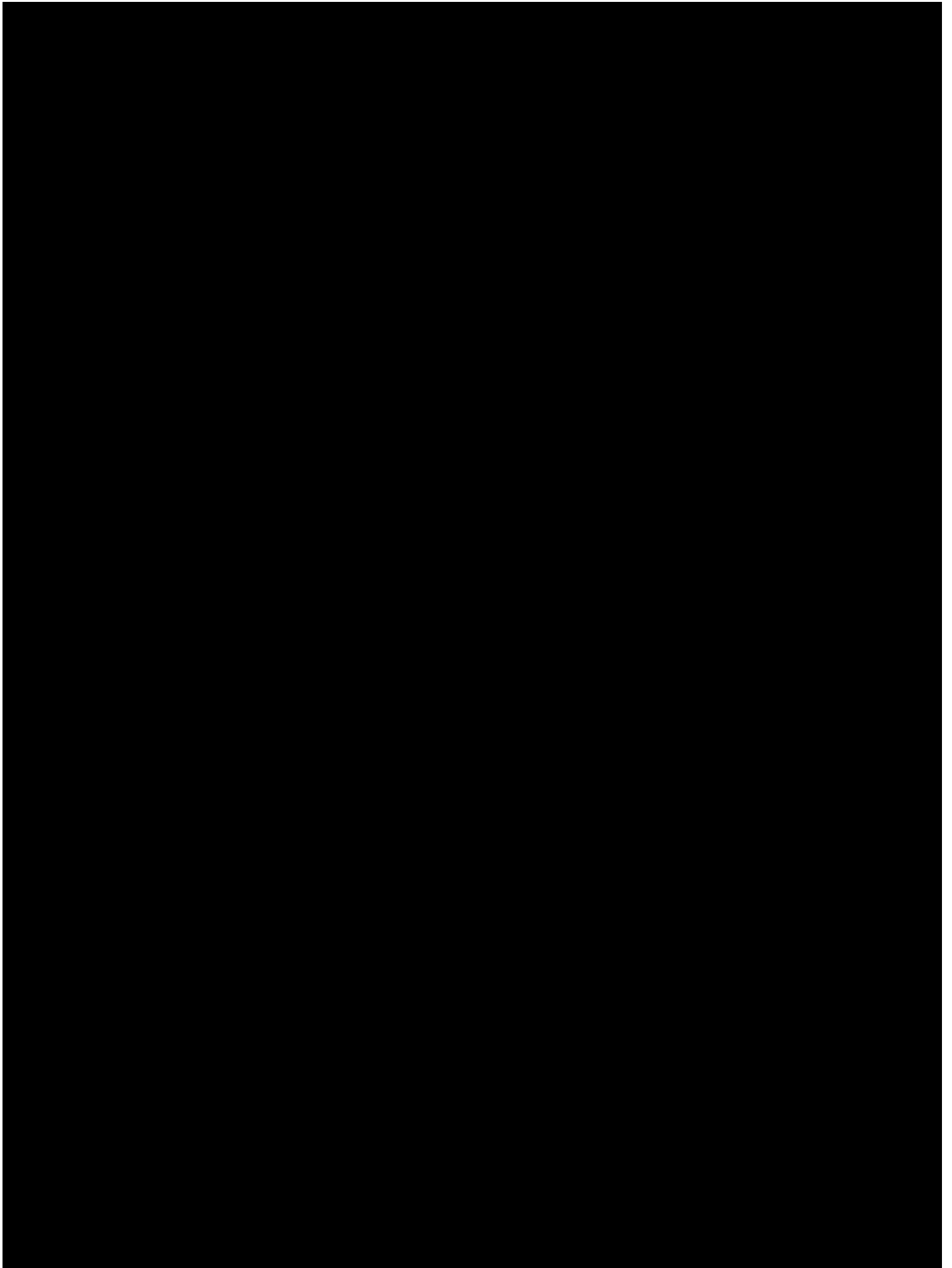
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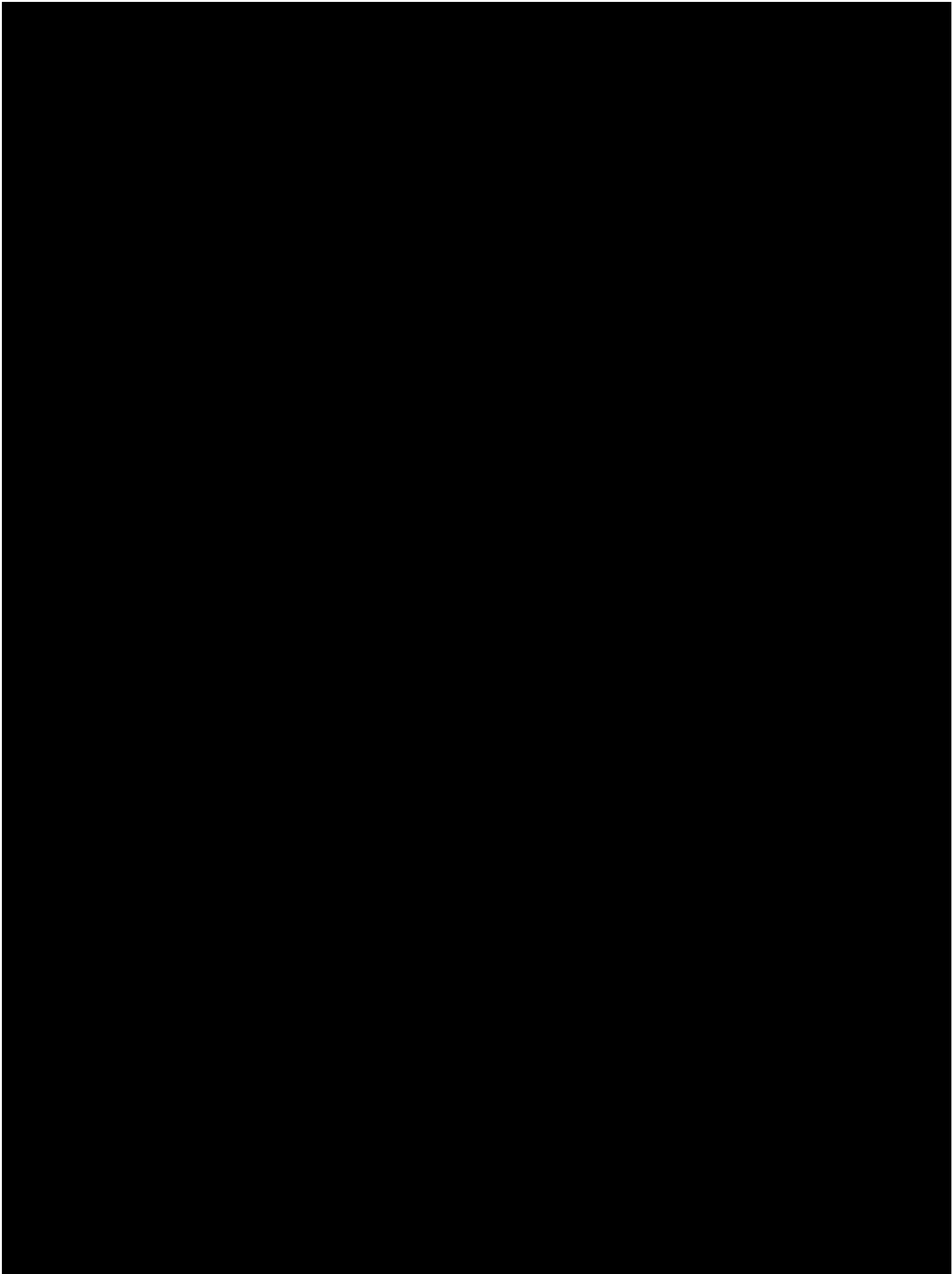
## Appendix 11-1: Fisheries communication plan

