

# Charlotte Mason BEEHIVE



## Teacher's Guide and Lesson Plan

## **Available Now**

Charlotte Mason Beehive is delighted to introduce A Course in Paper Sloyd for Home Schoolrooms and Educational Establishments, a complete four-year Paper Sloyd curriculum. This comprehensive course can begin as early as with pupils of around six years of age in their first year of formal schooling, but may be picked up and worked through by older students of any age who want to establish a firm foundation and working knowledge in Paper Sloyd.

The accompanying *Teacher's Guide and Lesson Plan* provides teachers with all the information they need to be able to successfully deliver this course to their students. Inside you will not only find lessons which use our three assigned lesson books, you will also find Skills Lessons and Alternative Design Lessons.





# Family Run Business

Charlotte Mason Beehive is a small family-run business founded upon the methodology of Victorian educator Charlotte Mason and the work of the Parents' National Education Union.

Located in the heart of rural England we provide content and educational resources with a view to enabling parents and educators to deliver an authentic, and simplified living education in their homes and schoolrooms.

Please visit our website for more living books, exclusive curricula, free resources, lesson plans, digital downloads, and much, much more.



# A COURSE OF PAPER SLOYD FOR HOME SCHOOLROOMS AND EDUCATIONAL ESTABLISHMENTS

# PART II

# PAPER TEARING AND MODELLING FROM TORN MATERIAL

# H. G. PATERSON

2025 EDITION—REVISED AND UPDATED BY RACHEL & JAMES NORTH METRIC CONVERSION, UPDATED DIAGRAMS, COLOUR PHOTOGRAPHS, DIGITALLY ENHANCED.



CHARLOTTE MASON BEEHIVE, MELTON MOWBRAY, LEICESTERSHIRE, U.K.

## Paper Tearing and Modelling 2025 Edition

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This edition of 'Paper Tearing and Modelling' is a brand new transcription, prepared and edited by Rachel and James North for Charlotte Mason Beehive. It is based off original scans of the twentieth century publication by H. G. Paterson, which has now entered the public domain.

Printed and bound in England.

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Cover & book design by James North Technical drawings and photographs by James North Written content by Rachel & James North

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Charlotte Mason Beehive charlottemasonbeehive.com

# INTRODUCTION TO THE NEW EDITION

THE ongoing resurgence of interest in Paper Sloyd among home educating families has been so encouraging to see, and our family, too, has been enlivened by this incredibly versatile handicraft. As with all new things, however, the learning curve can be steep and, at times, overwhelming. Our main purpose, therefore, in establishing A Course in Paper Sloyd for Home Schoolrooms and Educational Establishments, and furthermore publishing updated colour editions of classic Paper Sloyd volumes of work, is to make this handicraft even more accessible to families following the Charlotte Mason method of education. In the new updated editions of these wonderful, yet scarce, and hitherto inaccessible books, we hope to bridge the gap between "I want to try this", "I will try this", and "I not only can try this", but "I can do this". Because Paper Sloyd is beneficial to all and it is worthy of our time, and therefore it should be accessible to all.

The benefits of Sloyd, a Swedish word meaning handicraft, cannot be overstated. In fact, countries such as Sweden, Denmark, Norway, and Finland still teach Sloyd as a compulsory subject. The students in these countries mainly work with wood, metal, and textiles, but Miss Mason favoured paper and cardboard in her schools, making this one of the most affordable and simplest handicrafts to get started with.

But apart from its accessibility, there is much value to be gained by incorporating Paper Sloyd into your home lessons. Miss Mason is described as saying that "Sloyd [is] the most valuable and most educative of all the handicrafts" and that it educates the whole person. Quite apart from there being much technical value gained from working with ones hands in this way, there is much educational, and even moral, value to be gained as well.<sup>1</sup>

The head, the hand, and the heart are all employed in the workings of Paper Sloyd, and as the student develops a steady hand and perfects his hand-eye coordination, as he learns about angles, obtains the ability to create a perfect square, and is able to cut along a straight line without a ruler or guide of any kind, and as he understands the beauty of using the hand to create something useful and something beautiful, he finds his character developing too.