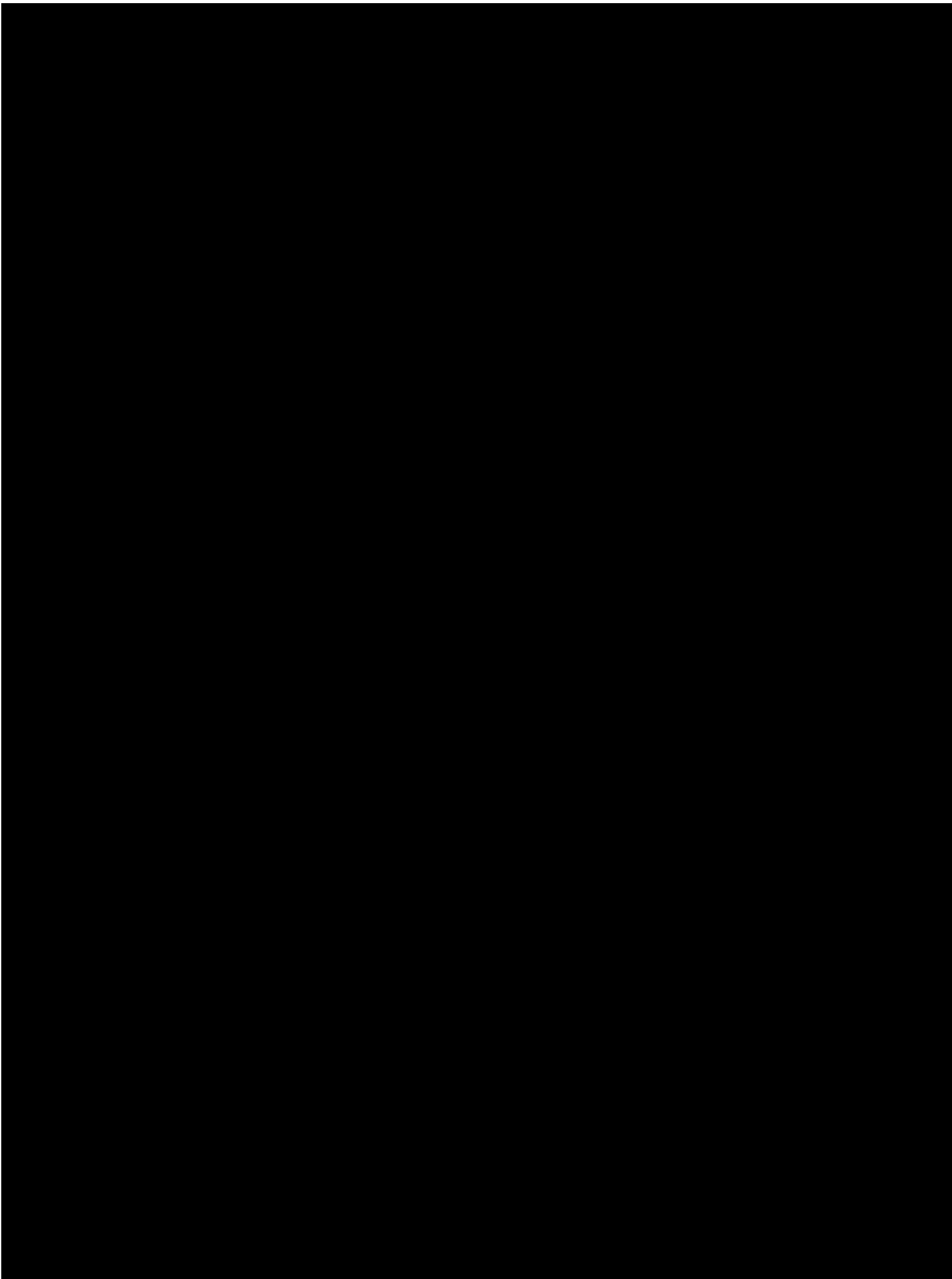




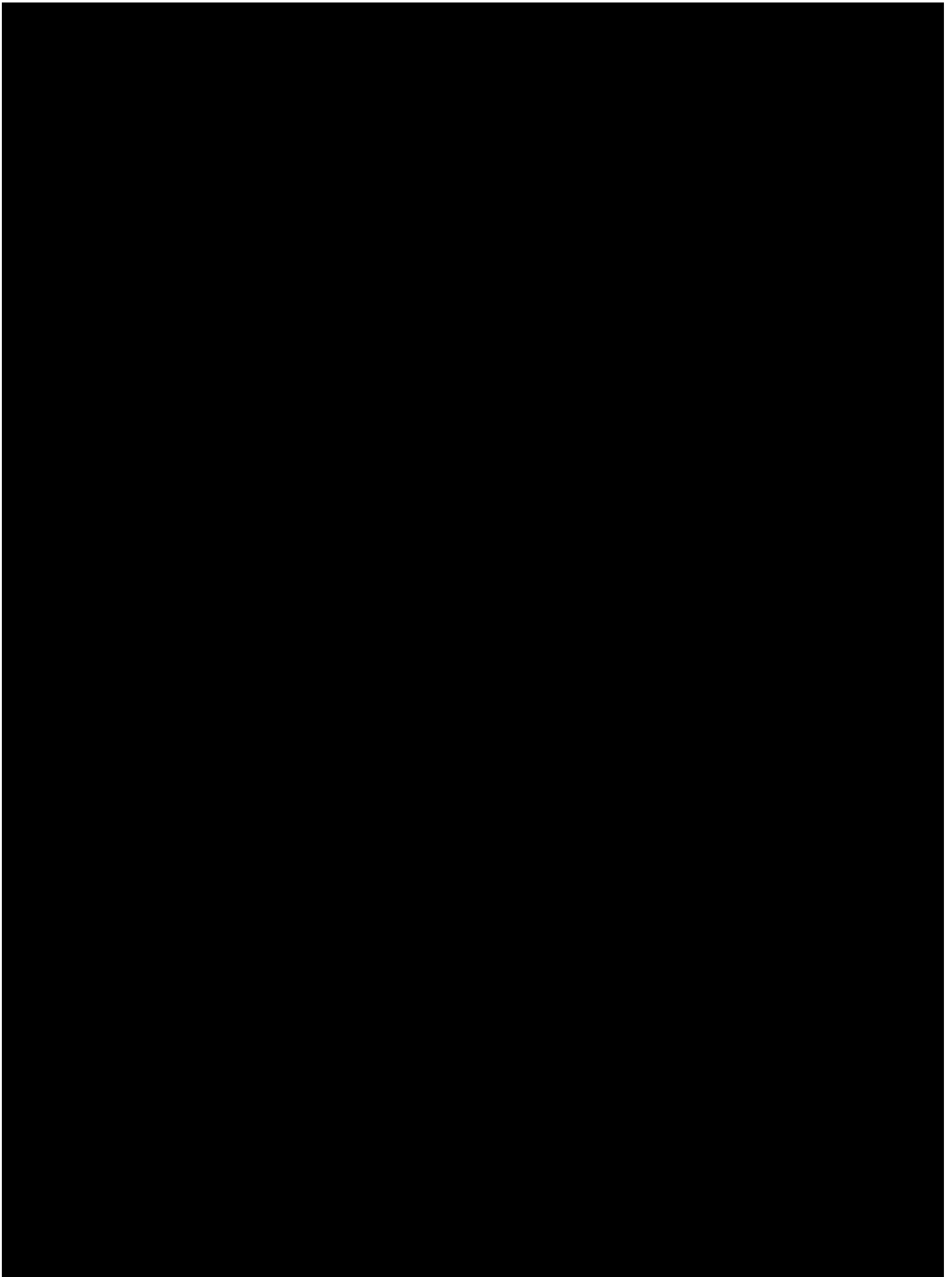


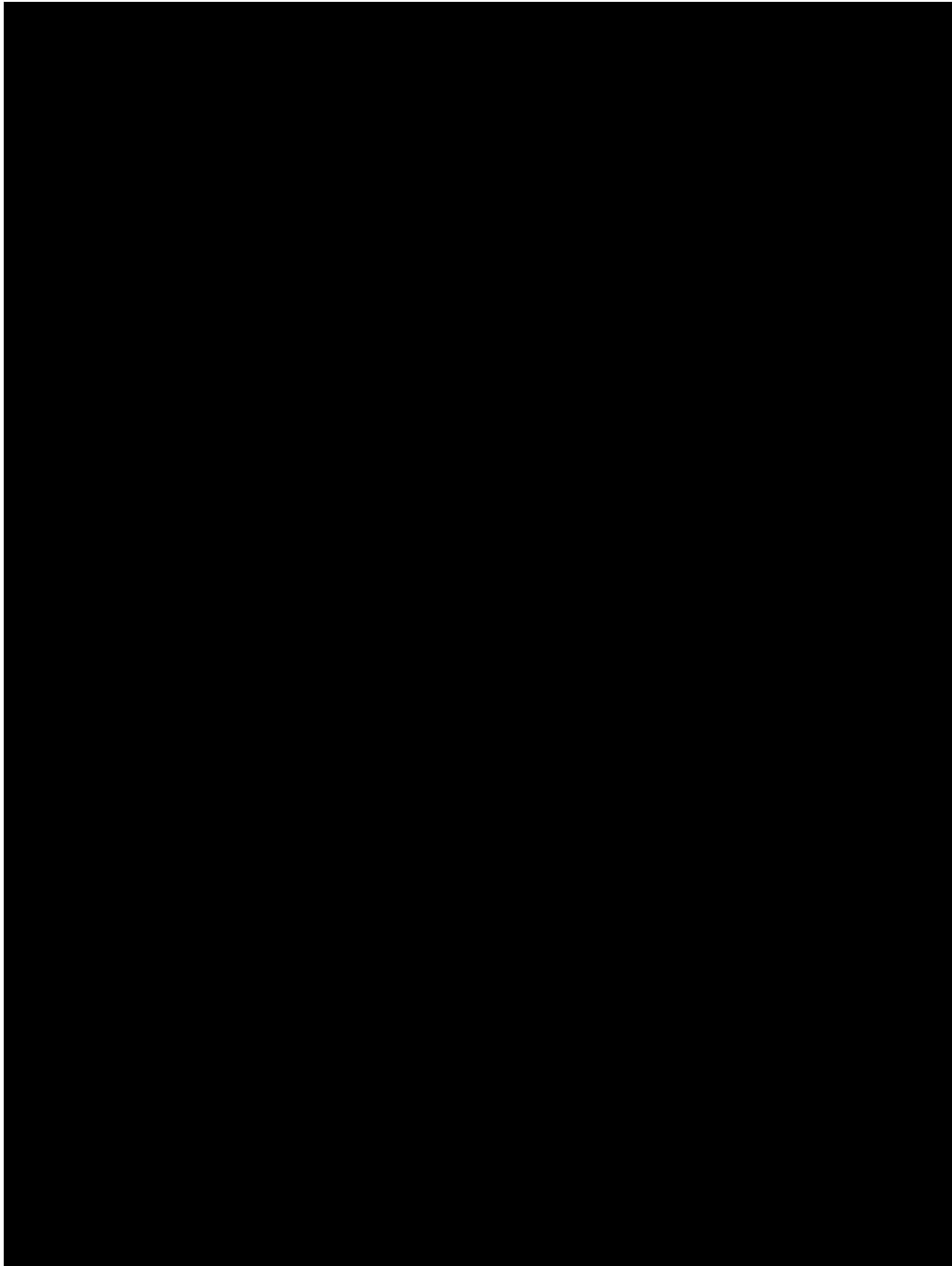


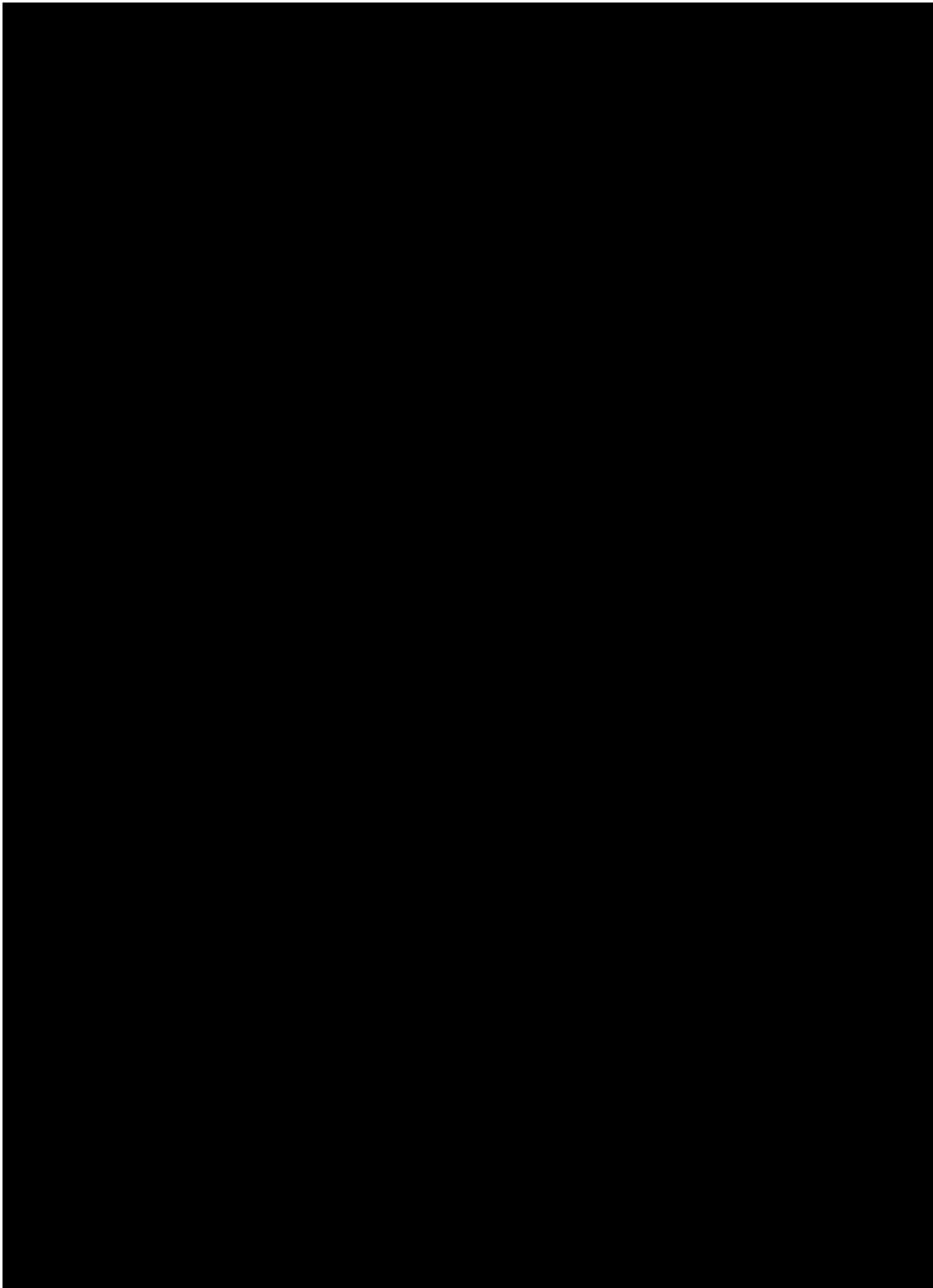


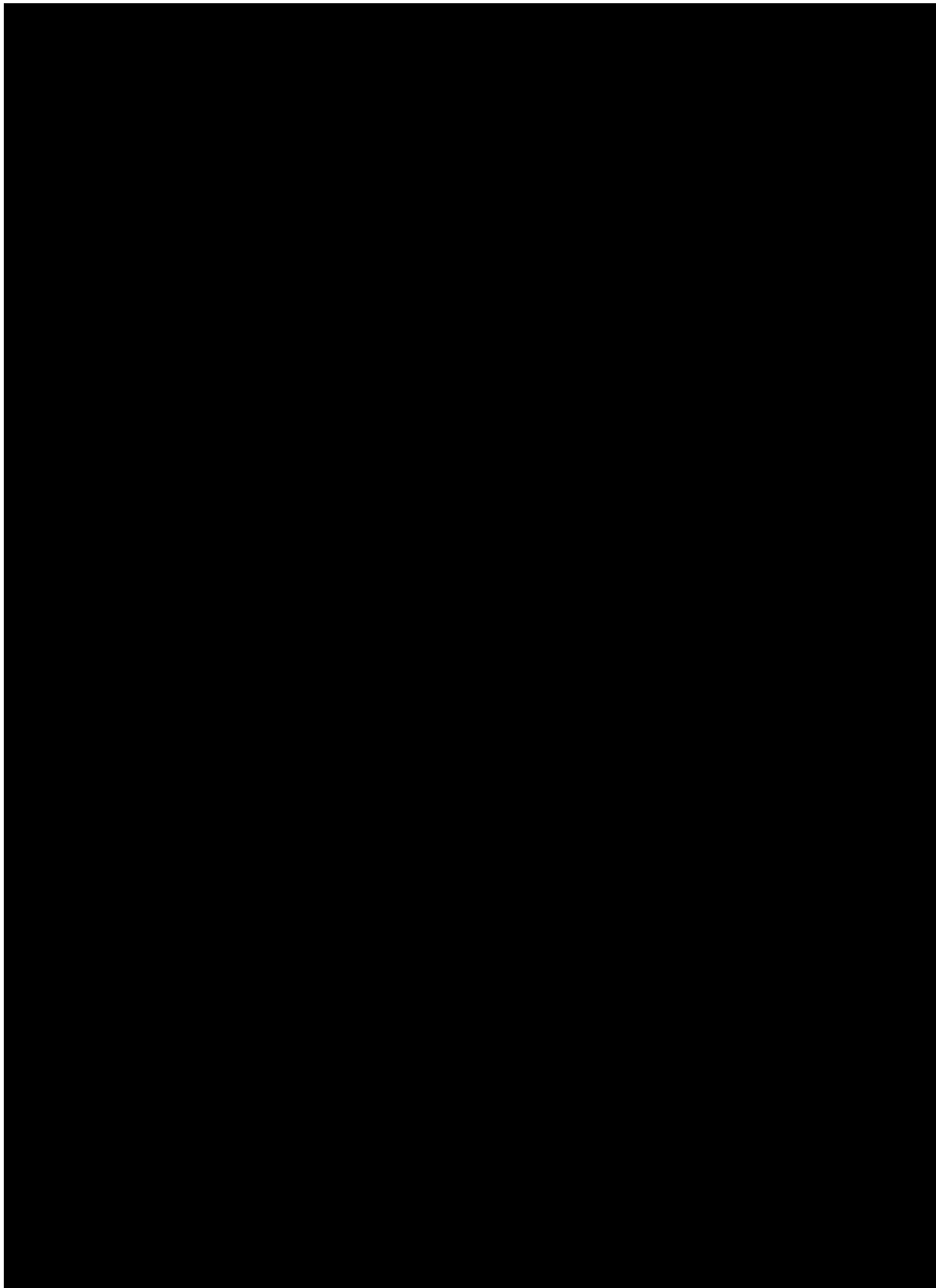


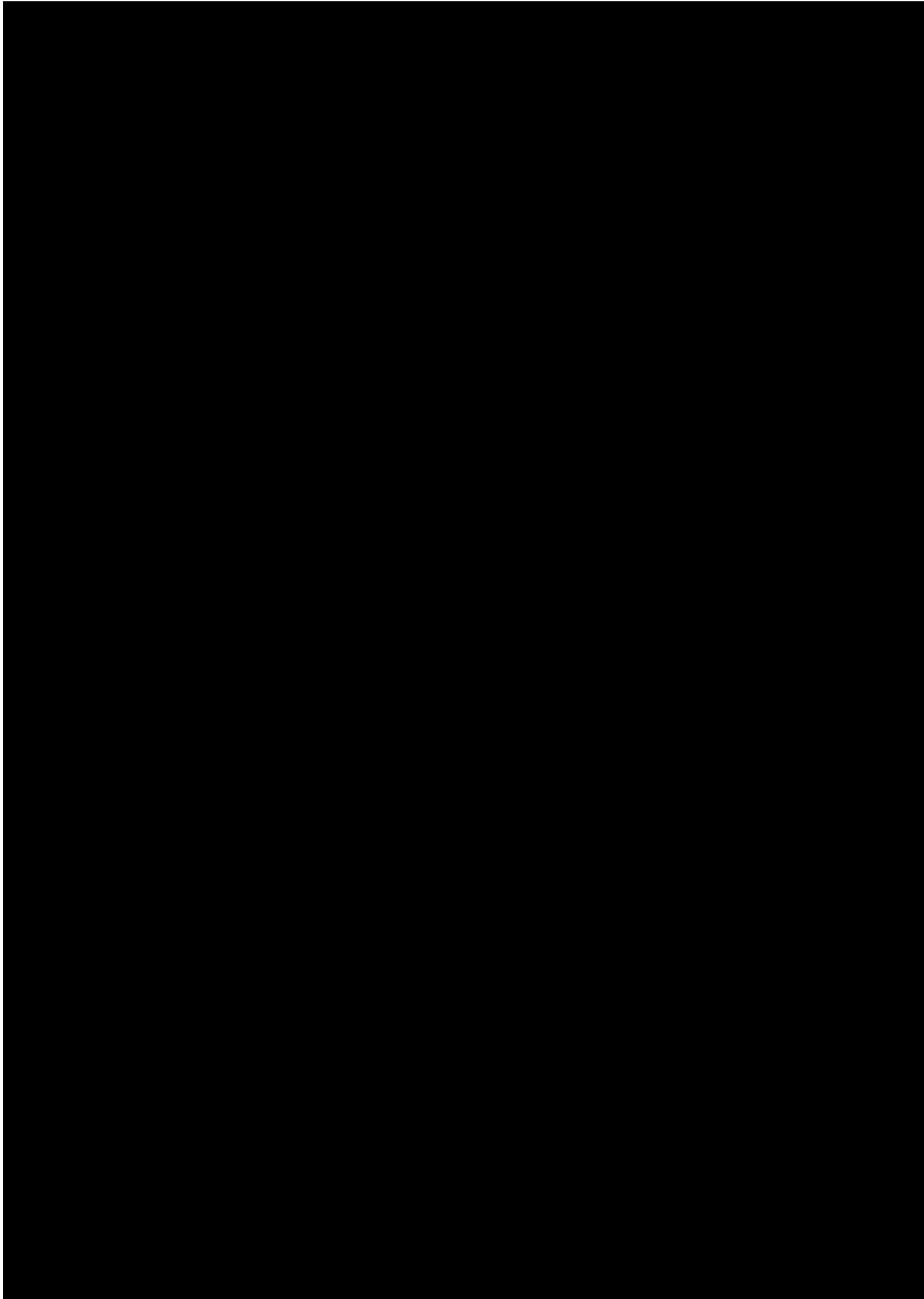


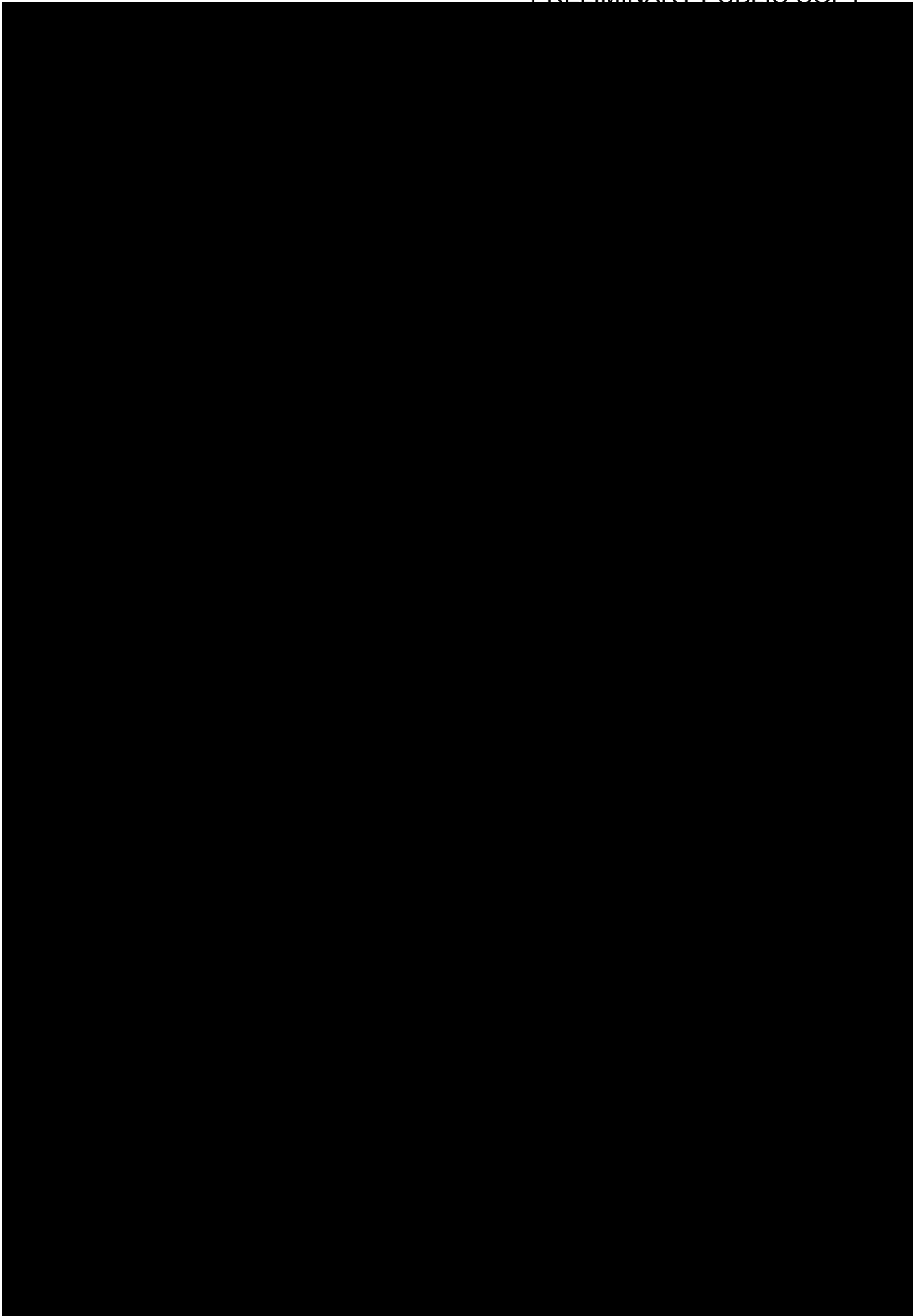


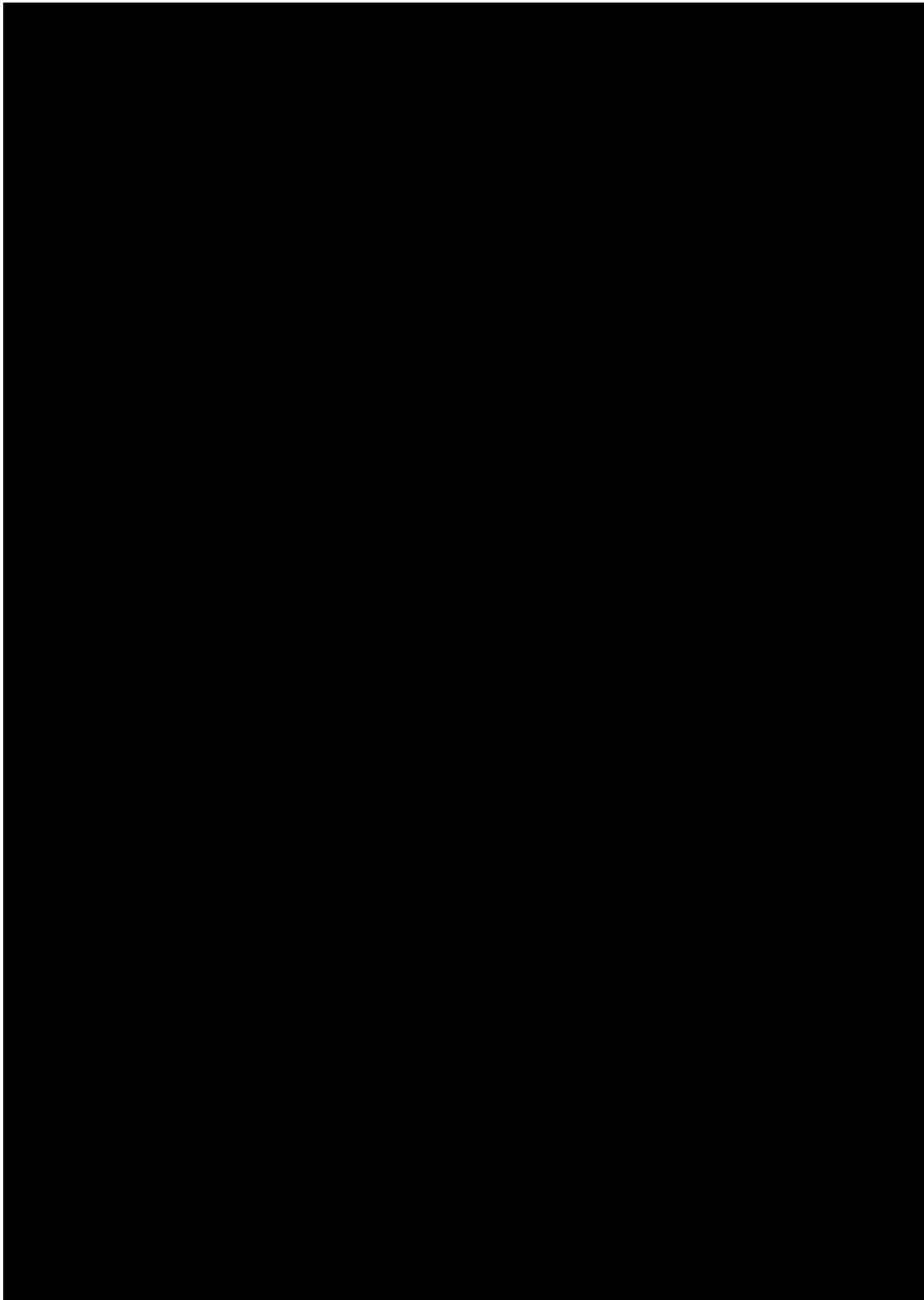


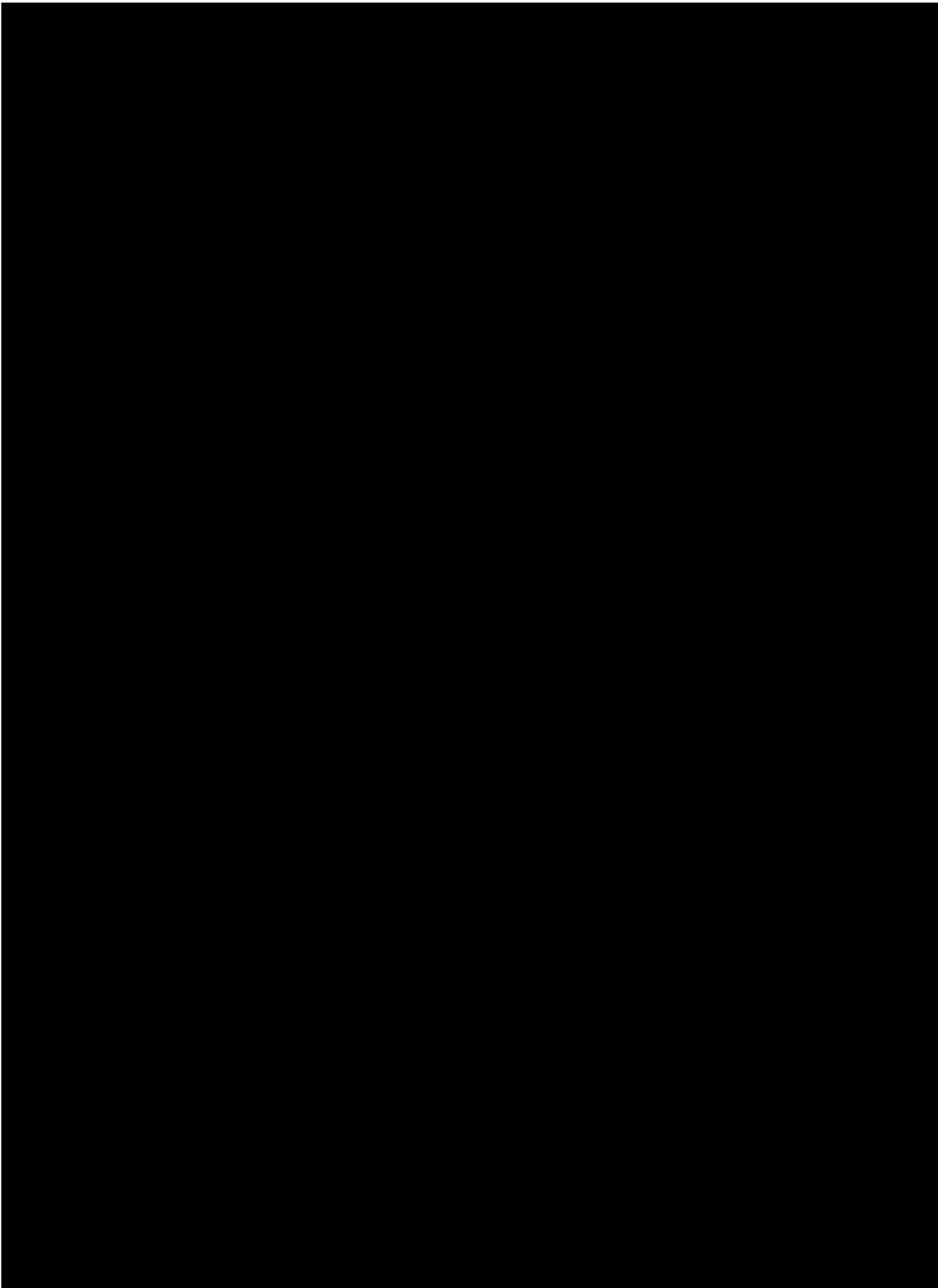




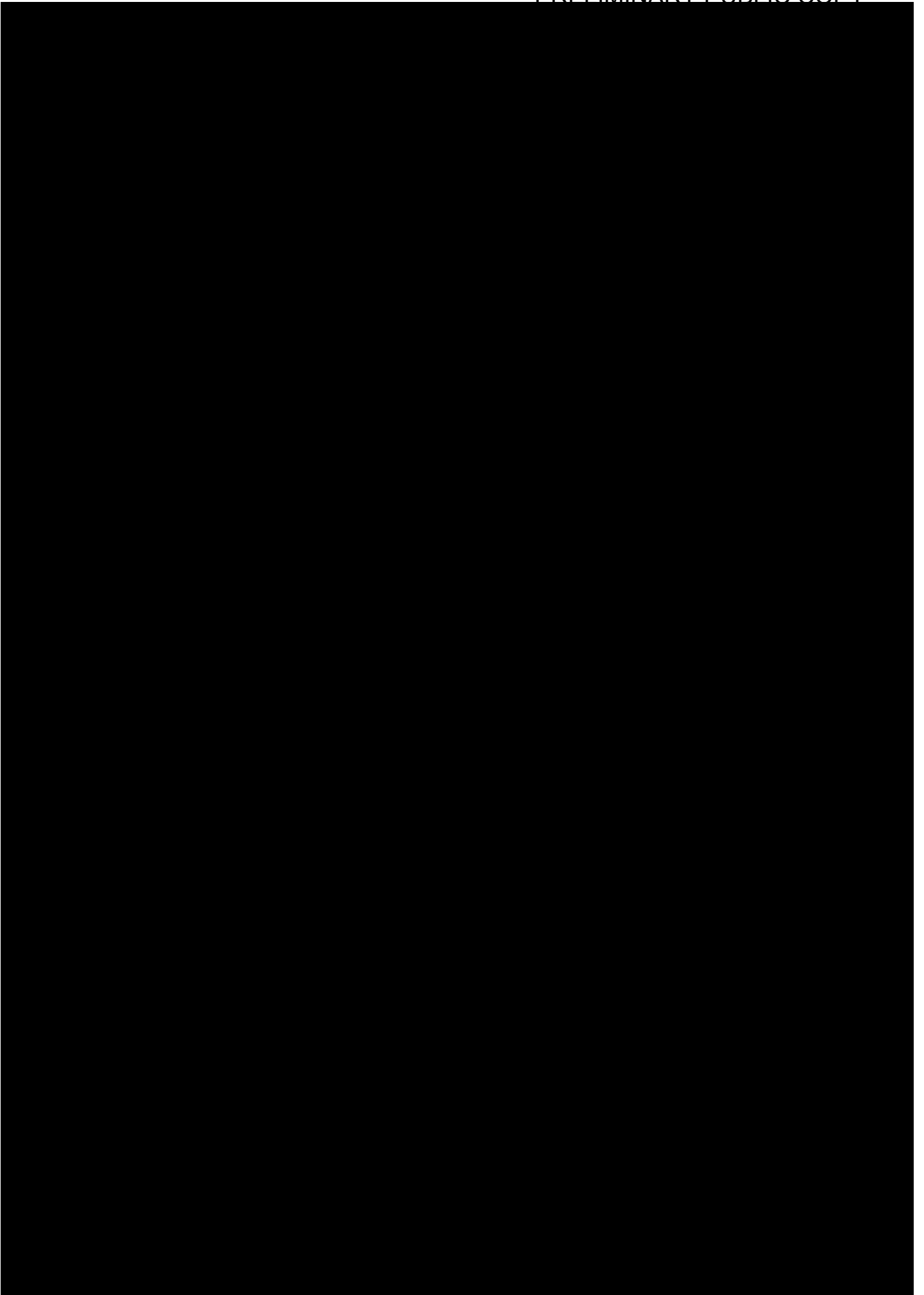


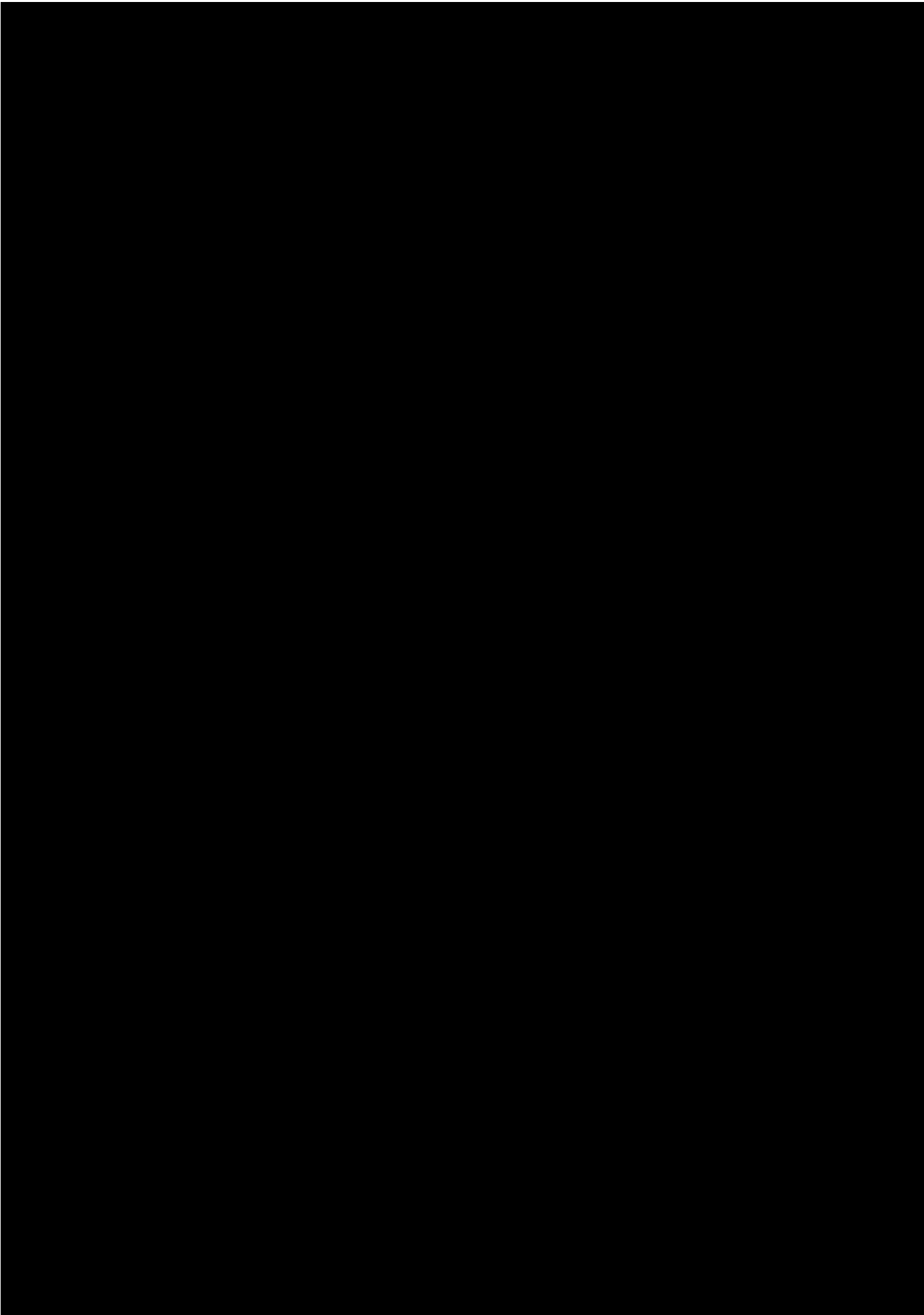


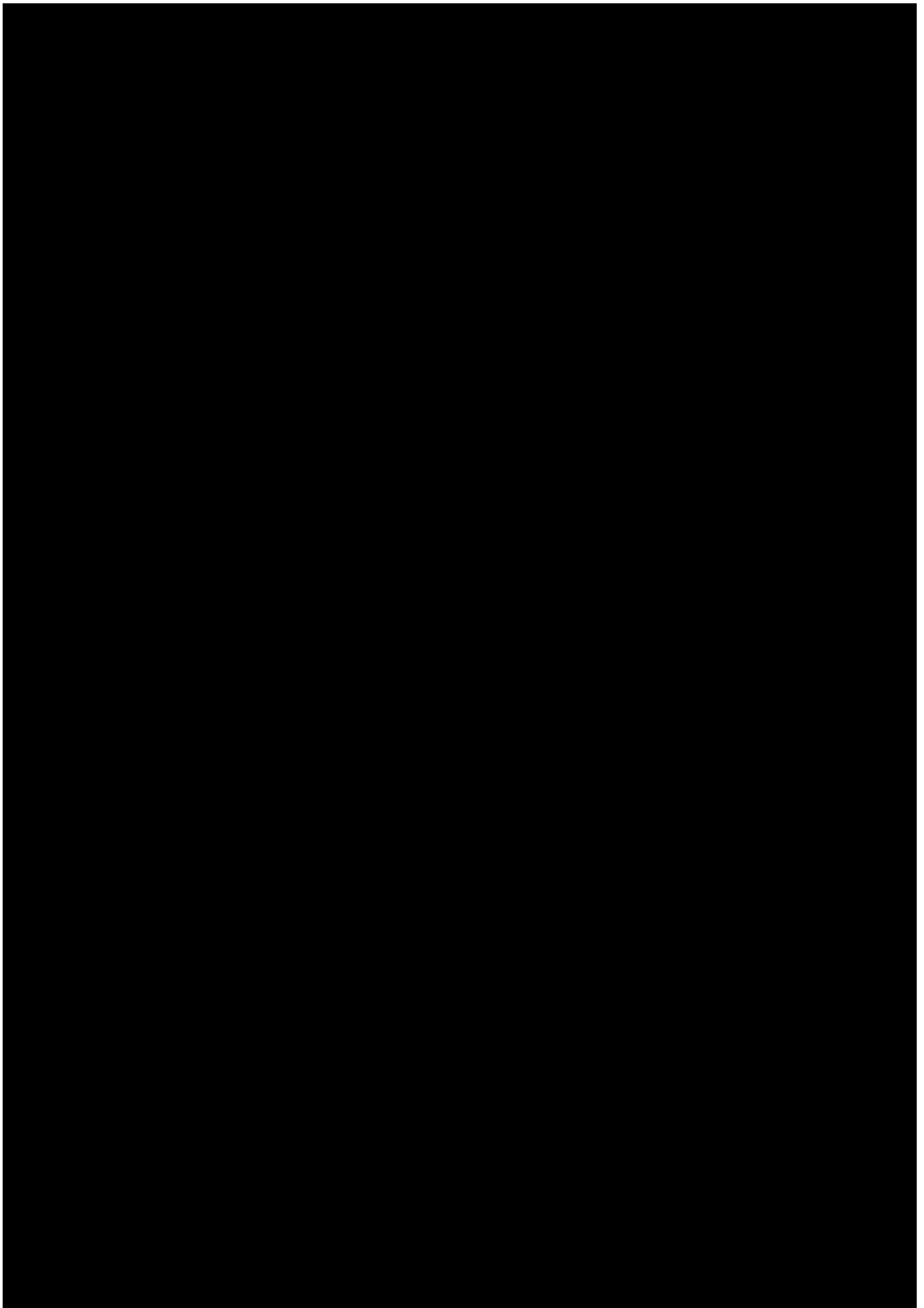


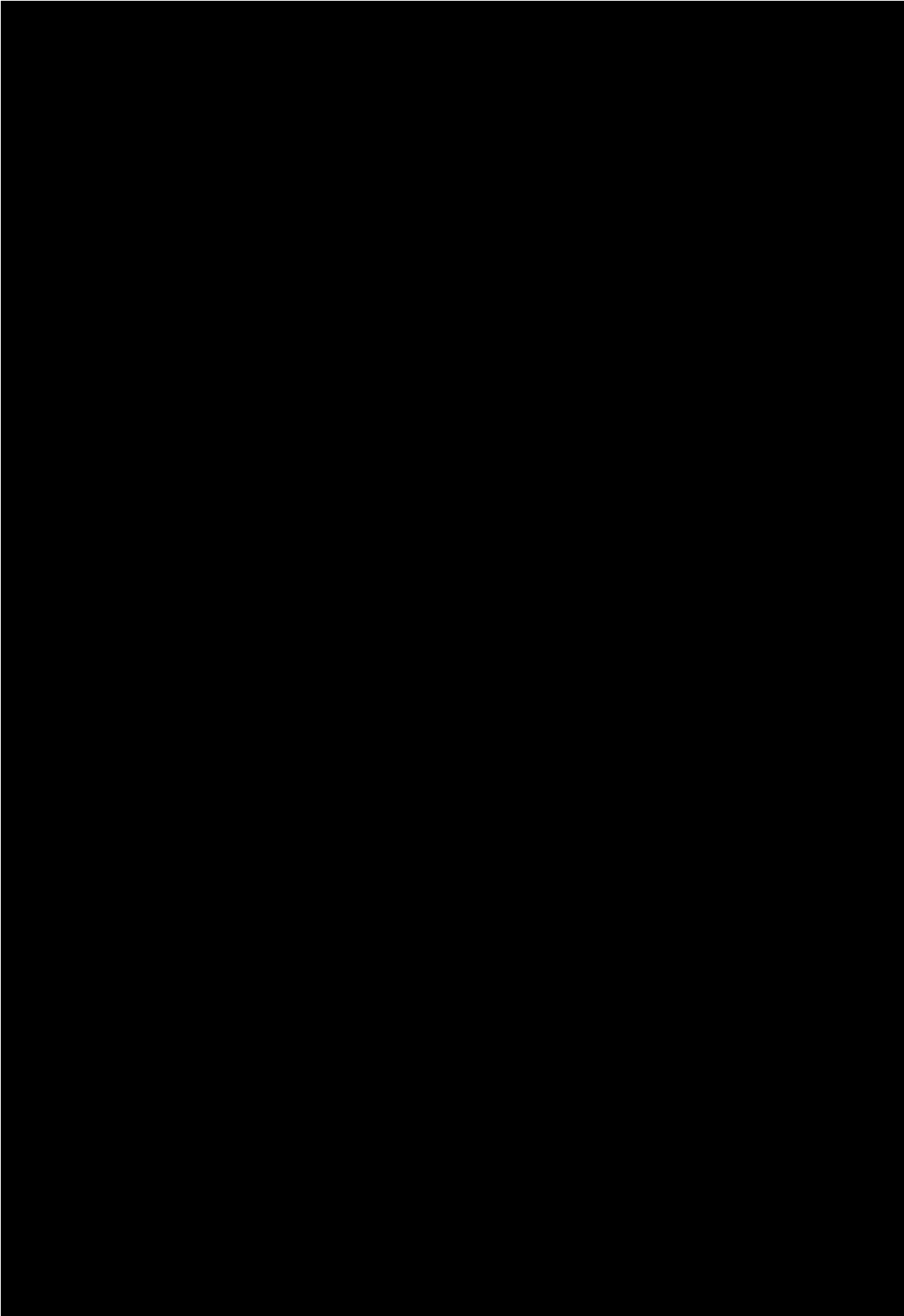


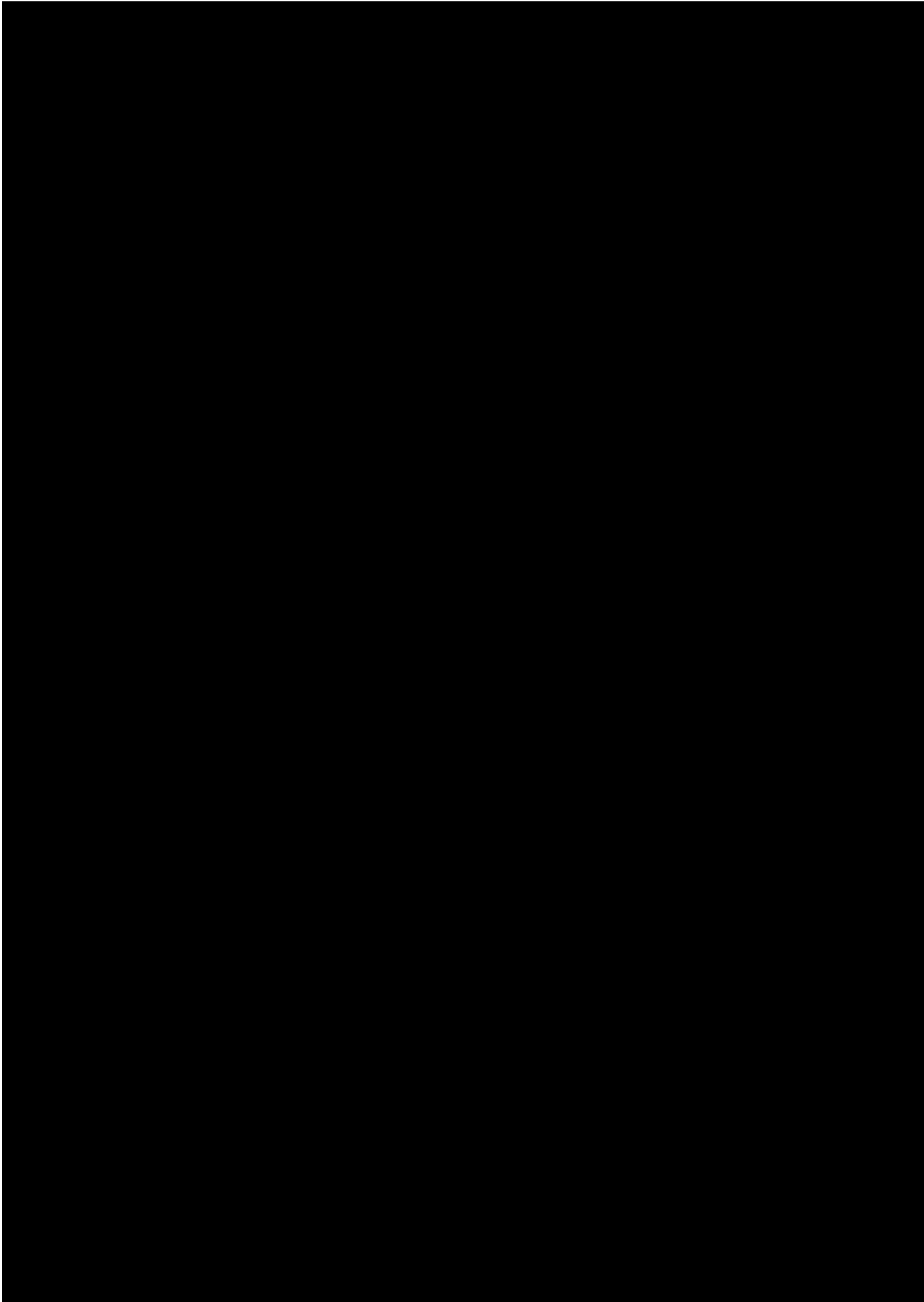


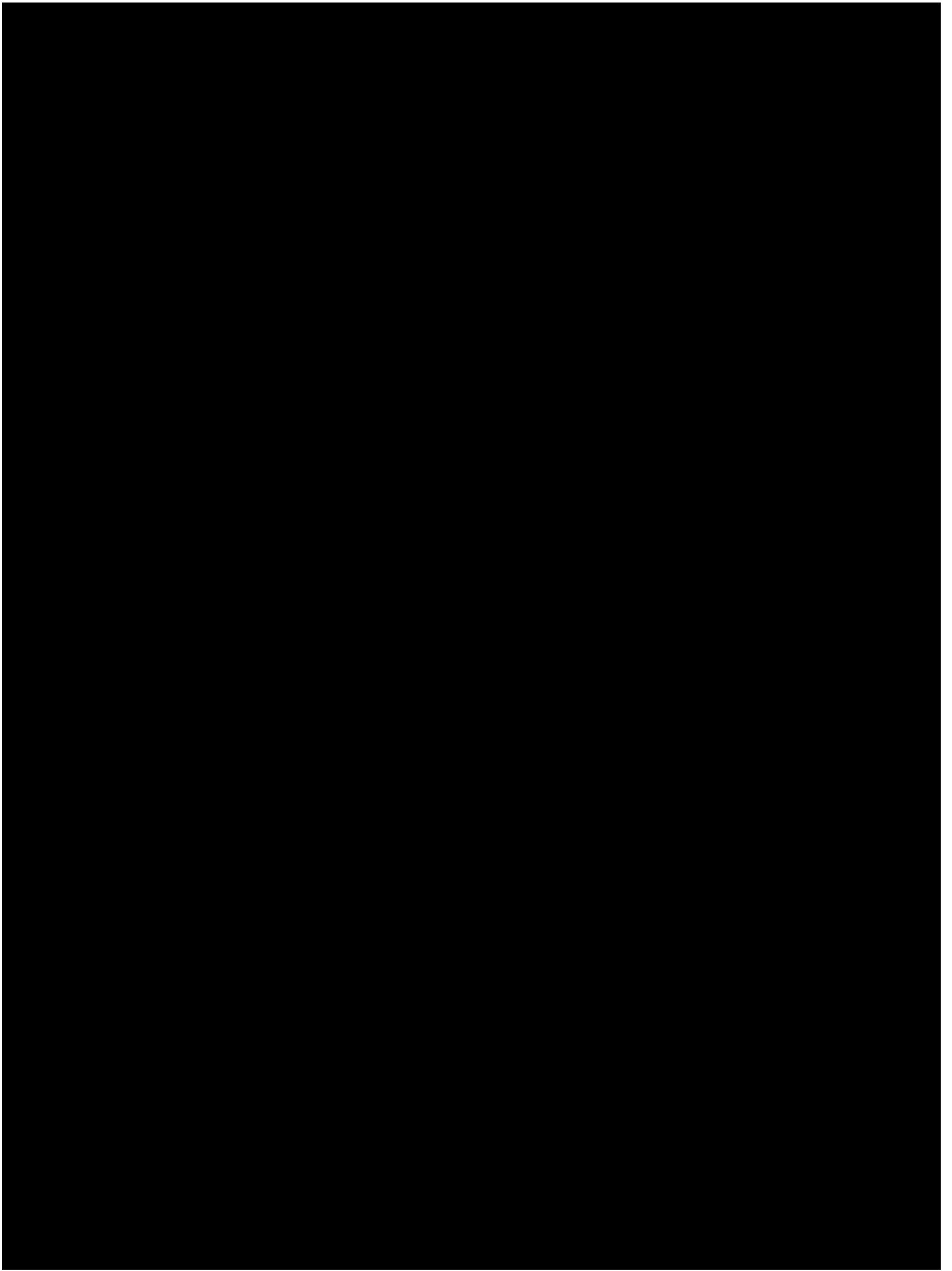


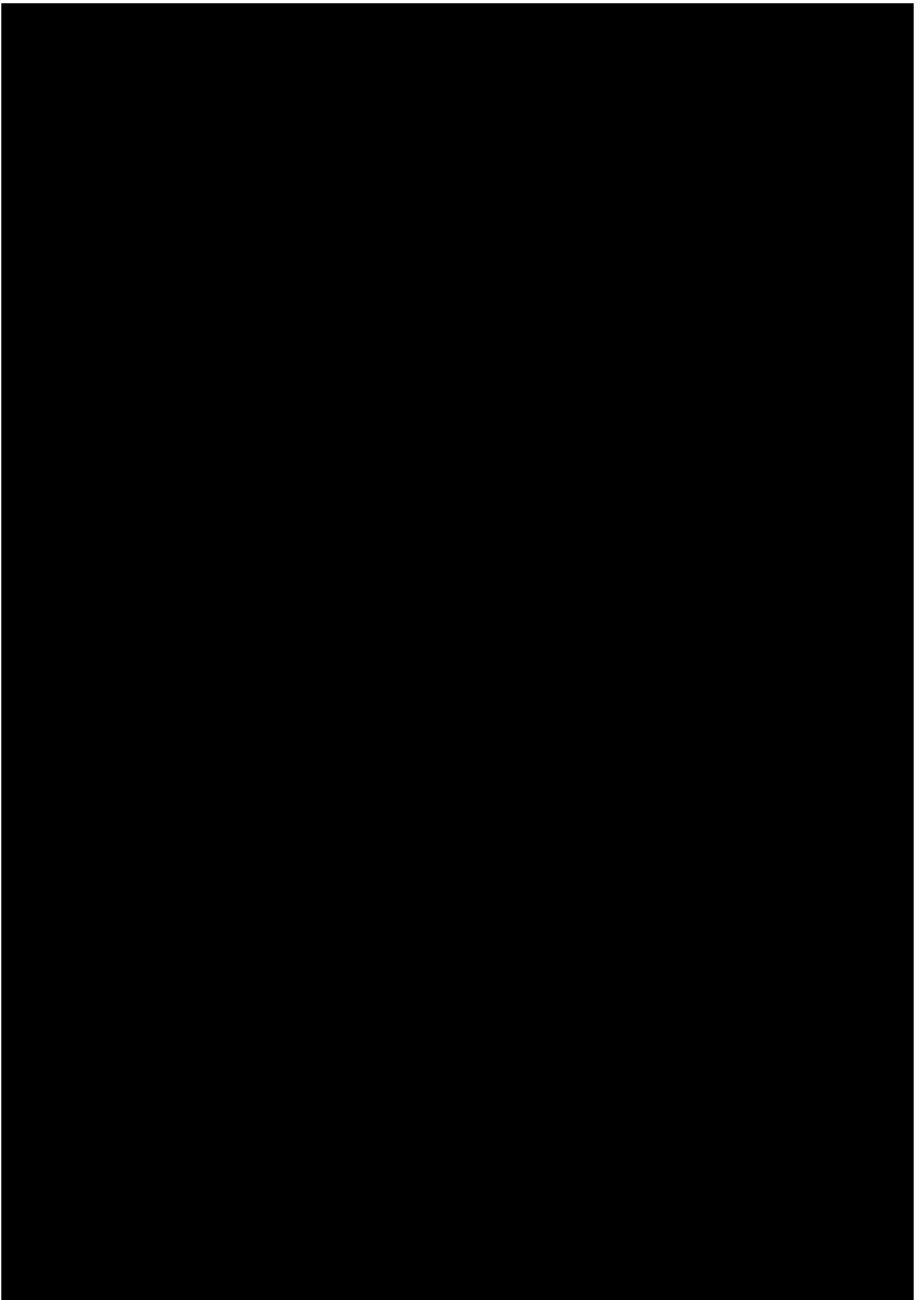


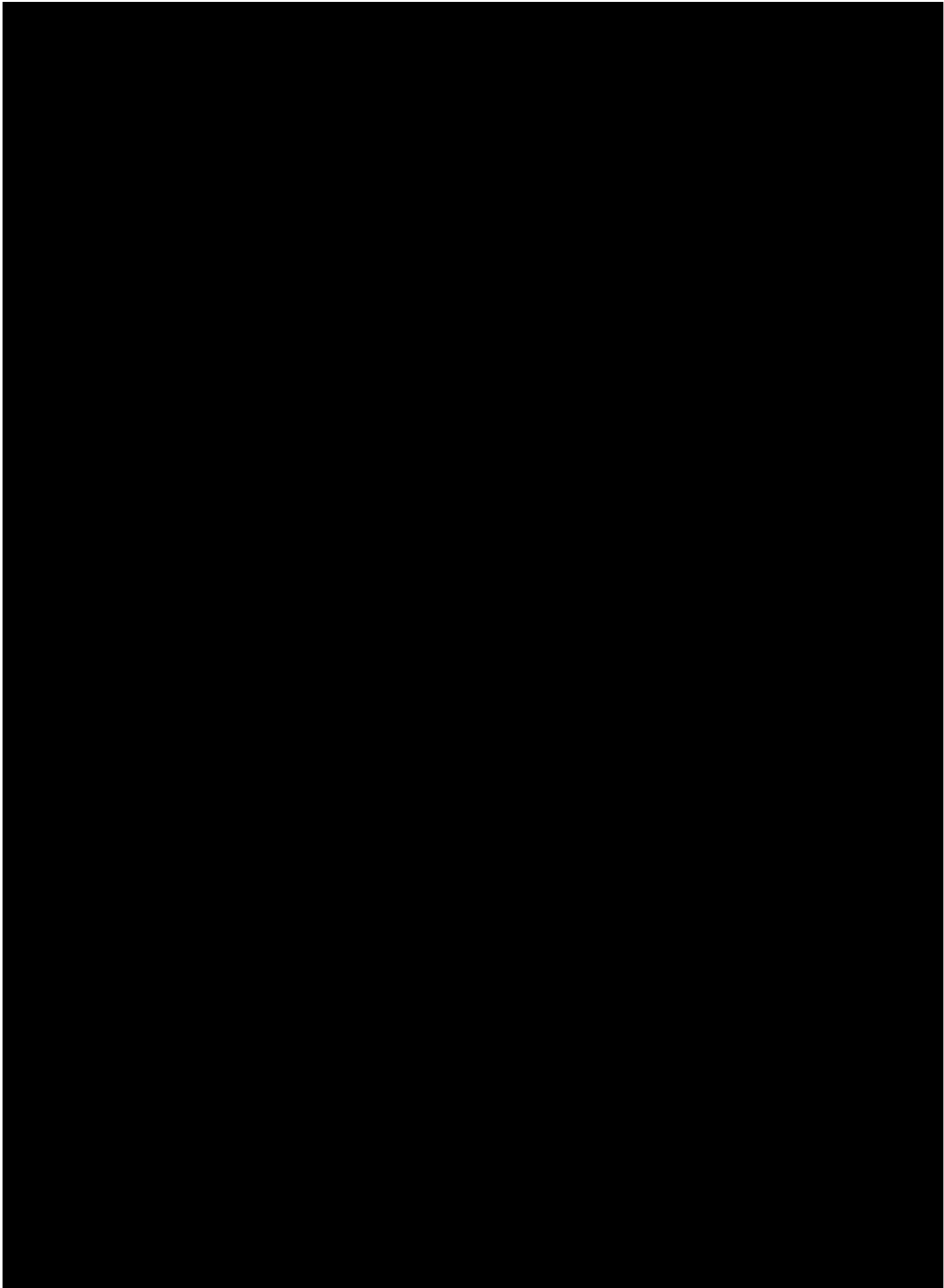




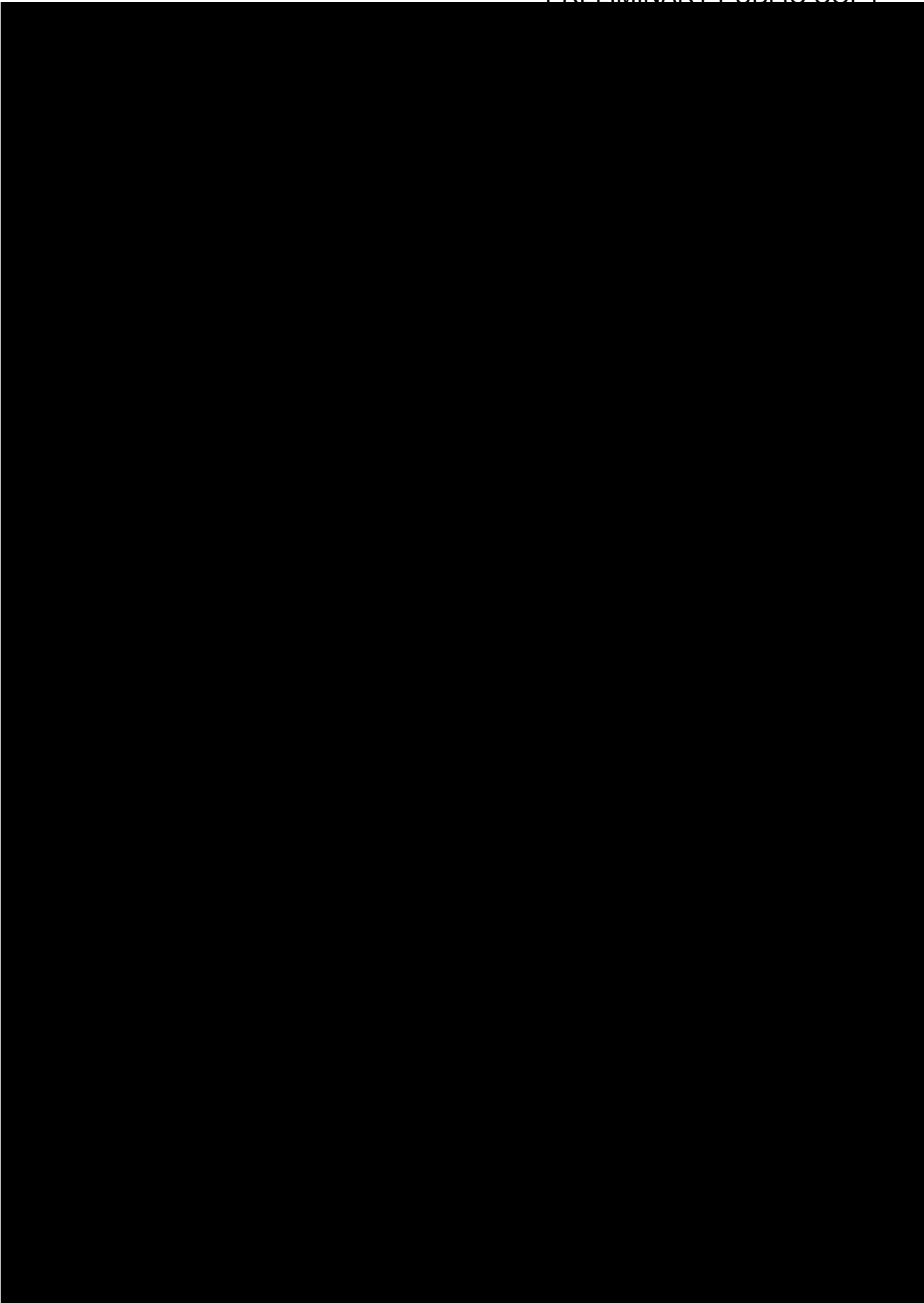


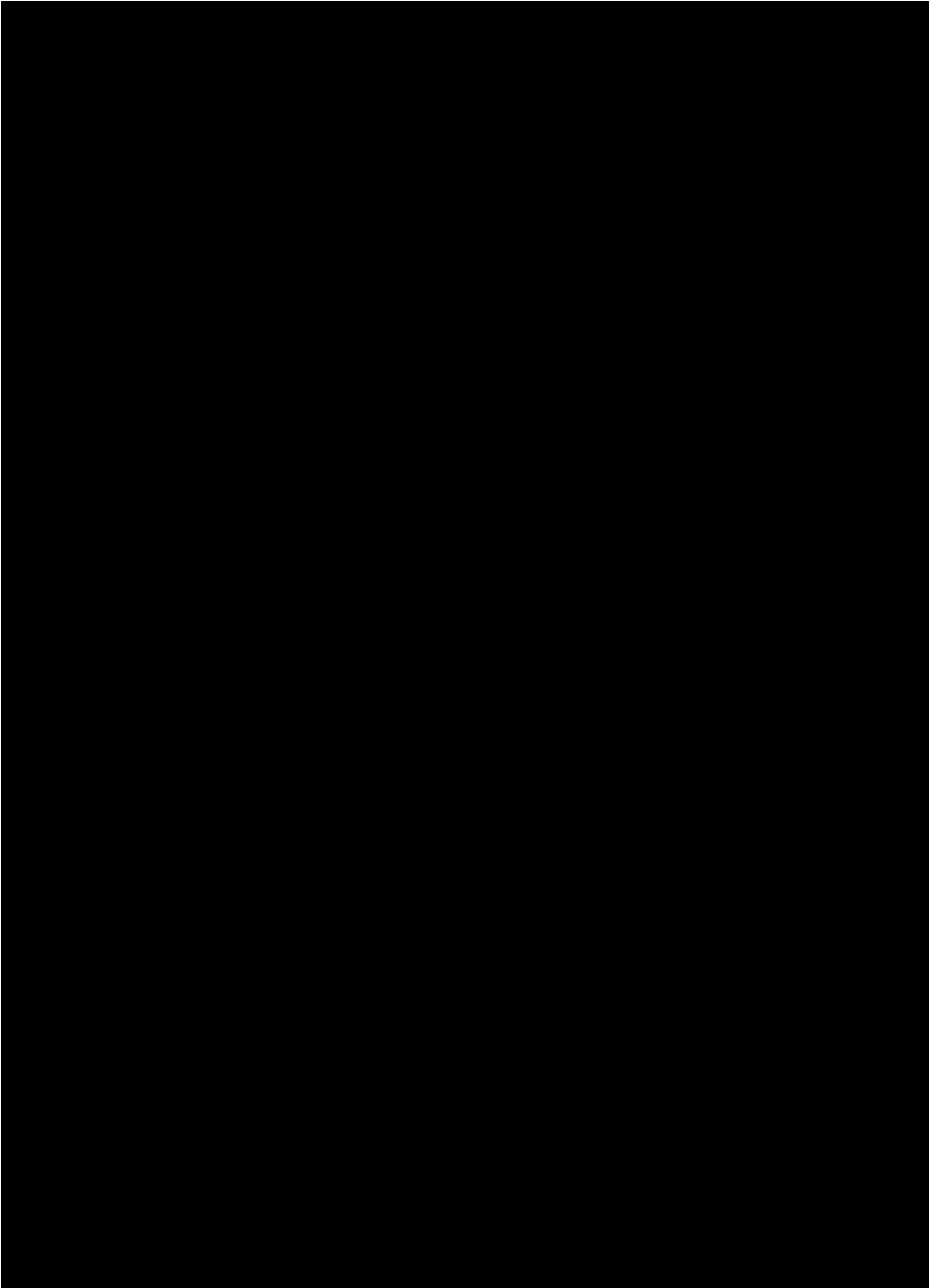


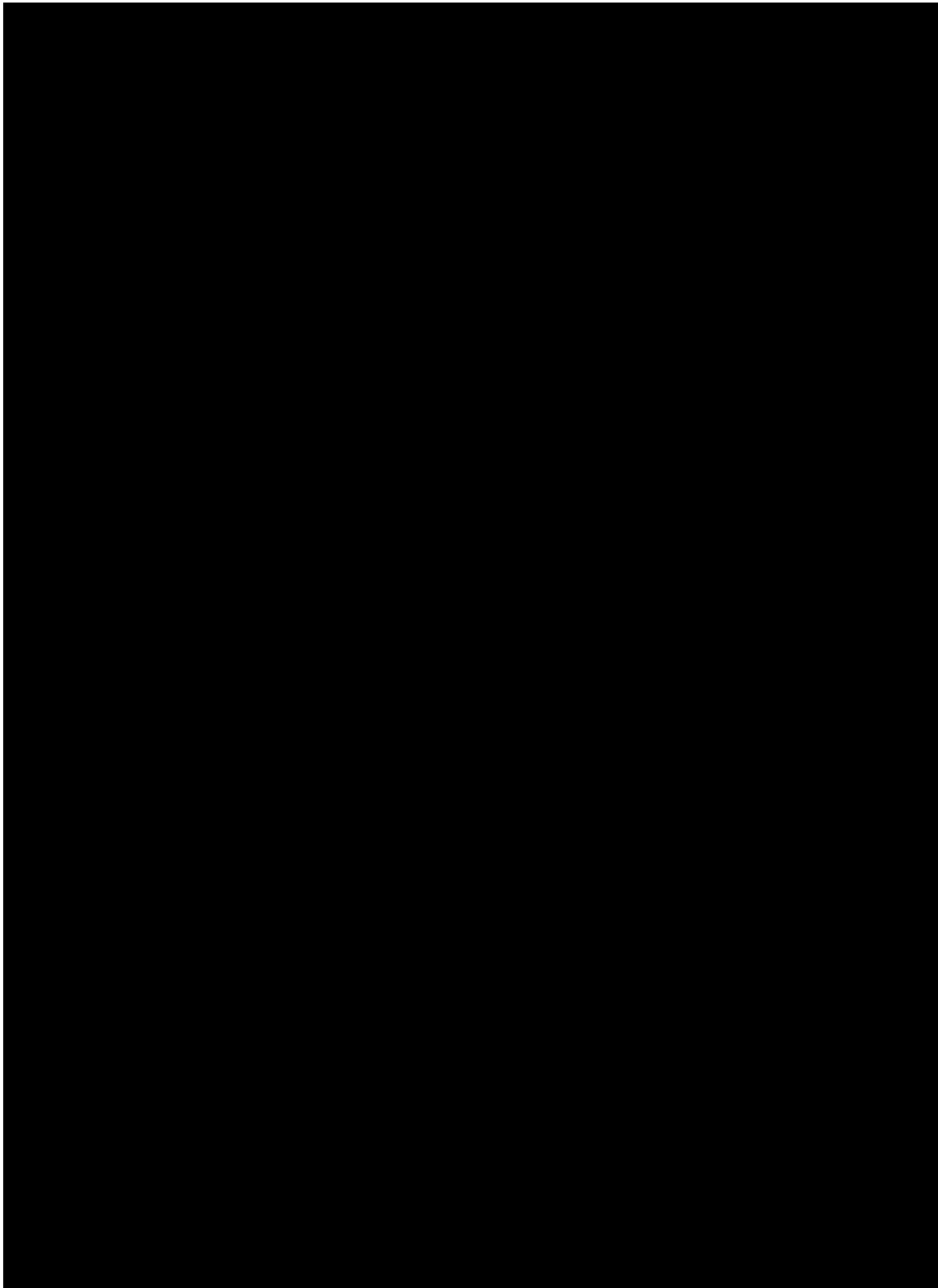


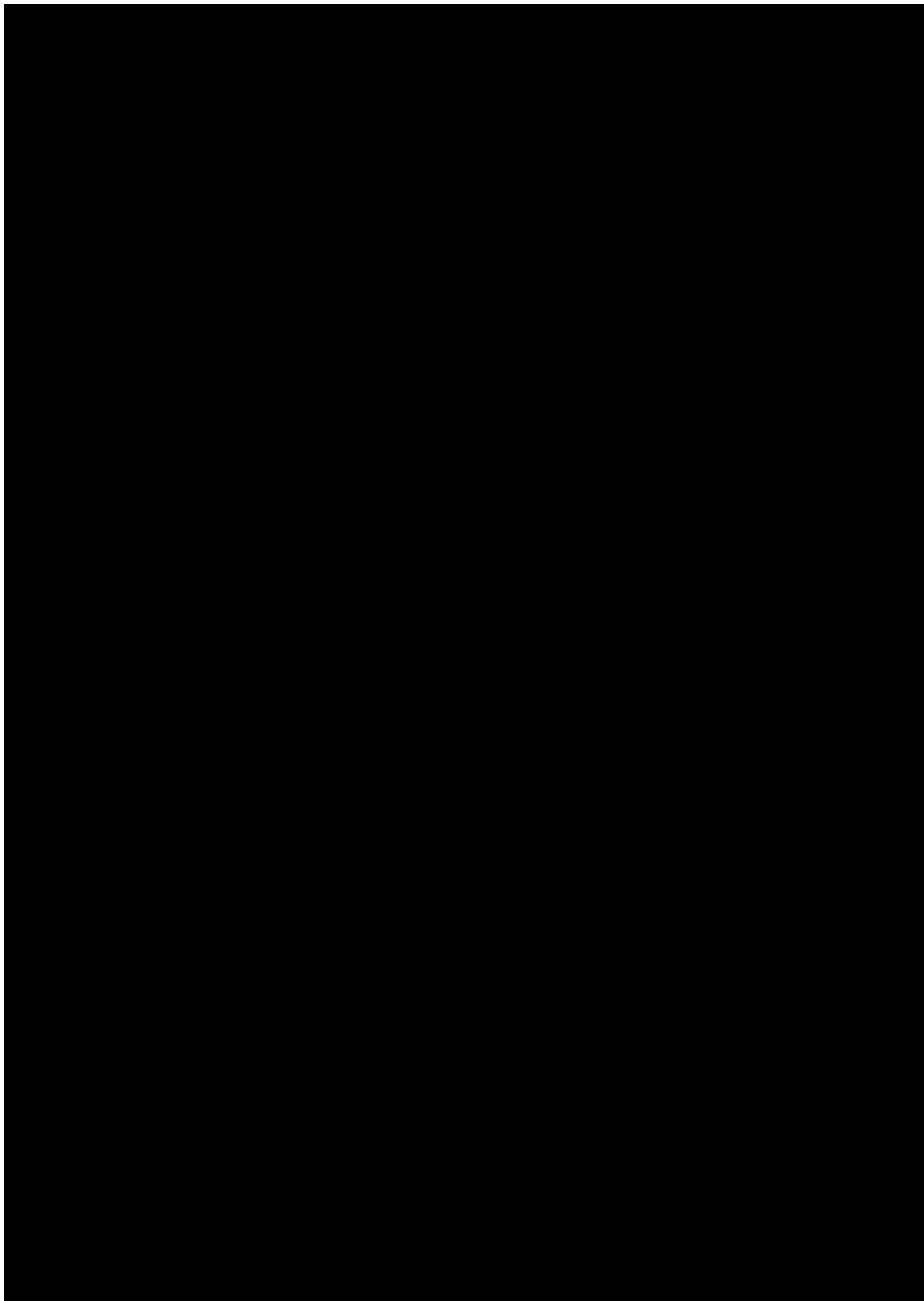


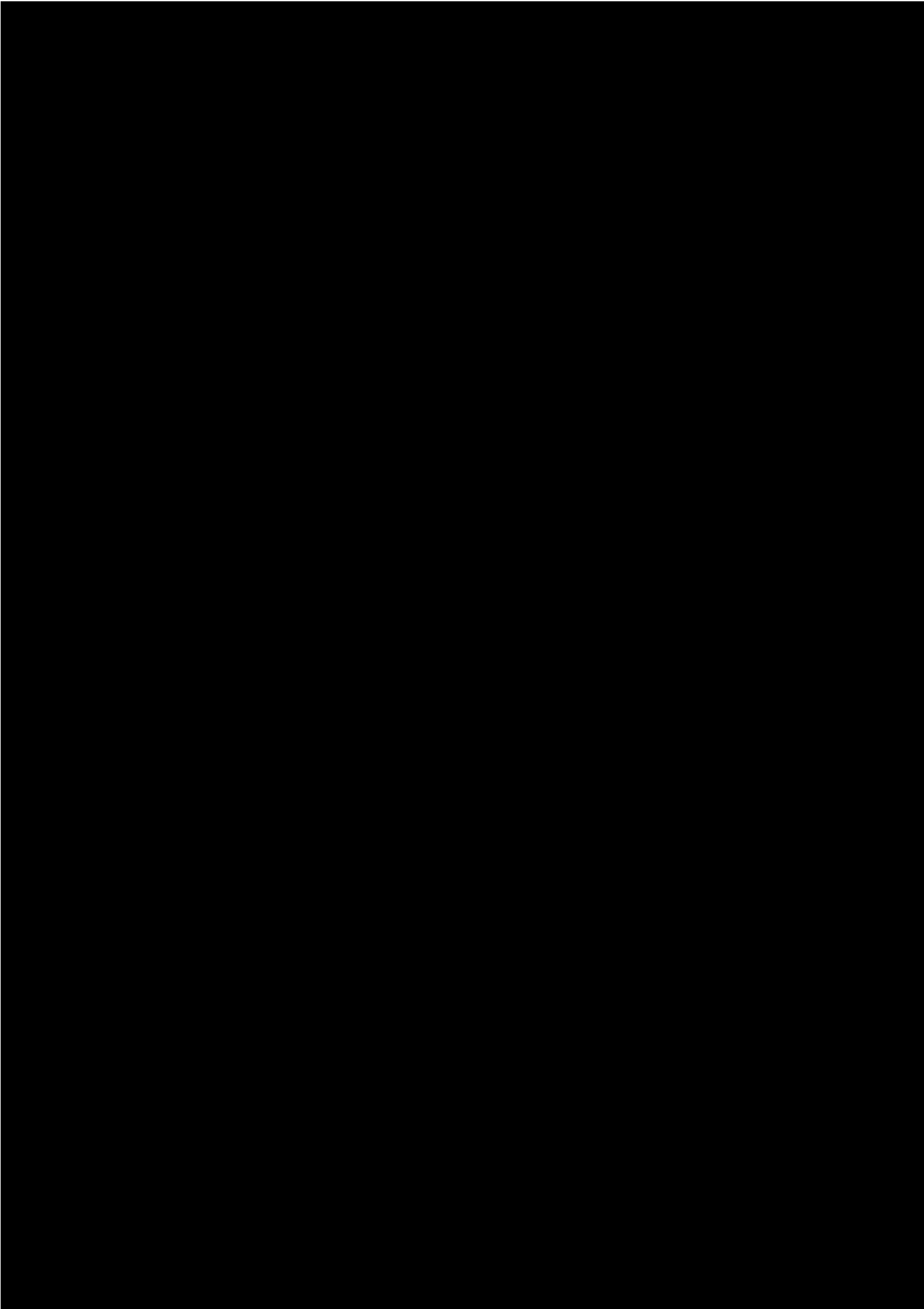


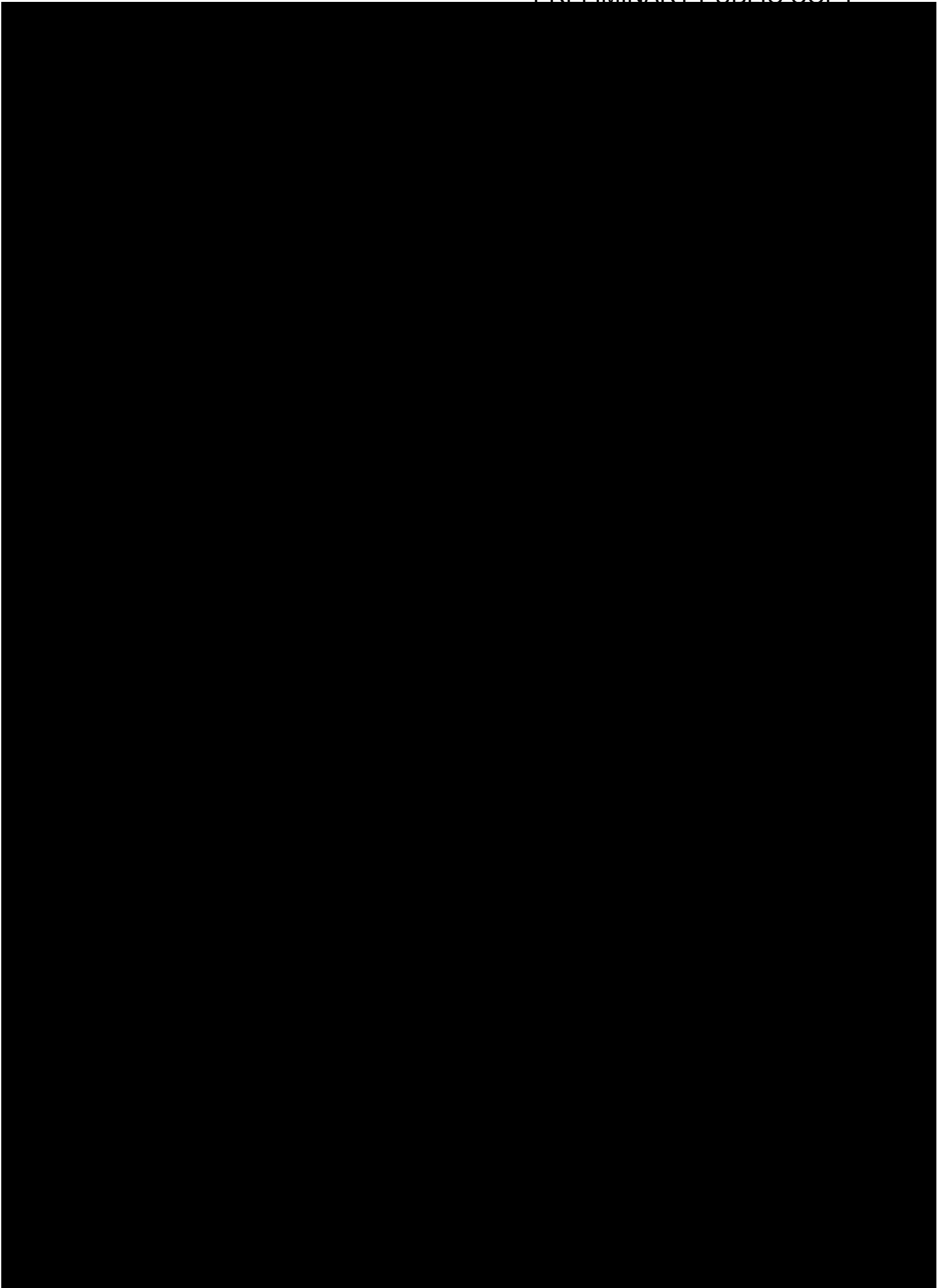


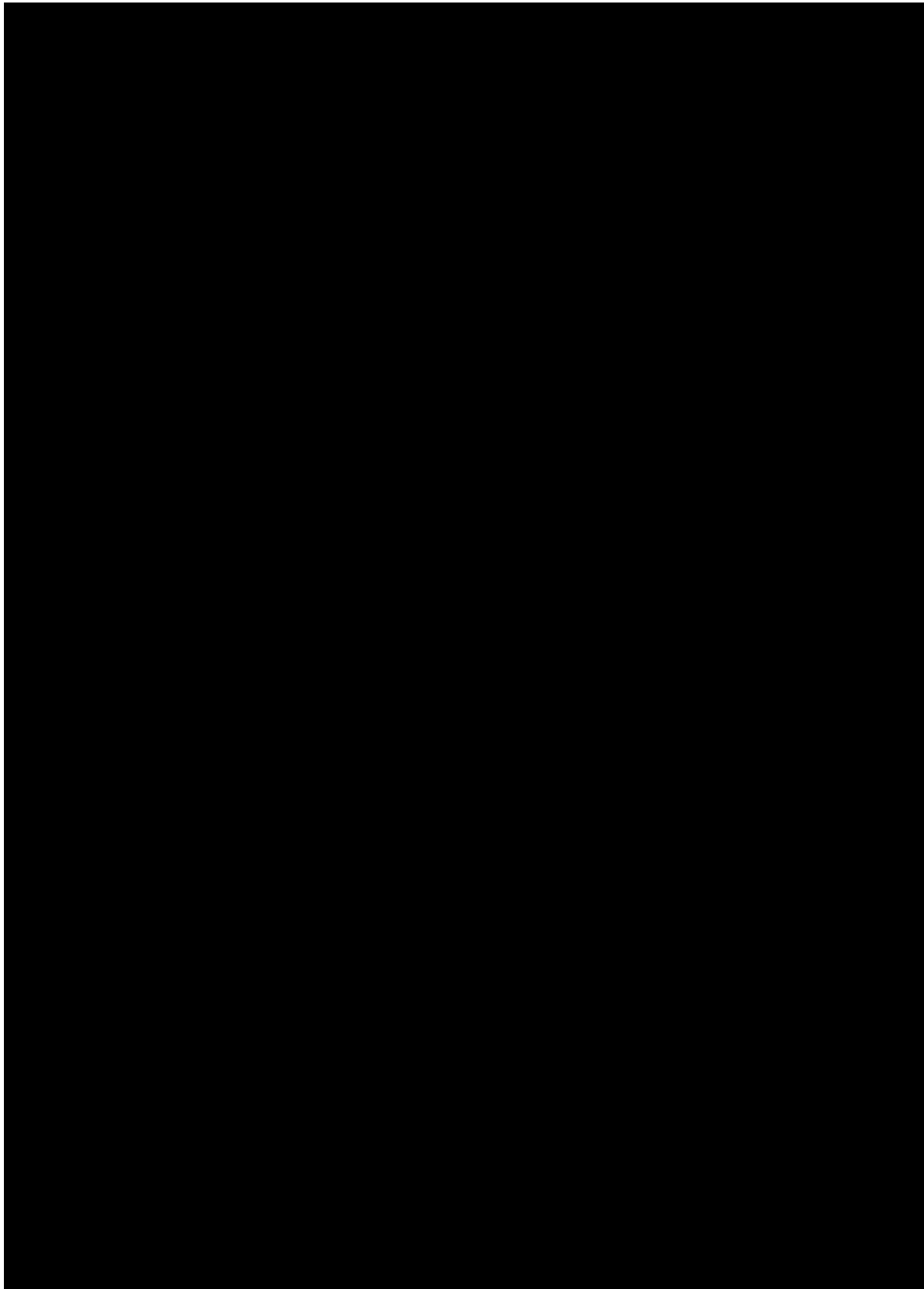


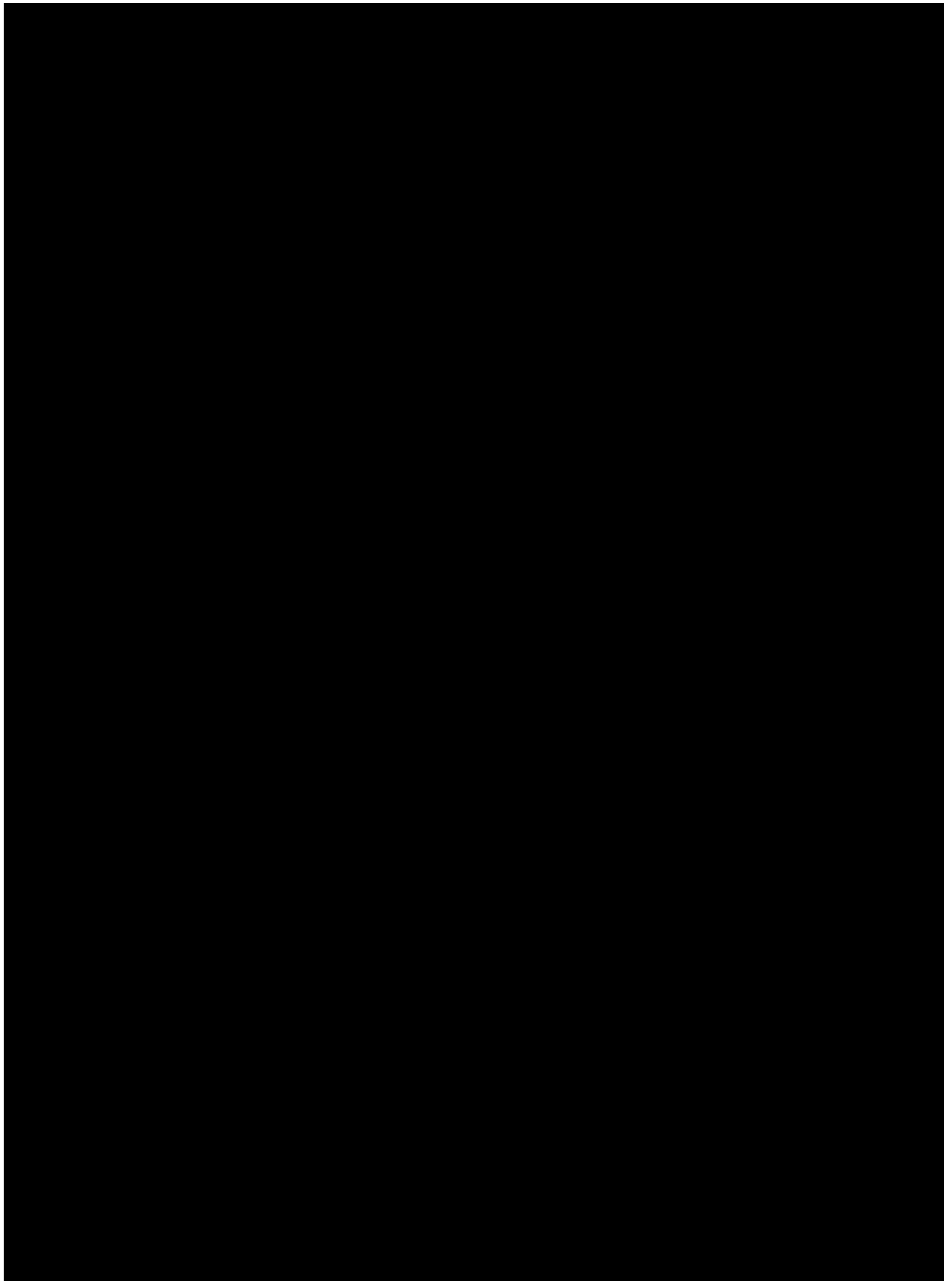




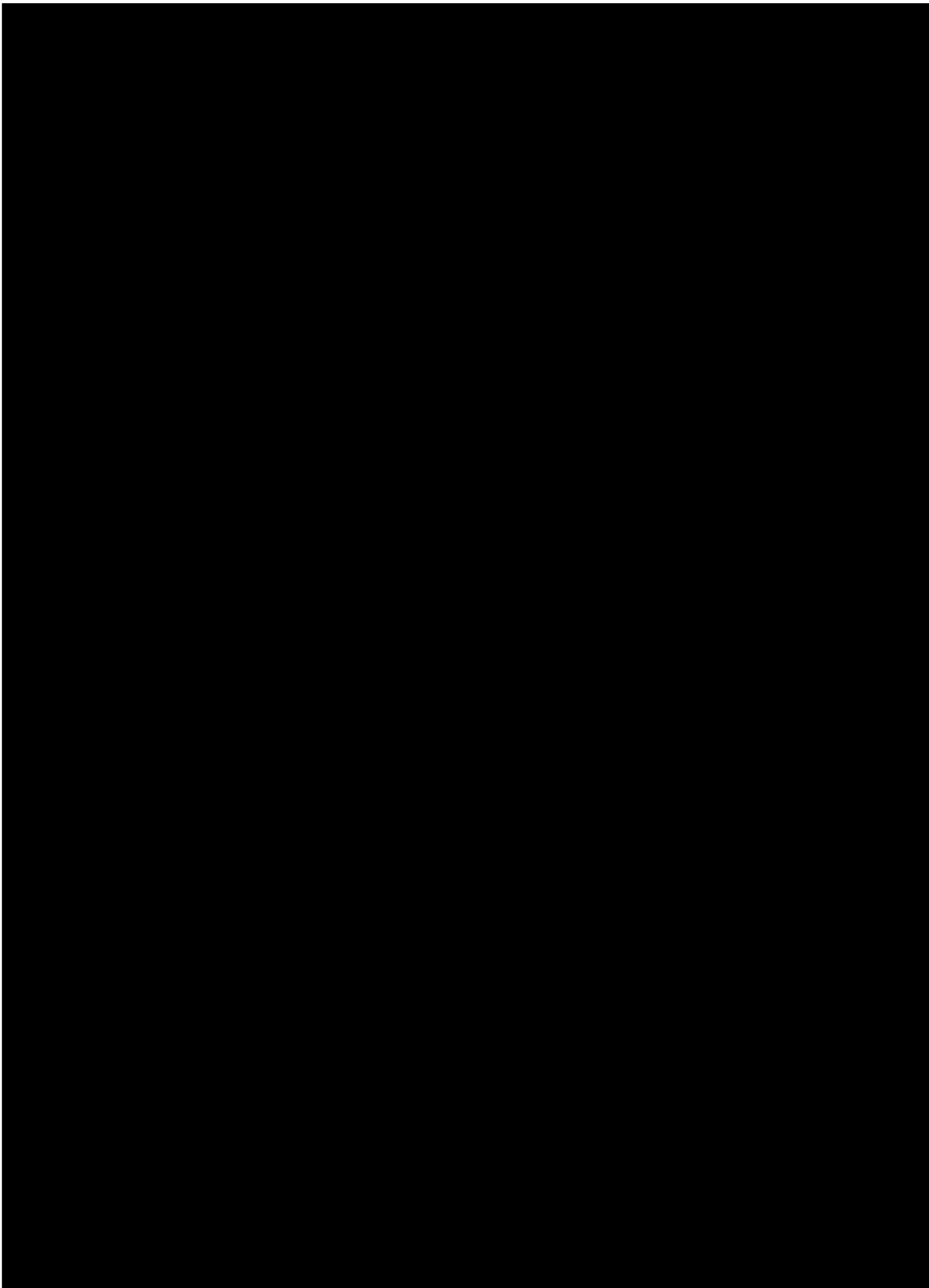


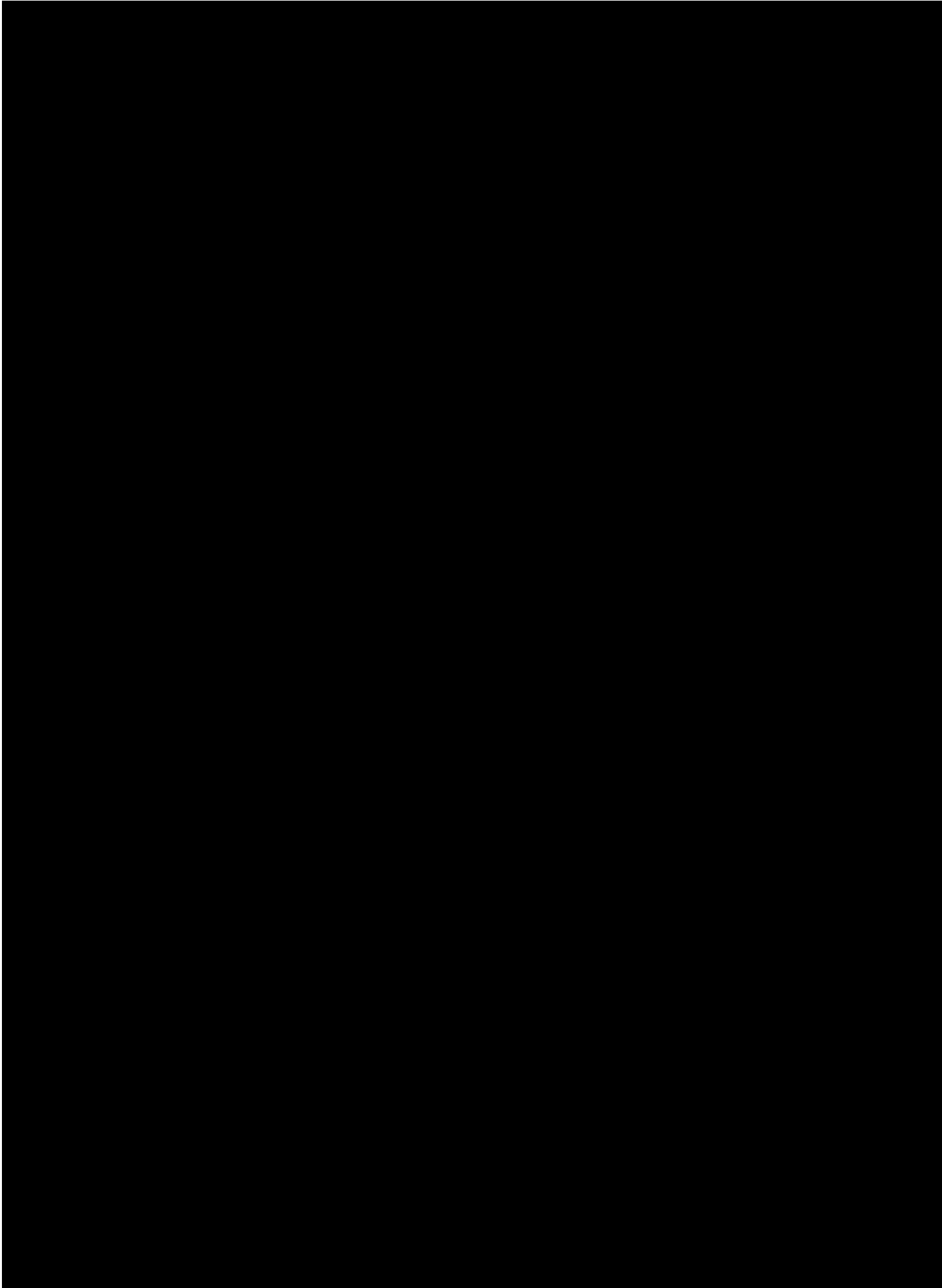


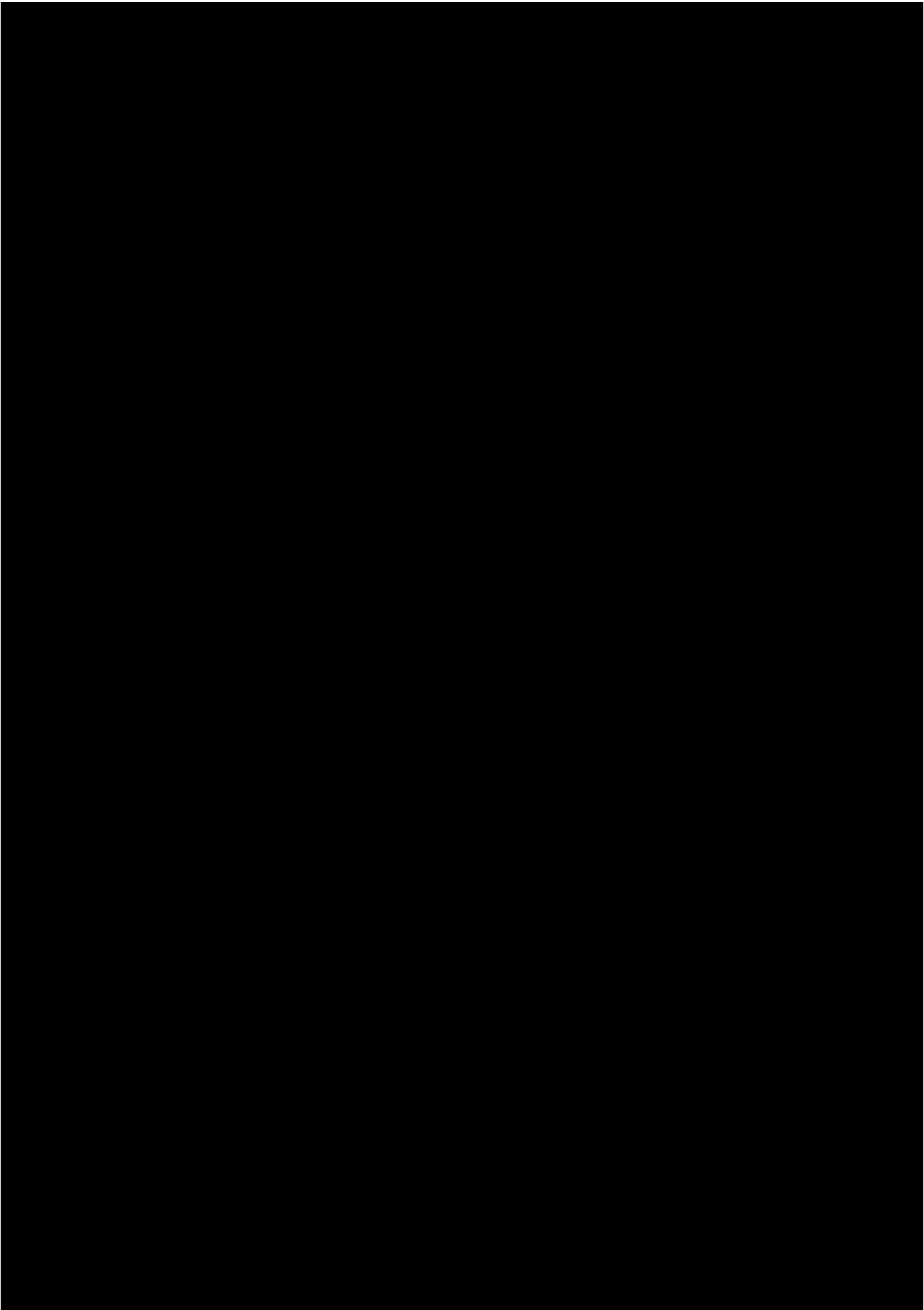


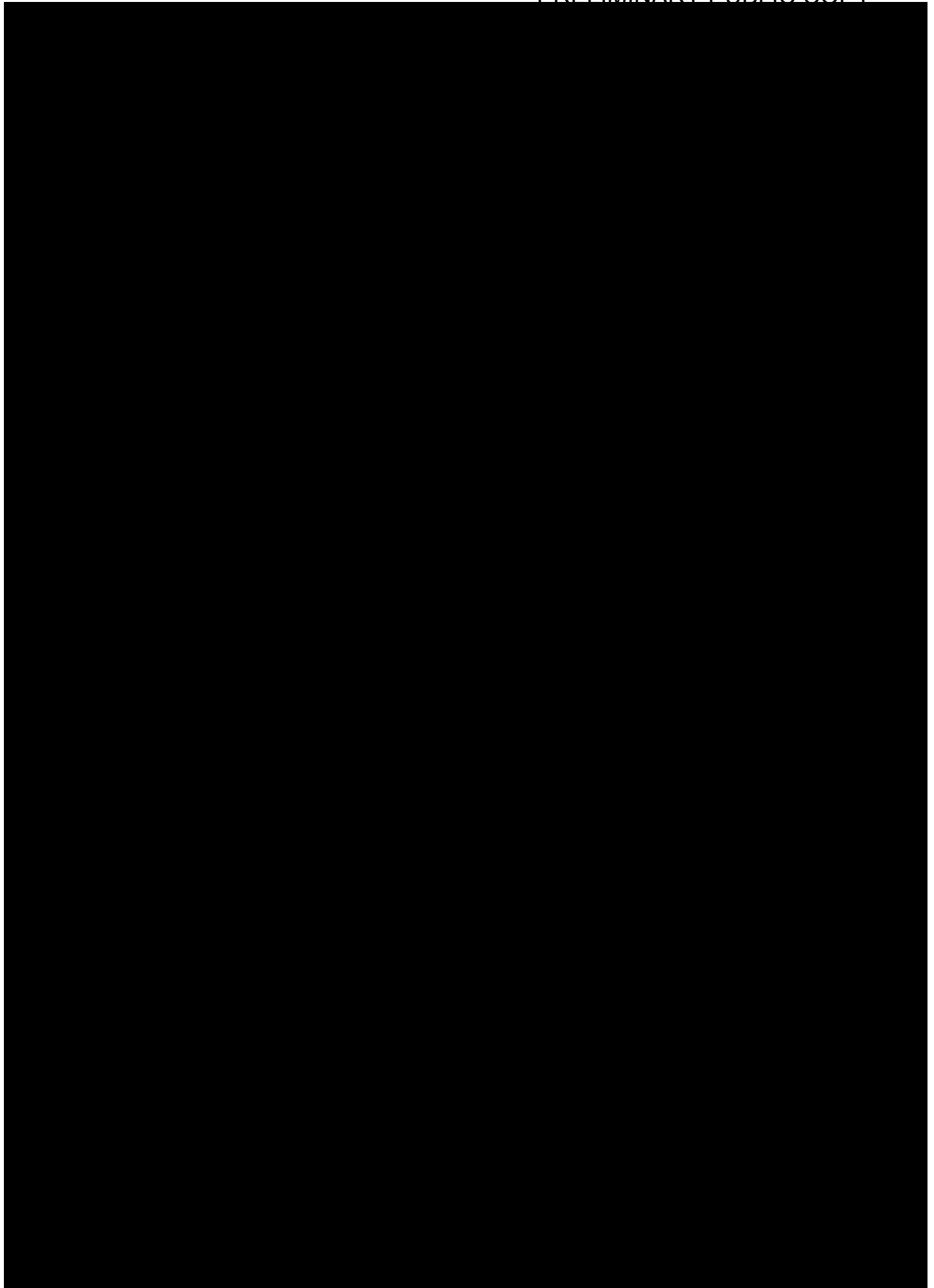


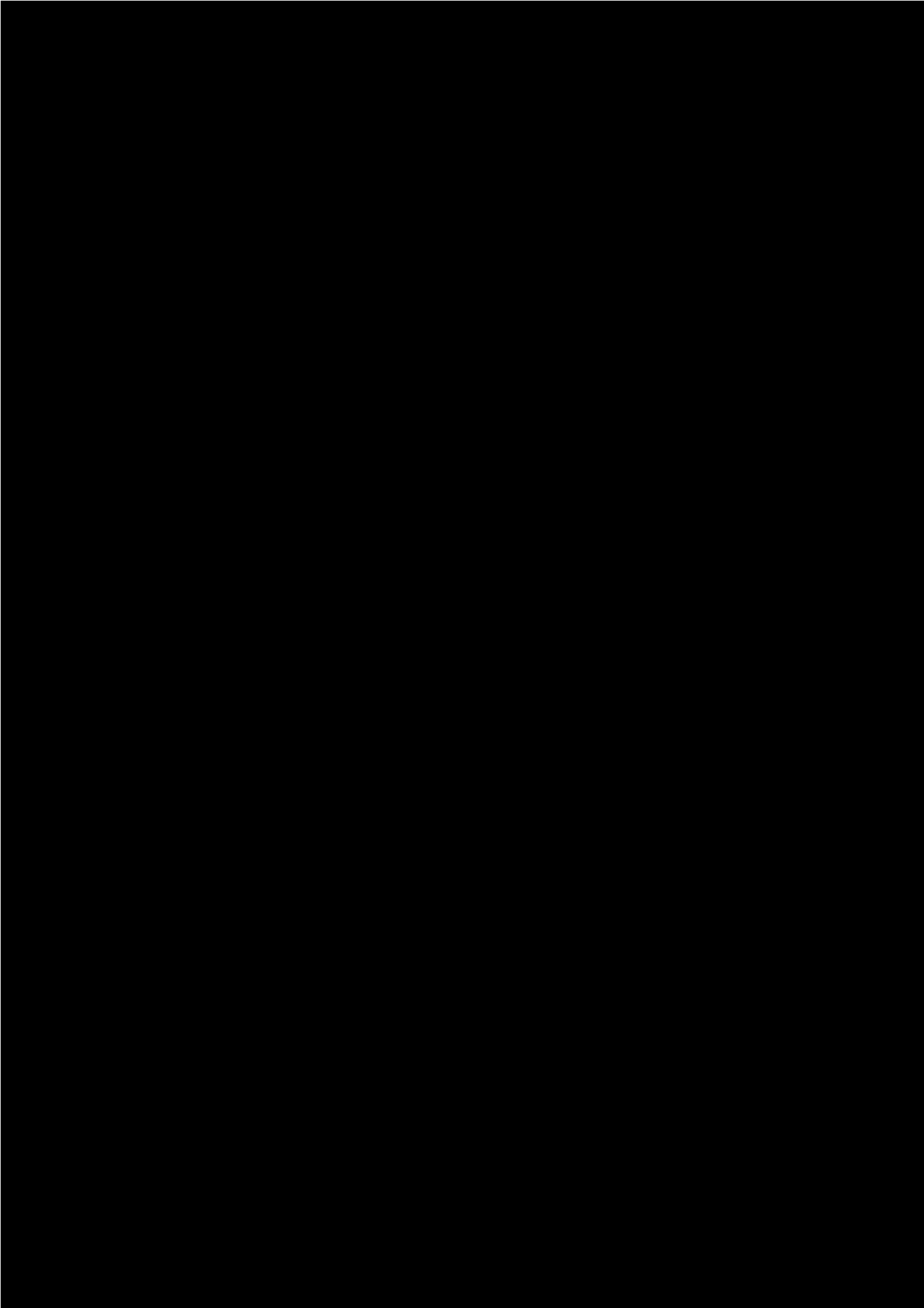


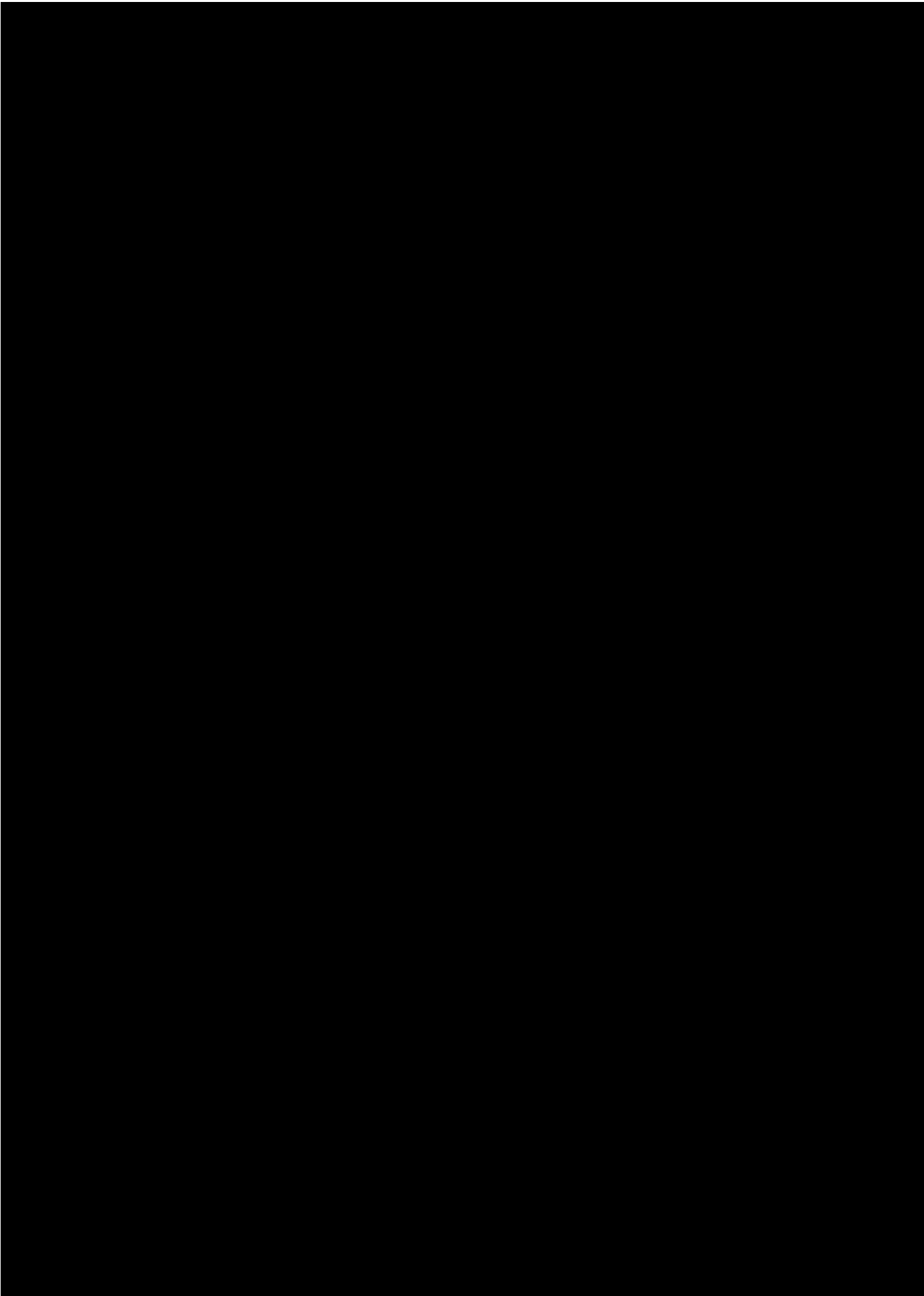








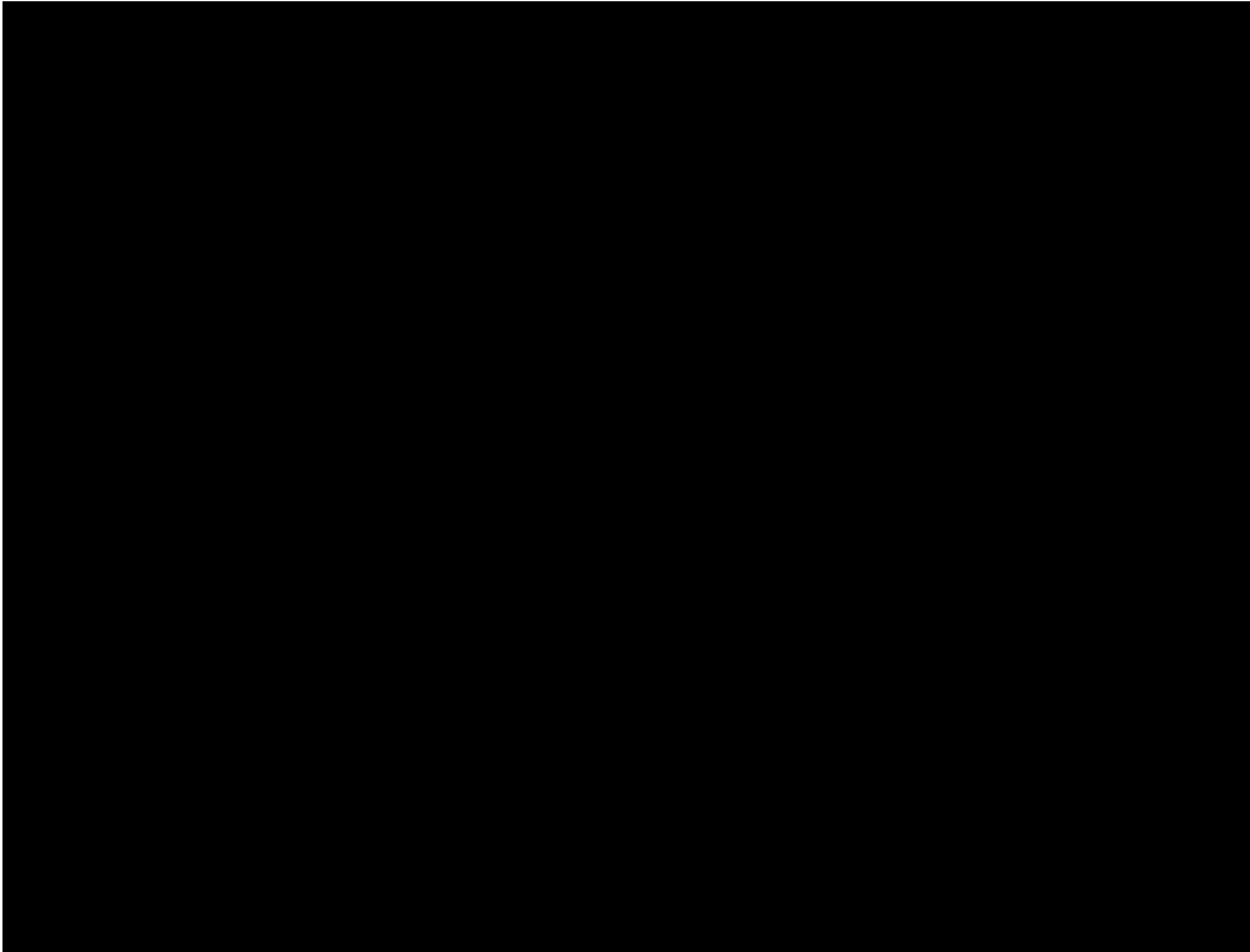


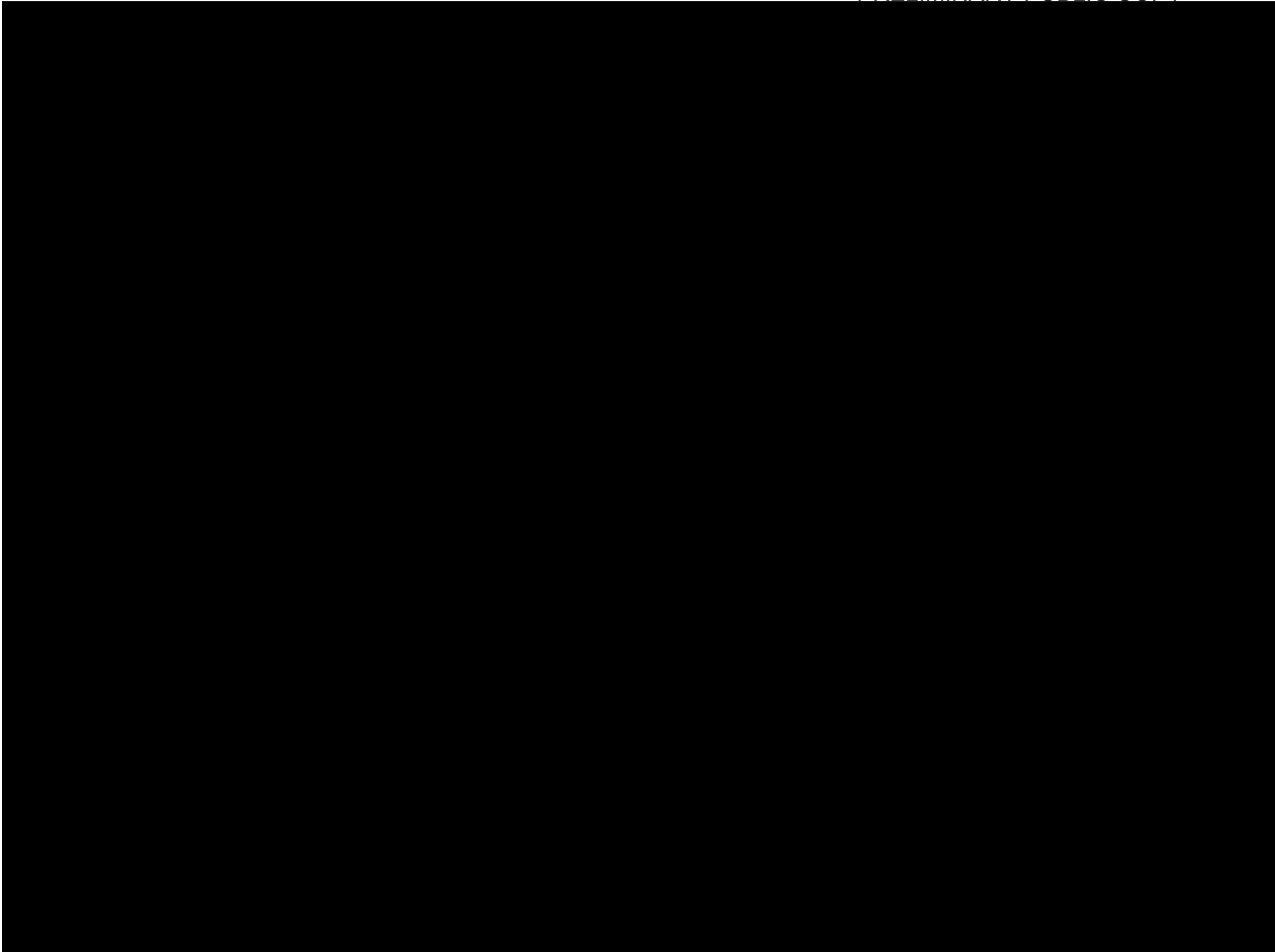


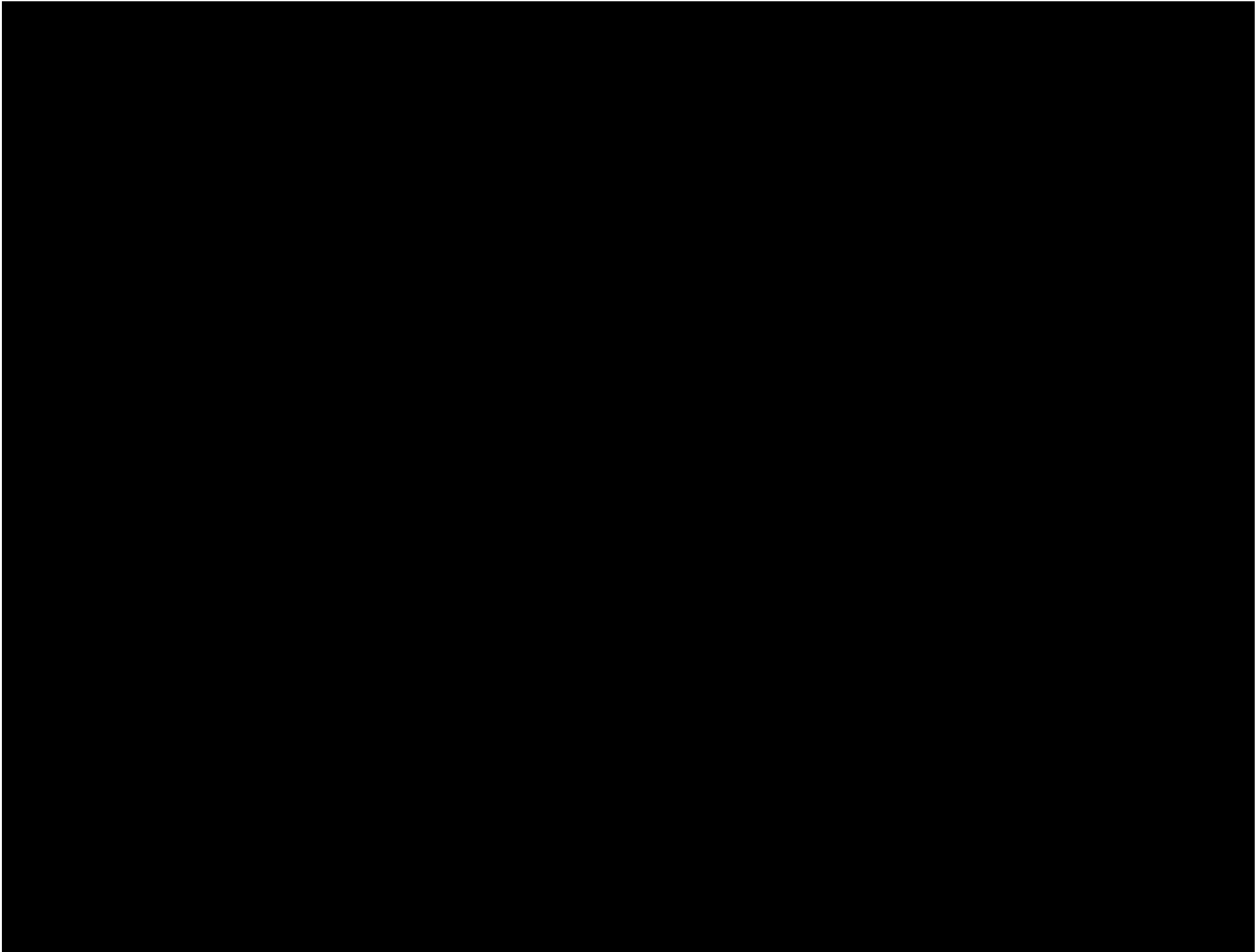
## Appendix 11-2: Major fish and invertebrate species



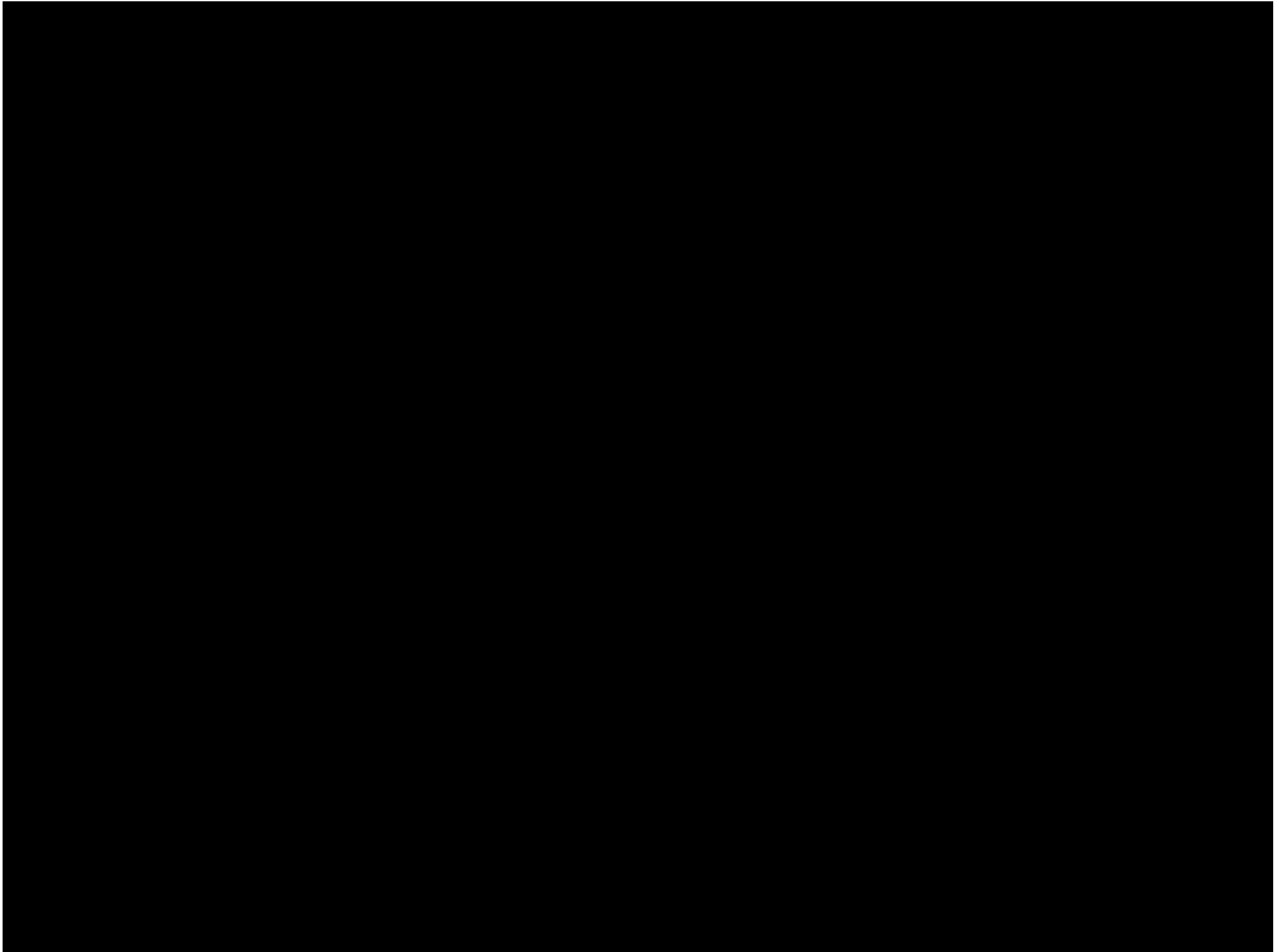


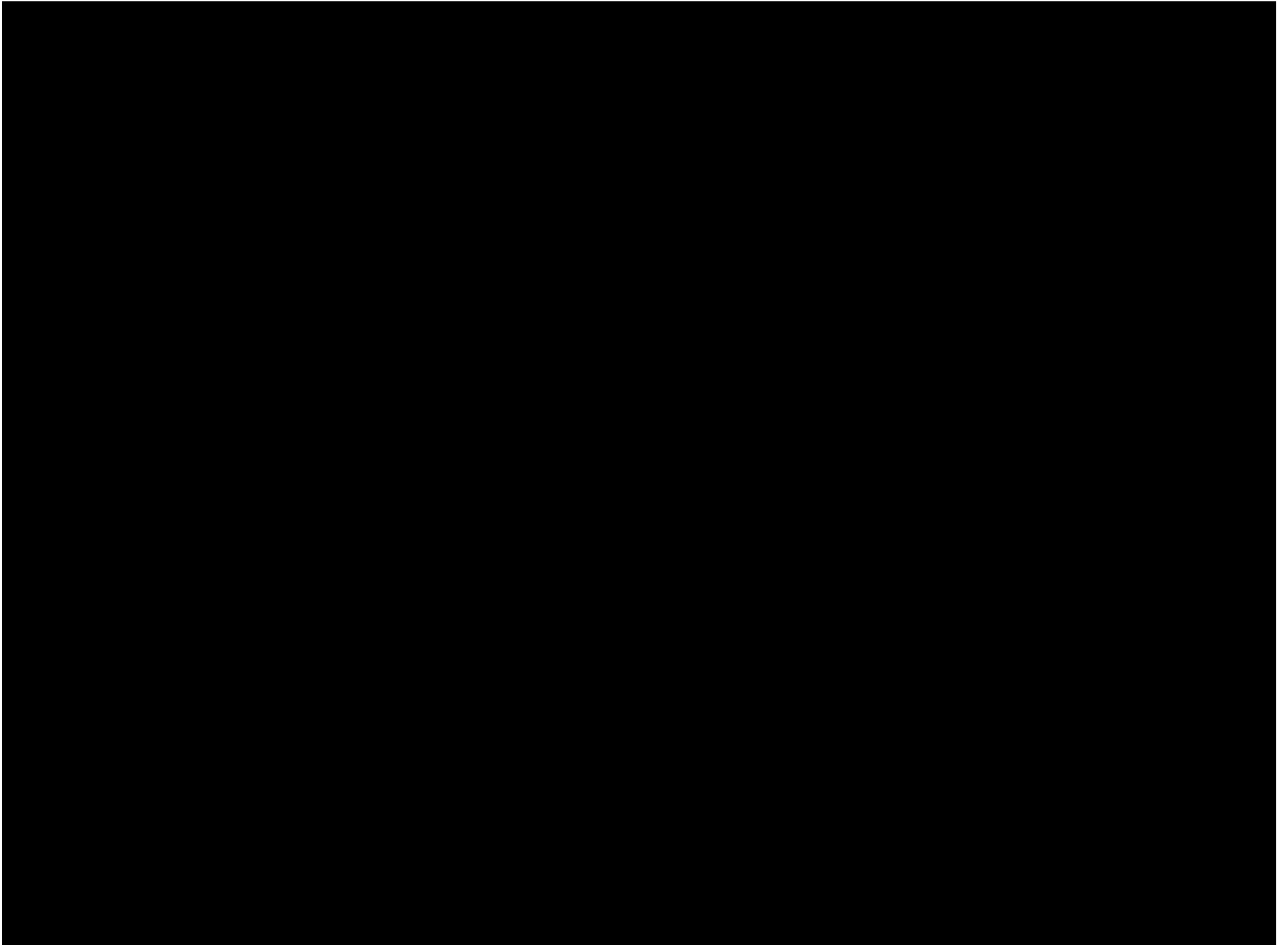












Appendix 11-3:



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The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every receipt, invoice, and bill should be properly filed and dated. This not only helps in tracking expenses but also provides a clear audit trail for tax purposes. The author notes that many small businesses fail because they do not keep proper records, leading to lost deductions and potential penalties.