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The latest publication in our Paper Sloyd series, *Paper Tearing*, by H. G. Paterson, forms a sequel to *Paper Folding* by the same author and was the second part in the *Educational Handwork for Schools and Colleges* series, which was published in the early twentieth century. Despite being the third book published by Charlotte Mason Beehive for students learning the art of Paper Sloyd, *Paper Tearing* is intended to form the second part of our complete four-year Paper Sloyd programme of work, *A Course in Paper Sloyd for Home Schoolrooms and Educational Establishments*, subsequently bridging the gap between *Paper Folding* and *Paper Modelling*.

Following on from *Paper Folding* in a systematic and controlled way, *Paper Tearing* builds upon the foundation already laid by its predecessor, and teaches students the fundamental skills needed to progress to the more advanced modelling techniques in *Paper Modelling*.

<sup>1</sup>For more information on the principles and benefits of Paper Sloyd, please see 'The Living Principles of Sloyd' by Brittney McGann (July 2017), available at charlottemasonpoetry.org.

In similar fashion to the other books in our Paper Sloyd range, *Paper Tearing* is a brand new and fully updated colour edition of this scarce title. It serves as a gentle introduction to geometrical concepts such as angles, and introduces children to the skill of measuring and marking out models accurately. As students work with mathematical implements such as set squares, they will gain a solid understanding of the importance of right angles and the accuracy of folding when constructing models that work.

This new release has been extensively revised and updated. The models, methods, and techniques employed are faithful to the original, as is the spirit in which the book has been written; however the instructions have been re-written in an easy to follow step-by-step manner and are accompanied by colour photographs to highlight each step. We are committed to making Paper Sloyd accessible to all and aim to eliminate ambiguity completely, and so for this reason, the steps and photographs are numbered to correspond with each other and each step has a picture associated with it.

The book uses both metric and imperial measurements and includes remastered digital technical diagrams. The diagrams indicate folds by the use of dotted lines, while solid lines demonstrate the point at which the paper will be torn. We have retained many of the original drawings for illustrative purposes only.

As in the original publication, space is provided at the end of the book for writing notes and for making drawings of alternative models.

Miss Mason scheduled Paper Sloyd about once a week and although this book was never assigned by her we believe it serves as an excellent bridge between the two books she did assign, *Paper Folding* and *Paper Modelling*. It is our view, then, that this book is most appropriate for students aged seven and above who have previously completed the models laid out in *Paper Folding*. In our Paper Sloyd curriculum we've assigned *Paper Tearing* for students in the second year of Form I, thereby moving the position of *Paper Modelling* on by one year.

We have compiled the book to include clear divisions by term, with all materials for the term listed at the start of each section. The schedule we have laid out for the full Paper Sloyd series, A Course in Paper Sloyd for Home Schoolrooms and Educational Establishments, is as follows:

	Term I	Term II	Term III
Form IB (6-7 years old)	Paper Folding Nos. I-VIII	Paper Folding Nos. IX-XVI	Paper Folding Nos. XVII-XXIII
Form IA (Lower) (7-8 years old)	Paper Tearing Nos. I-X	Paper Tearing Nos. XI-XXII	Paper Tearing Nos. XXIII-XXXII
Form IA (Upper) (8-9 years old)	Paper Modelling Series I, Nos. I-VIII	Paper Modelling Series I, Nos. IX-X Series II, Nos. I-V	Paper Modelling Series II, Nos. VI-XII
Form IIB (9-10 years old)	Paper Modelling Series II, Nos. XIII-XIX	Paper Modelling Series II, Nos. XX-XXIII Series III, Nos. I-III	Paper Modelling Series III, Nos. IV-XI

In Form IB, when students were assigned *Paper Folding*, by H. G. Paterson, Miss Mason also specified that students should make "two other original models on the same lines" each term. In our complete four-year Paper Sloyd curriculum we've extended that to include all twelve terms covered by our programme, and we encourage you to employ the same attitude regarding this. Encouraging students to exercise originality and imagination when working with the paper is an invaluable lesson that cannot be understated. Happily, the books lend well to this kind of treatment as many of the projects contain additional notes or sketches for alternative model designs that can serve as inspiration for your students.