Next, the document covers the topic of budgeting. It suggests that business owners should create a monthly budget to monitor their cash flow and identify areas where they can save money. The author provides a simple template for a budget, including categories for salaries, rent, utilities, and marketing. It is stressed that a budget should be flexible enough to accommodate changes but strict enough to prevent overspending.

The third section focuses on managing customer relationships. The author argues that excellent customer service is a key differentiator for many businesses. This involves listening to customer feedback, responding promptly to inquiries, and resolving complaints efficiently. The document also touches on the importance of maintaining a clean and professional appearance, as this can significantly impact a customer's perception of the business.

In the final part, the author discusses strategies for marketing and sales. It highlights the value of social media in reaching a wider audience and building a brand identity. The author suggests that businesses should focus on providing high-quality content and engaging with their followers. Additionally, the document mentions the importance of having a clear sales strategy and tracking the effectiveness of various marketing efforts.

The first part of the document discusses the importance of maintaining accurate records in a business setting. It highlights how proper record-keeping can help in identifying trends, making informed decisions, and ensuring compliance with legal requirements. The text emphasizes that records should be organized, up-to-date, and easily accessible to relevant personnel.

Next, the document addresses the challenges of data management in the digital age. With the increasing volume of data generated by various sources, businesses face the task of storing, securing, and analyzing this information effectively. The text suggests implementing robust data management systems and protocols to mitigate risks and maximize the value of the data.

The third section focuses on the role of technology in streamlining business operations. It explores how automation and digital tools can reduce manual errors, save time, and improve overall efficiency. The document encourages businesses to invest in the latest technologies and provide training to their employees to ensure they can leverage these tools to their full potential.