The material required for each model has been simplified as much as possible and although many of the projects use pre-gummed paper, eliminating the need for a glue stick, we do advise keeping a glue stick to hand for reinforcing models as necessary. Always ensure you apply adequate amounts of water coupled with firm pressure to the gummed paper, allowing time for it to stick. Paper Clips are also advised to secure models while gummed paper dries.

A complete set of course materials can be purchased directly from Charlotte Mason Beehive. Purchasing this supply pack will make it even easier to implement Paper Sloyd in your home lessons. In addition to our standard Supply Pack we also offer a Premium Supply Pack which includes an exclusive Instructor's Diagram Folder. This folder includes templates at a scale of 1:1 for every project in the book, which will be a great help and support to teachers and students alike. The templates not only serve as a time saver for teachers in learning the models and preparing for a new lesson, but they also take much of the guesswork out of teaching the subject. The instructions will be more clearly understood and any mistakes made will be more readily ascertained. The templates will also enable younger or less abled children to build the models successfully.

Witnessing families overcome their trepidation towards Paper Sloyd and fall in love with the discipline has been a highlight of the last few years, and we are eternally humbled by so many home educators choosing Charlotte Mason Beehive's resources to employ these lessons with their children. We hope this new resource will make Paper Sloyd even more accessible to families the world over.

May you have a truly wonderful and fruitful school year learning new skills with your family. Please share your completed models with us on social media.

RACHEL NORTH March 2025

# INTRODUCTION TO THE ORIGINAL EDITION

ON submitting the second of a series of textbooks in which paper is used as the medium for formative training, the author desires to express his thanks to the many teachers and educationists, to whose use and appreciation of the former part of the scheme, the appearance of this issue is largely due.

Until recent years Handwork in Paper was considered merely a necessary appendage to the work of the Kindergarten. As such, there was claimed for it no special aim, beyond that of a training in the neat, accurate folding of pleasing patterns. No connecting link existed with the larger scheme of occupational education. Careful research and experimental work have however brought a change. Work in paper has outgrown its old sphere, and is now certain to play an important part in the future development of the power in the child to think constructively.

For this purpose work in paper has many advantages over other media. It is a material with which every child is familiar. Its cost is trifling. With it results can be obtained such as the proving of simple geometrical theorems in the minimum of time. It presents to the teacher, student, or pupil almost unlimited variety and possibilities of construction. As a potent factor in education, Handwork in Paper appeals with equal force to the teacher of the Primary, Junior, and Senior Divisions of our schools.

The work in this course is intended for children of the Junior division who have completed the scheme of Paper Folding in Part One. It is desirable that this condition should be fulfilled, as the methods of general construction, as well as those applied to folding and tearing adopted in the former course, are utilised and elaborated without special explanation throughout this stage. It is therefore necessary to the full understanding of these methods that the work of the two parts be taken in sequence.

The essential difference between the work of the two courses is that, whereas, in. the former, the models are constructed from pieces of paper which have been cut for the pupils to the exact size and shape, in the present course—with few exceptions— both dimensions and shape are obtained by the pupil. This change renders necessary the introduction of some method by which the children can measure the material supplied for the various models, and thereafter reduce it to the measured size. It may be presumed that in the case of most children this will be their first experience in the actual use of measurements; it is, therefore, important that the initial instruction in methods of measuring should be on sound lines. With this view the Card Ruler illustrated on Page 17 has been specially designed. It is the product of numerous experiments in teaching children, and, after using rulers of various sorts, including dimensioned strips of cardboard, it has been adopted as possessing all the advantages of the narrow ruler, while it has several additional features to recommend it. It provides a clean, smooth surface on which to work, as the roughness of the school desk often proves a hindrance to successful folding. The central arrangement of squares acts as a testing sheet in determining a right angle when folding. In certain cases it also makes the use of the left hand, as well as the right, compulsory in folding and creasing, as dimensions are determined from left to right. In this connection, teachers using the ruler should modify their methods so as to ensure a fair amount of left-hand folding, creasing, and tearing. No smaller unit than a quarter of an inch is used on the Ruler, and it is believed that the skill in transferring simple measurements unconsciously acquired by the child in the execution of the simple problems of the course, will appear with telling effect in the subsequent stages of school work.

The practice which was adopted in the first course—that of the pupil tearing all supplementary openings in the cut paper which were necessary in the construction of the models—makes a further step now possible, that of tearing the outline edges of the paper, as well as these additional openings.

This substitution of the torn outline for the cut is a change which entails serious effort on the part of the pupil. The children, by the time they reach this stage, know what constitutes a really well torn edge, and many are even able to appreciate the artistic beauty of successful tearing, as compared with the cut produced by the knife or machine.

The forms to be torn include the Square, Oblong, Rhombus, Equilaterial Triangle, Hexagon, and Right Angled Triangle. An exception is made with the last mentioned form which is not torn on all three sides. This is done either with view to providing, as in models 2, 3, and 4, a gradual transition from the cut to the torn shape; or it is done, as later in the course, with a view to economy of material. The latter point requires constant attention from the teacher of the class engaged in preparing material with torn edges.

It will be observed that in the diagrams used on Page 27, illustrating the method of obtaining a square by tearing, an irregularly shaped piece of paper is used. The reason for this is to show that, while in general practice roughly squared or rectangular pieces of paper are used for tearing, the original form has no bearing on the finished shape.

Several features of the former course have been retained in the present scheme. No tools are used except the Card Ruler. Glue is not needed, a small damp sponge being the only apparatus required for the execution of the models. Strips, discs, and square and triangular tickets of gummed paper are again employed for fastening, while at the same time their application is so arranged as to add a decorative feature to the work. Space is provided, as formerly, at the end of the book for notes, sketches, or other matter pertaining to the work at this stage. Materials for the course have again been carefully selected, prepared, and packed in cardboard boxes similar to those issued for Part One.

The various hints given to teachers in the introduction to Part One also apply here, and should be acted on.

While the examples selected for this Course are mostly new, one or two old types have been retained and furnished with features of fresh interest. Many drawings and suggestions for alternative models are given; these could easily have been multiplied, but in doing so no good purpose would be served. The additional examples are given in order that they may act as an incentive to further effort in this direction on the part of teacher and pupil alike.

In Part One teachers were advised to have their children "follow prescribed and directed operations alone." This remark, the author well knew, would call for strong dissent from advanced advocates of self-expressional work from the child; but facts must be faced: the elements of a language must be taught before a child can be expected to express himself in that language. To quote from Part One "The models while carefully selected and arranged, are intended to be taken as typical and suggestive only." This remark should apply with increasing force to the work of Part Two.

A good teacher is always on guard against over teaching, just as he is careful to avoid under teaching, and no class work in the school affords a teacher a better opportunity than this to form a correct judgment of the individual power of the pupils for work. By all legitimate means encourage honest, individual effort in the children, but the shortest road to genuine work of the self-expressional type is to begin by laying a sure foundation of well directed method, and sound instruction, in the early stages of Handwork.

In conclusion, it seems almost superfluous to remind teachers that the making of these little objects in paper—however valuable may be the training and discipline acquired in the process—does not exhaust, but rather only visualises, the wealth of information and imagination with which the alert teacher will clothe the childrens efforts. Even the Pyramids, probably the most uninteresting of all the exercises to a Junior Class, will, if associated with the History, English, Geography, or Religious Knowledge Lessons, produce a more truthful and lasting impression, both of the shape and of the story of the great Egyptian structures, than if the one lesson were unconnected with the other. If the children are of a suitable age these models may be used to demonstrate the geometric forms—Triangle, Hexagon, Rhombus, &c.—and to illustrate such terms as Base, Altitude, Diagonal, Acute, Right, and Obtuse Angles; or, the models when made in a junior Class may be sent to a class in the Senior Division of the school to be used as problems for the actual measurement and calculation of areas and volume.