Finally, the document concludes by discussing the importance of continuous improvement and innovation. It stresses that businesses should regularly evaluate their processes, seek feedback from customers and employees, and be open to adopting new ideas and technologies. This mindset is essential for staying competitive in a rapidly changing market.



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The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial data. This includes not only sales and purchases but also expenses and income. The document provides a detailed list of items that should be tracked, such as inventory levels, accounts payable, and accounts receivable. It also outlines the procedures for reconciling these accounts and identifying any discrepancies.

The second part of the document focuses on the classification of expenses. It explains how to categorize different types of costs, such as direct materials, direct labor, and overheads. This classification is crucial for determining the true cost of production and for identifying areas where costs can be reduced. The document provides examples of how to allocate overhead costs to different products and departments, ensuring that each unit bears its fair share of the total expenses.

The third part of the document discusses the importance of regular audits and reviews. It explains that periodic checks of the financial records can help identify errors, fraud, and inefficiencies. The document provides a checklist of items to be audited and a schedule for conducting these reviews. It also emphasizes the need for transparency and accountability in the financial reporting process, ensuring that all stakeholders have access to accurate and timely information.

The final part of the document provides a summary of the key points discussed and offers some concluding thoughts on the importance of sound financial management. It encourages the reader to adopt the practices outlined in the document to ensure the long-term success and stability of their organization. The document concludes with a statement of the author's hope that the information provided will be helpful and informative.