The value of Association in the hands of a capable teacher can scarcely be over-estimated, but, there is a misuse of Association just as there can be a misuse of Illustration, and any undue straining after correlation is undesirable. The best methods of correlation can rarely even be suggested; they come with spontaneity to the teacher who is wrapt up in his work.

The author gratefully acknowledges the kind assistance with the illustrations given by Mr George Cunningham, and with the designing of examples by Miss Mary Fraser and Mr John Calder.

MORAY HOUSE, EDINBURGH.

# PAPER TEARING

# MATERIALS REQUIRED FOR THIS COURSE

May be obtained through Charlotte Mason Beehive, or through leading suppliers of paper and stationery products.

#### PAPER

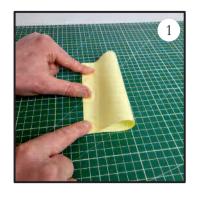
- 23 x Craft Paper (A4 or letter size)
- 1 x Thick Card (A4 or letter size)
- 2 x Paper 70gsm (A4 or letter size)

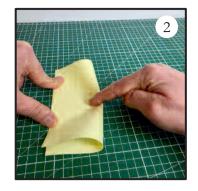
#### GUMMED PAPER

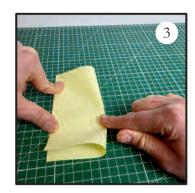
- 6 x Gummed Paper Strips, 200mm x 20mm (8" x <sup>3</sup>/<sub>4</sub>")
- 33 x Square Gummed Tickets
- 3 x Gummed Discs

#### **MISCELLANEOUS**

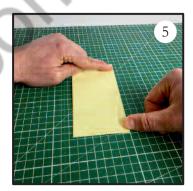
- Paintbrush and Cup of Water
- Glue Stick (optional)
- Paper Clips (optional)
- Lollipop Stick
- Set Square
- Needle and Thread
- Pencil
- Ruler
- Cutting Mat (optional)











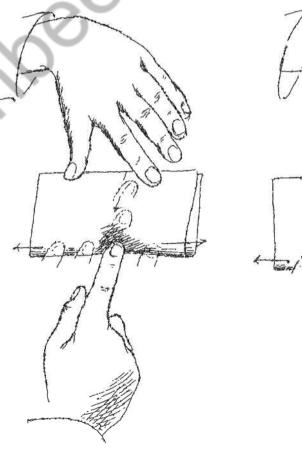
# DIRECTIONS FOR FOLDING, CREASING AND TEARING.

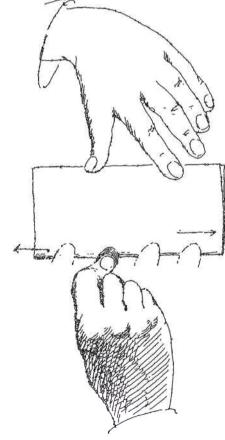
#### FOLDING AND CREASING

#### **MATERIAL:**

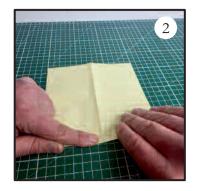
Craft Paper

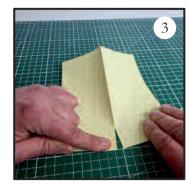
- 1. Bring two sides of the paper together to produce the fold line where the fold is required. Ensure the sides are accurately aligned with one another.
- 2. Press your finger down to the centre of the desired fold, flattening the centre point securely.
- 3. From the flattened centre run your finger across the fold line to the edge of the paper, creating an obvious fold as you move.
- 4. In a similar manner, run your finger across to the other side of the paper, completing the fold.
- 5. A creased edge suitable for accurate tearing should be first folded as in the previous steps. Now, take your thumb, press down firmly, and draw it along the fold until the edge takes on the desired sharpness.

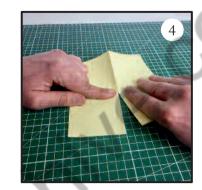


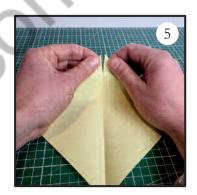










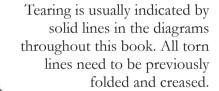


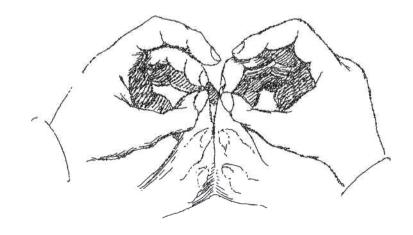
#### **TEARING**

#### **MATERIAL:**

Craft Paper

- 1. Take your previously creased piece of paper with the convex side of the crease up and pointing towards you.
- 2. Place the tip of your index finger next to the creased line, and with your other hand grip the opposite side of the paper.
- 3. Pull outwards to the side (not upwards).
- 4. Work slowly and carefully to produce the tear. Bring your finger and hand grip further down the paper at intervals during the tearing process.
- 5. An alternative version of tearing is done by gripping the paper either side of the crease between the thumb and index finger, and pulling apart. This version is especially useful when tearing on a diagonal, a technique used throughout this book.

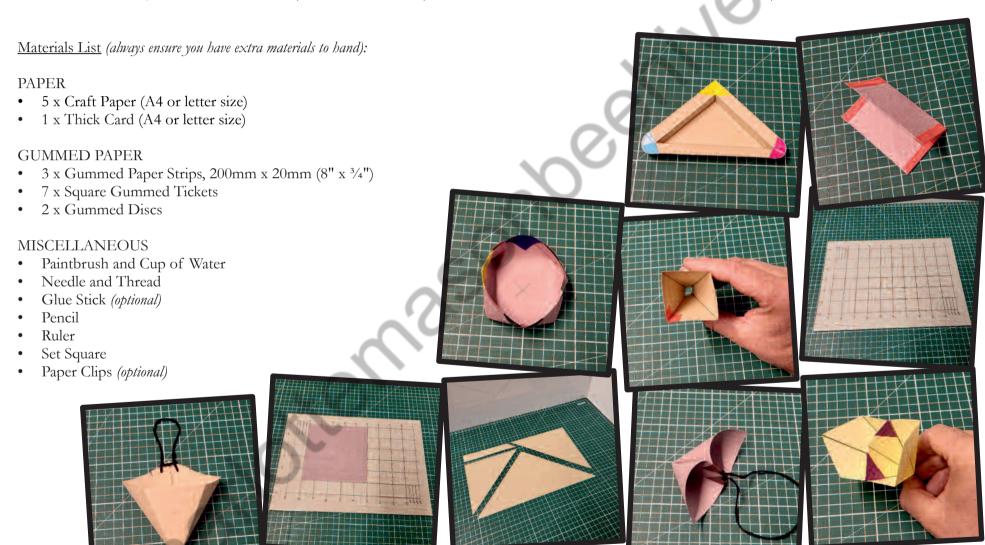




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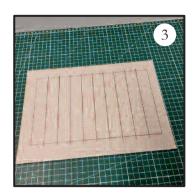
# TERM I.—MODELS I-X

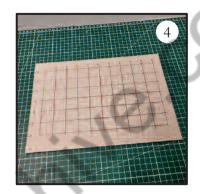
CARD RULER | WALLET | MATERIAL FOR MODELS | FILLER | TRINKET POUCH | TRAY FOR SMALL FRUIT OBTAIN A SQUARE BY TEARING | DUAL POCKET | ALTERNATIVE DESIGNS FOR DUAL POCKET | CIRCULAR TRAY