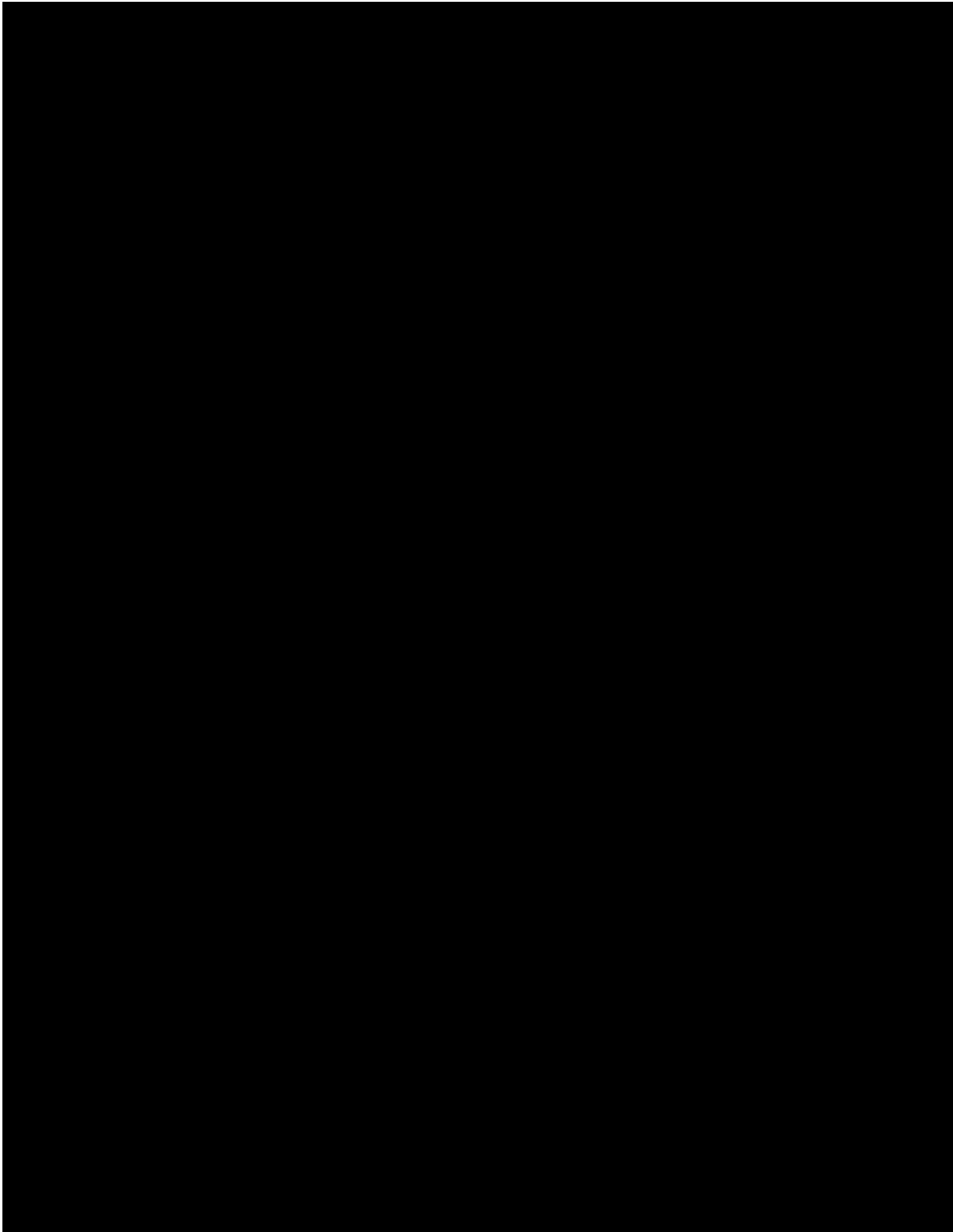




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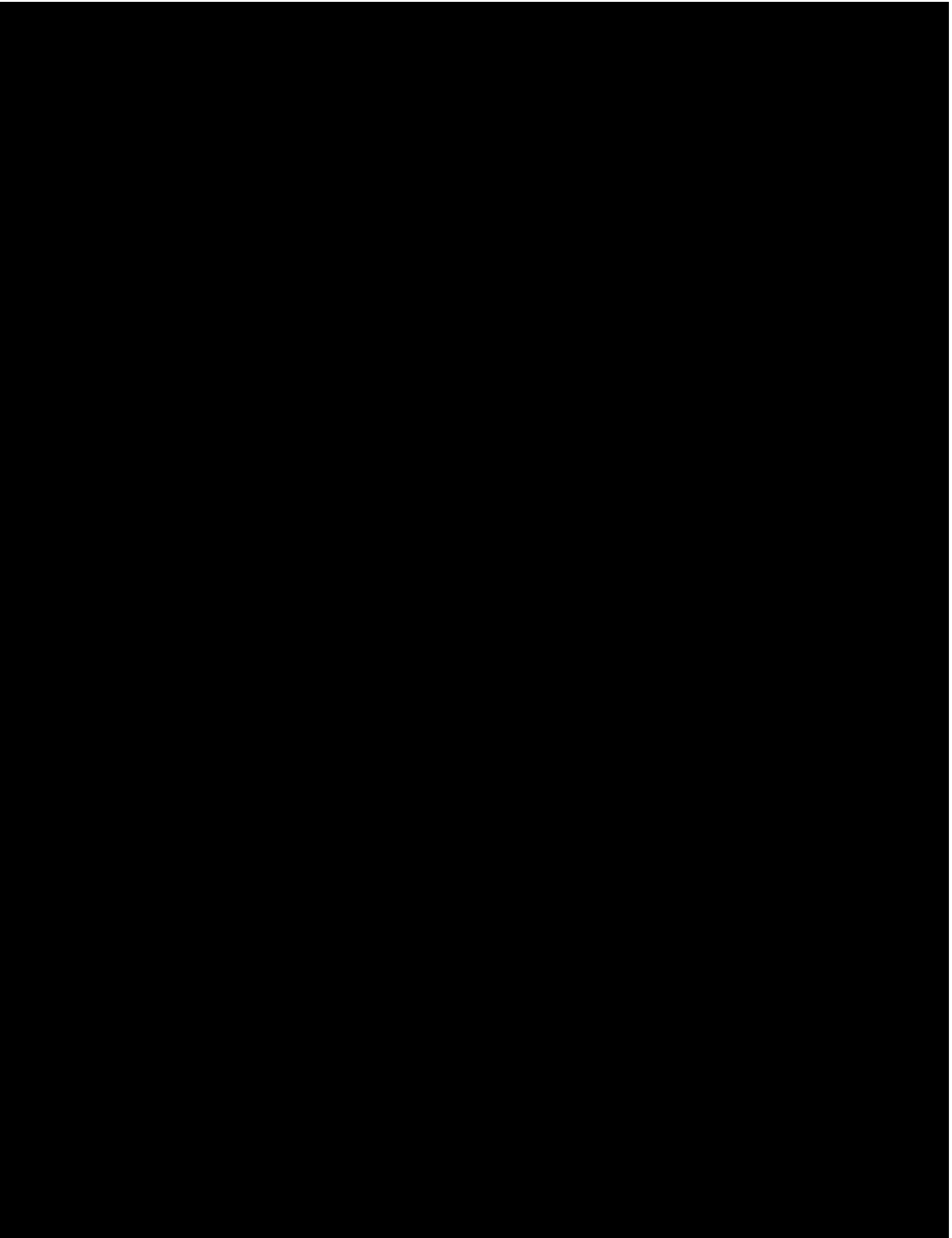
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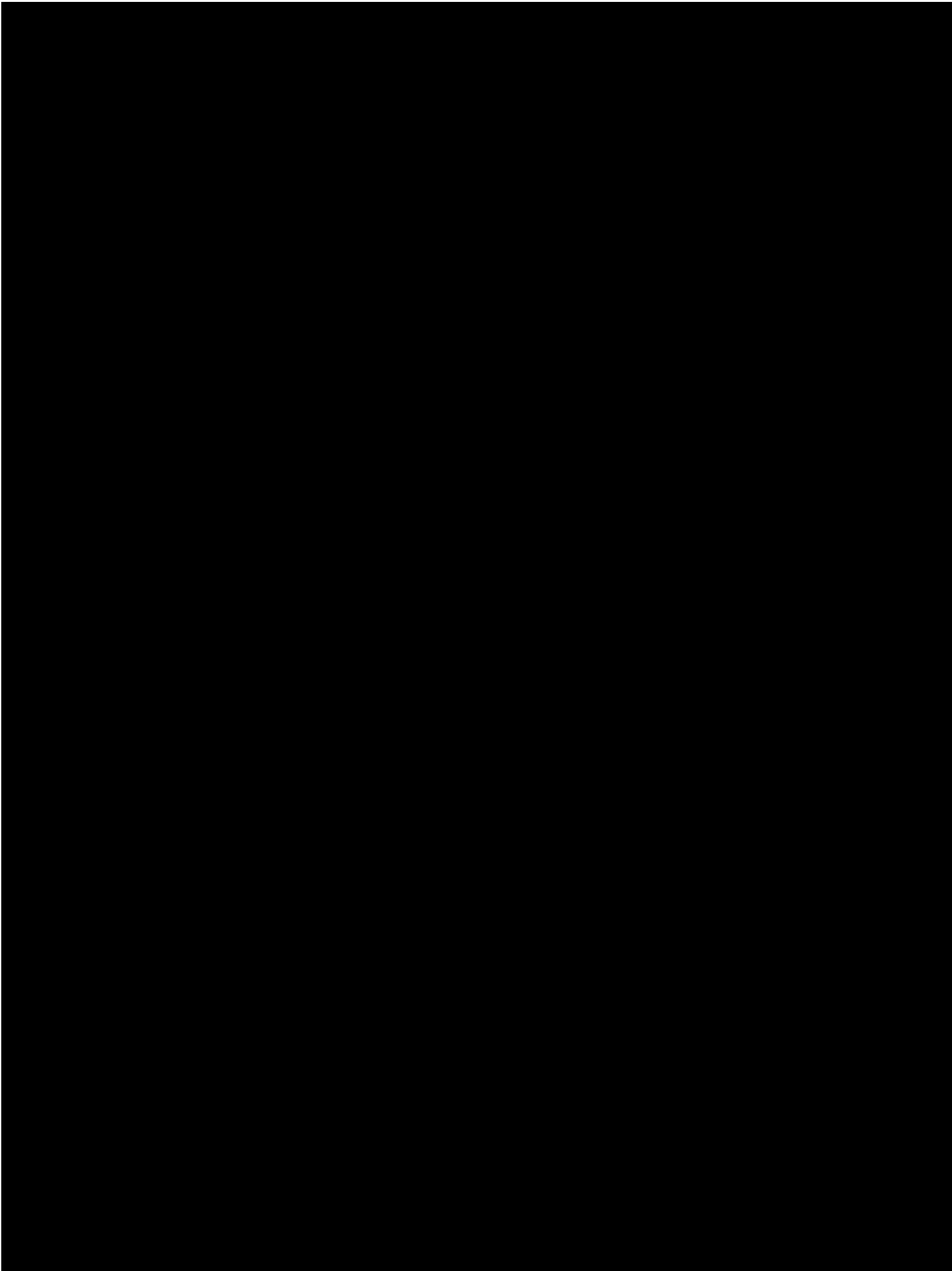
Appendix 11-4: [REDACTED]





**Appendix 11-5: Letter of support from [REDACTED]**





## Appendix 11-6: Article published on GAIA

## Embracing the digital transformation: Geodata engagement platform aids offshore wind development

*This article was co-authored by Fugro/ASOW and published in Sea Technology*

The energy transition is in full swing along the Atlantic Outer Continental Shelf. Seventeen projects in various phases of development now dot the Eastern Seaboard, from Maine to North Carolina. One of these projects, New Jersey-based Atlantic Shores Offshore Wind, recently met a major development milestone with submission of their Construction and Operations Plan (COP) to the U.S. Bureau of Ocean Energy Management (BOEM), which regulates offshore energy development in federal waters.

In addition to advancing their project with this formal proposal, Atlantic Shores is also helping to advance the offshore wind industry. Theirs is the first COP to supplement required static hardcopy maps and reports with live digital deliverables. Made available to BOEM through an innovative web-based geodata platform called Gaia.Hub, this lead-by-example embrace of digitalization supports multiple industry goals, including faster regulatory review, increased transparency, and improved public trust.

### **Big project, big data**

The Atlantic Shores Offshore Wind lease spans 740 square kilometers and is located 10-20 miles off the coast of New Jersey between Atlantic City and Barnegat Light. The company's first project is expected to supply 1,510 megawatts of offshore wind energy to over 700,000 homes. It is the single largest offshore wind project in New Jersey to date, and the second biggest in the nation. Construction is targeted for 2024 with energy delivered by 2027.

In terms of assets, the project will comprise up to 200 wind turbine generators, 10 offshore substations, 710 kilometers of export cable, and 940 kilometers of inter-array cables buried 2 meters below the seabed.

Developing an offshore wind farm project of this size and scope requires a massive amount of geodata which must be integrated and communicated to an ever-growing audience of stakeholders. Operators, contractors, and regulators alike can quickly become bogged down by the volume and complexity of these information assets—especially when they are locked in multiple, siloed systems that challenge contextual decision-making and limit operational insights.

To improve the data delivery and discovery experience, Atlantic Shores worked with Fugro, a global geodata specialist and years-long contractor on the project, to apply their Gaia.Hub solution.

### **Answering the geodata challenge**

Gaia.Hub is a cloud-hosted, web-based geodata engagement platform for accessing geospatial data and documents throughout the project life cycle. Evolving with the project, Gaia.Hub provides a single source of information for the project team and its stakeholders, allowing users to access geodata at any time, from any location in a simple, intuitive website.

Within a singular interface, Gaia.Hub provides a clear overview of the various types of geodata visualized in a spatial context, linked with associated documents. From this platform, users can readily access the project's evolving ground model, latest windfarm layout, site constraints, final geodata locations, processed datasets, and interpretive results in one interface.

Fugro began building the Atlantic Shores Gaia.Hub solution in April 2021 to support the COP. The system was designed to integrate public datasets and historical project data with new information being developed during ongoing field programs. As such, the platform enables real-time tracking of the site characterisation effort, along with an updated 'digital twin' of the project's developing ground model.

Gaia.Hub currently stores an impressive progression of geodata development, the highlights of which are summarized in the following timeline of activity:

2019: Reconnaissance surveys in support of seabed clearance of obstructions and buried archaeological resources for the installation of metocean buoys. Prior to this glance at the seabed, Atlantic Shores relied on nautical charts and limited public domain data of low-resolution bathymetry, historical seismic and sampling surveys, regional geomorphology, and charted wrecks, obstructions, and submarine cables for preliminary site understanding.

2020: Site characterization of the planned wind turbine corridors and export cable routes, with acquisition of high-resolution geophysical and geotechnical data to: develop a baseline for the soil stratigraphy and unitization for turbine foundations; determine the conductive properties of the shallow soils and understand the chemical effects of the soil-cable interface; and identify areas more susceptible to scour or sediment mobility; understand the native benthic environment at proposed infrastructure sites.

2021: Continued site characterization activities with additional high-resolution geophysical and geotechnical data acquisition and testing, this time focused on potential inter-array cable lay areas and extension and re-routes of the export cable corridors. The additional geophysical information allowed a more complete mapping of the subsurface data, particularly the extent of buried channels which could have implications on the strengths of the shallow soils as infrastructure is installed. The additional geotechnical samples and lab tests characterized the soil profiles on the order of weakest to strongest in terms of soil behavior under loading to understand the ground risk and optimal design.

To put this work in perspective, over the span of two-and-a-half years, these environmental, geophysical, and geotechnical surveys and assessments covered over 485 square kilometers of seabed, producing 45 terabytes of raw and processed geophysical data, 9,800 onshore and offshore lab tests, 550 minutes of benthic video, and daily wind and wave measurements from two lidar buoys. All of this information now resides in and is being managed through Gaia.Hub, with users accessing the data from interactive spatial displays to make informed decisions earlier in the development process.

Concrete examples of how Gaia.Hub supports faster decision-making includes the avoidance of magnetic anomalies, obstructions, and geohazards during data acquisition; the rerouting cables and adjusting of wind turbine locations in a single work season; the reduction of survey operations in unfavorable areas; the optimization of geotechnical investigations to target challenging stratigraphy; the adjustment of acquisition programs while survey work was ongoing. By employing Gaia.Hub early in the design phase, users benefit from the full picture of information.

### **High engagement, meaningful returns**



The Atlantic Shores Gaia.Hub site has become a well utilized tool among the project team and its contractors. In fewer than nine months, the site has provided over 200 users access to over 45 terabytes of geodata and more than 11,000 documents and supporting files. These files, which are linked to discrete seabed locations, include geotechnical logs, prognosis charts, sample photos, sample videos, final reports, seismic images, etc.

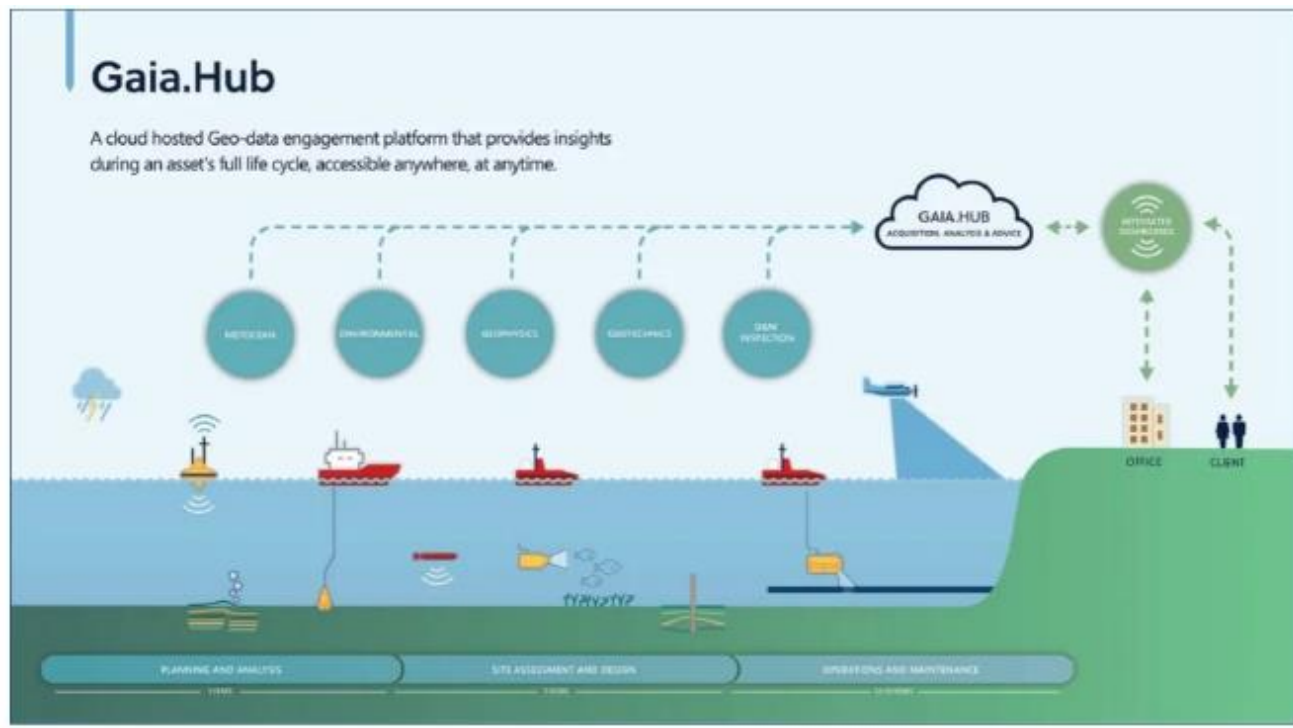
The growing user group for the Gaia.Hub site includes project managers, geotechnical engineers, marine archaeologists, geoscientists, biologists, ecologists, foundation engineers, cable engineers, and offshore field crew. As of January, BOEM staff have also joined the user community and can now directly access source geodata related to BOEM's hardcopy COP reporting requirements.

### **Advancing industry goals**

As one of the world's largest energy markets, the US offers much offshore win potential, but so far has just one wind farm in operation, producing 125,000 megawatts of energy annually. Current US policy aims to significantly increase these energy resources, with the Biden administration issuing a goal to reach 30 gigawatts of installed wind energy by the year 2030.

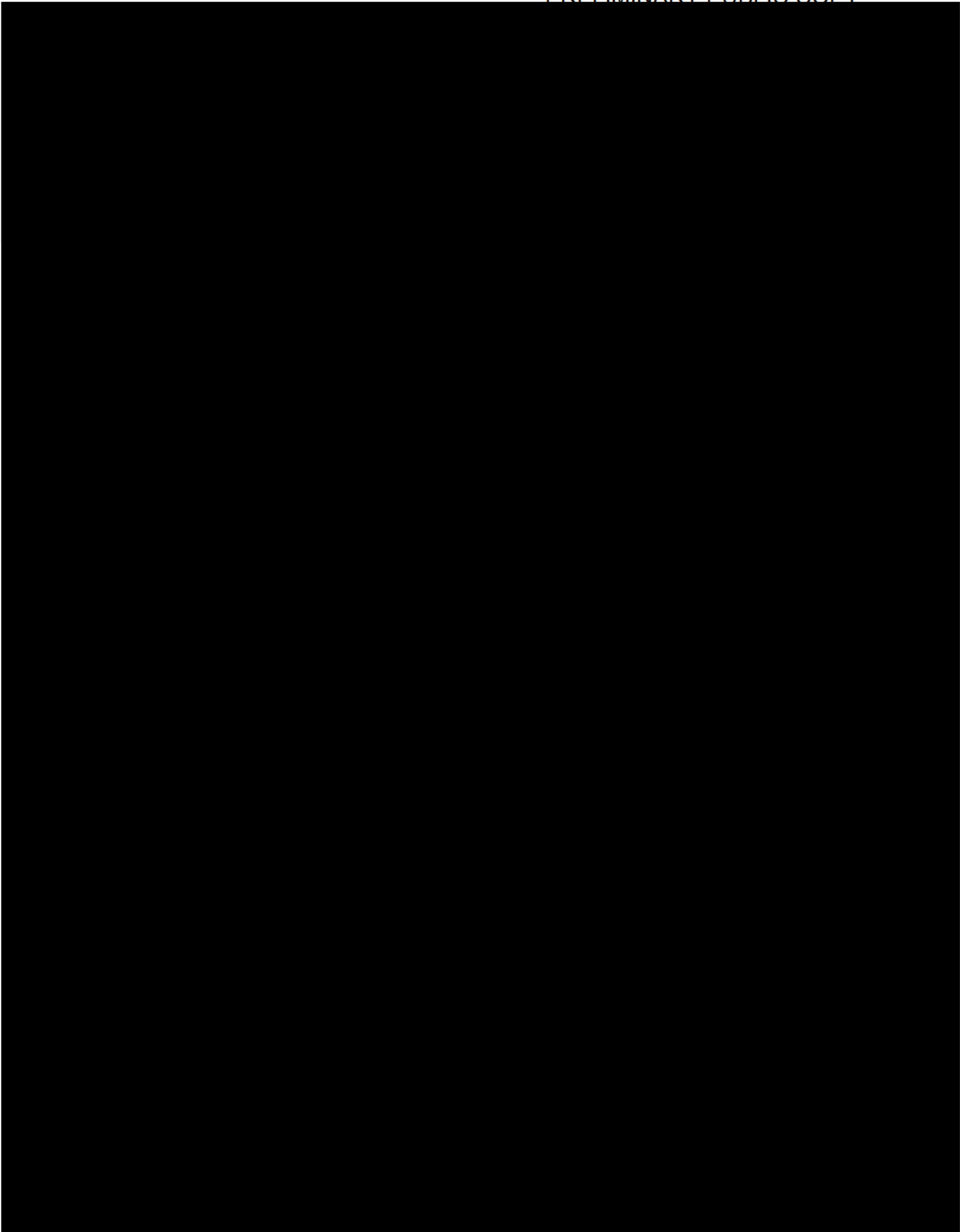
Meeting this aggressive target will require all parties—operators, contractors, and regulators— to operate at maximum efficiency. The Atlantic Shores Gaia.Hub solution is an important step in this direction, accelerating the pace of project development through highly coordinated field programs that can adjust based on real-time geodata, and supplementing static, hardcopy reporting deliverables with access to source project geodata to allow faster regulatory review.

By making by making large datasets available through streaming, and complex datasets accessible through intuitive dashboards and web-based applications, Gaia.Hub allows regulators to view and manipulate the same information as project engineers, which increases transparency, builds public trust, and hopefully leads to streamlined review and construction.





**Appendix 11-7: Letter of support from [REDACTED]**



**Appendix 11-8:** [REDACTED]