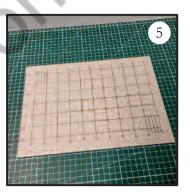










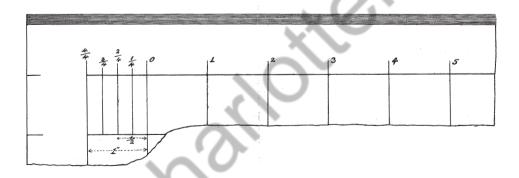


#### I.—CARD RULER

The Card Ruler is used for obtaining on paper the various measurements necessary in constructing the models.

This ruler, once completed, was intended to be used in constructing the subsequent models throughout the book, however with the widespread availability of modern cutting mats this is no longer a prerequisite to undertaking the course.

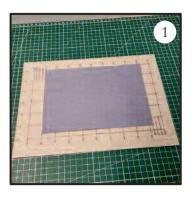
One important difference between this card ruler and a modern cutting mat is the 'zero line'. The 'zero line' on the card ruler is measured one increment from the edge of the grid thus enabling the first section of the grid to be used for quarter inch measurements (or 5mm measurements in the case of a metric ruler).

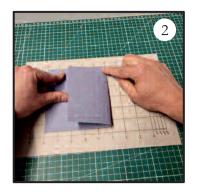


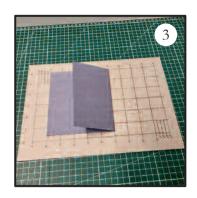
#### **MATERIAL:**

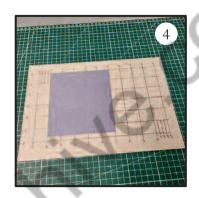
A4 Sheet of Thick Card | Pencil | Ruler | Set Square

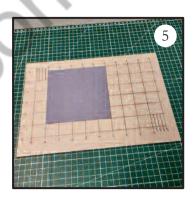
- 1. Draw a 26cm (or 10") horizontal line across the top of the card starting 20mm (or 1") from the lefthand side whilst keeping a distance of 20cm or 1" from the top. You should use your ruler and pencil to create maker points before drawing the line.
- 2. Using your set square to create a right angle at the edge of your horizontal line, continue to draw the outline of the grid. This will measure 26cm x 16cm (or 10" x 6").
- 3. Mark the vertical lines in 20mm (or 1") increments.
- 4. Similarly, mark the horizontal lines in 20mm (or 1") increments.
- 5. Mark 5mm (or  $\frac{1}{4}$ ") increments in the two corner squares.
- 6. [Optional] Using your ruler mark a replica of a ruler up the left vertical edge to be used for measuring.





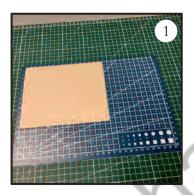




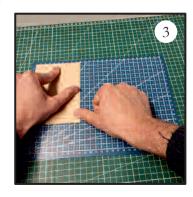


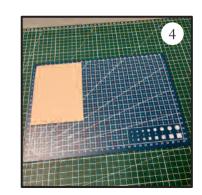
#### MEASURING ON A CARD RULER: 5" SQUARE METHOD.

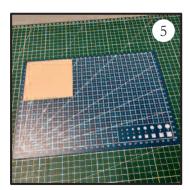
- 1. Place a piece of paper on the card ruler so that the edges lie alongside the vertical zero line and the top horizontal dimensioned line.
- 2. Hold the paper firmly in position with the fingers of the left hand and fold the paper back upon itself.
- 3. Crease down—in this case—at the 5 inch line.
- 4. Tear off the surplus material.
- 5. Rotate the paper and repeat the previous steps to obtain a 5" square.





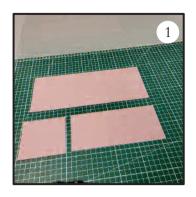


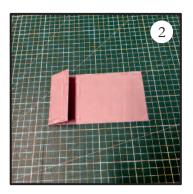


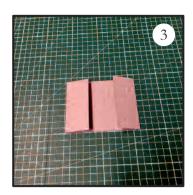


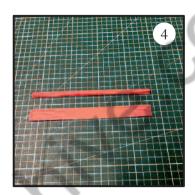
#### MEASURING ON A CUTTING MAT: 100mm SQUARE METHOD.

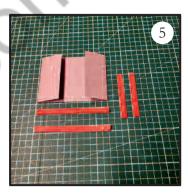
- 1. Place a piece of paper on the card ruler so that the edges lie alongside the vertical zero line and the top horizontal dimensioned line.
- 2. Hold the paper firmly in position with the fingers of the left hand and fold the paper back upon itself.
- 3. Crease down—in this case—at the 100mm line.
- 4. Tear off the surplus material.
- 5. Rotate the paper and repeat the previous steps to obtain a 100mm square.







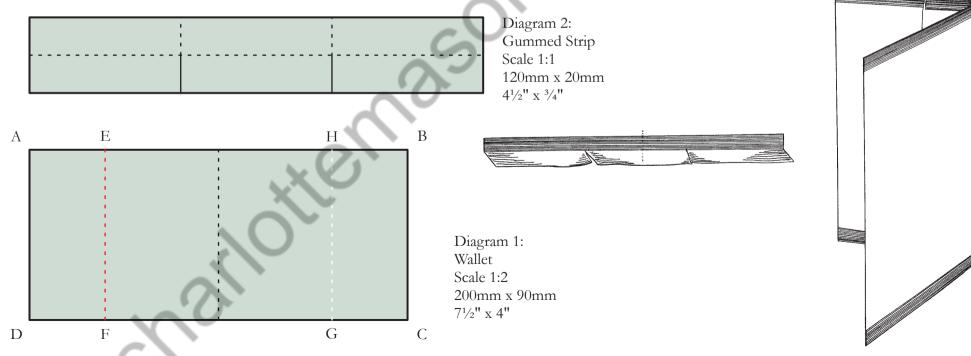




### II.—WALLET

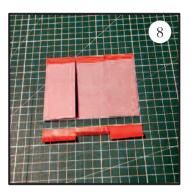
The perfect size for carrying your cash cards or special trip passes when you're out and about, the dimensions can be doubled if you'd prefer something bigger.

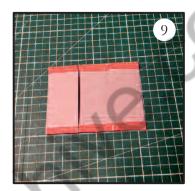
This lovely compact wallet will make a treasured gift for a special loved one, and can be personalised anyway you like.













#### **MATERIAL:**

A4 Craft Paper | Ruler | Pencil | 2 x Gummed Paper Strips, 200mm x 20mm (8" x 3/4")

- 1. Mark out an outer rectangle 200mm x 90mm (or 7½" x 4") on a sheet of A4 craft paper as shown in diagram 1. Fold, crease and tear to size.
- 2. Place edge AD against the zero line on the cutting mat or card ruler. Fold AD over to the right 40mm (or 1½") along the cutting mat, and crease with your thumb. This will form the red line (EF) shown on diagram 1.
- 3. Turn the paper about, so that BC lies against the zero line, and repeat the previous step creasing at the white line (HG) on diagram 1.
- 4. Fold the two strips of gummed paper in half lengthwise.
- 5. Open the gummed paper out flat, and measure them to 120mm (or  $4\frac{1}{2}$ ") in length. Tear off any excess.
- 6. Mark 40mm (or 1½") from each end of the gummed strip. Now at each mark crease and tear halfway through the gummed strip to the central line as seen in diagram 2.
- 7. Place one edge of the wallet upon the intact half of one of the gummed strips, moisten and secure down.
- 8. Fold over the end thirds of the gummed strip, moisten and secure down. Now secure the middle third in a similar manner.
- 9. Attach in a similar fashion the second gummed strip to the opposite edge of the wallet.
- 10. Fold the wallet in half, and crease down the centre line forming the middle of the wallet.