

# WORKSHOP PLAN:

## Weaving on a Cardboard Loom



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**ARTS COUNCIL  
ENGLAND**



## WORKSHOP PLAN: WEAVING ON A CARDBOARD LOOM

Weaver Agnis Smallwood has designed this workshop plan to support a teacher to deliver a 50-minute workshop for Key Stage 3. By the end of the workshop your students will have learnt how to weave on cardboard loom. There's also an accompanying film, which you can watch [here](#), to support you.

We'd love to see the results of your workshop! Share your images with [@craftscounciluk](#) on Twitter and [@craftscouncil](#) on Instagram using [#MakeYourFuture](#)

MAKER NAME	PROJECT TITLE	MATERIALS NEEDED	LEARNING OUTCOMES
Agnis Smallwood	Weaving on a Cardboard Loom: a 50-minute workshop for KS3	Cardboard looms for each student (A5 size) Loom template Scissors Cardboard shuttle or a large plastic needle Ruler Pencil Yarn Malleable materials	All students will learn: - How to weave using a cardboard loom, including warping up and weaving over and under (plain weave) - Weaving vocabulary  Some students will: - Explore a range of different materials including colour and texture - Explore a range of different of techniques - Learn how to cut off their work of their looms

# WORKSHOP PREPARATIONS: WEAVING ON A CARDBOARD LOOM

## PRE-LESSON PREPARATIONS

## ACTIVITY SUMMARY

## HOW TO PREPARE

## THINGS TO THINK THROUGH

Looms

Cutting out the looms or making templates

You may wish to prepare all the looms ahead of the lesson or if you have a large class, create 5 - 6 templates that students can then draw around and cut out the triangles themselves to save on preparation time.

**Top Tip:**  
It's important when cutting the triangles to make sure that they are in line at the top and bottom of the loom, so that the warp threads run vertically down the loom and not at an angle.

**Differentiation:**  
Having the warp threads approximately 1 - 1.5cm apart is a good distance for many students. The larger the gap between the triangles and the resulting threads, the easier it is to weave in and out: this is important if you are weaving with very chunky materials.

Alternatively, threads can be placed closer together to create a tighter piece of weaving. This is important if you want pupils to investigate different patterns.

## MATERIALS

- Cardboard looms for each student
- Loom template
- Scissors
- Ruler
- Pencil



## WORKSHOP PREPARATIONS: WEAVING ON A CARDBOARD LOOM

### PRE-LESSON PREPARATIONS

### ACTIVITY SUMMARY

### HOW TO PREPARE

### THINGS TO THINK THROUGH

Shuttles

Cutting out the  
Shuttles

Cut out small rectangles  
around 7cm long x 2cm wide  
for each student and cut out  
a small triangle at each short  
end so that you have a slot to  
wind the yarn into.

You will need:  
Scissors, Cardboard shuttle  
Ruler, Pencil

How many to teach  
in a group

Consider how  
many students you  
will teach at a time

You might refer to:  
Books  
Internet  
Resource Sheet

It is possible to teach a class of 30  
but you might want to divide the class  
in half. Whilst one half is learning  
to weave the other half could begin  
exploring different weave and textile  
artists.

Malleable materials

Gather materials  
together

Gather together a range of  
different materials— see  
what you have lying around  
your department that you  
can recycle and use up.

Consider providing a wide range of  
different colours / textures and types  
of materials. Refer to the Weaving  
Materials Resource Sheet

## WORKSHOP PLAN: WEAVING ON A CARDBOARD LOOM

TIME NEEDED	ACTIVITY SUMMARY	STUDENT EXPERIENCES AND OBJECTIVES	TEACHER SUPPORT
5 minutes	Introduction	Students will understand what they will be exploring and investigating and where this fits within their projects. Students will begin to understand the vocabulary that they will hear during today's workshop.	Introduce the topic of weaving and place within the wider context of the project they are studying. Introduce some of the terminology which will be used today.  Resources: Glossary
5 minutes	Warping up loom	Students will understand how to warp up their own looms.	Demo how to warp up the loom and tie the two ends of the yarn diagonally across the back.  Resources: Cardboard looms for each student, scissors, yarn

### TOP TIP

If you have not prepared all the looms for students ahead of the workshop first ask students to draw around the templates and cut out the triangles. You can experiment with a range of weft materials but ensure your warp threads are strong. The yarn you use for creating your warp should be strong and not fluffy, so it can withstand the shuttle continually weaving under and over the threads without getting caught.

## WORKSHOP PLAN: WEAVING ON A CARDBOARD LOOM

### TIME NEEDED

### ACTIVITY SUMMARY

### STUDENT EXPERIENCES AND OBJECTIVES

### TEACHER SUPPORT

5 minutes

Watch weaving  
Demonstration

Students will understand how to begin weaving under and over their warp threads, and how to return in the opposite direction. Students will learn that this technique is called plain weave.

Demo how to begin weaving. This will include how to wind your yarn around the shuttle or threading the large plastic needle.

Resources: Cardboard looms, Scissors, Cardboard shuttle, malleable materials

### IN DETAIL:



When you have woven your first row, remember to take your tail end and weave it between 4 or 5 of the warp threads and then tuck it behind the remaining warp threads out of the way before pushing down to join the row below.

## WORKSHOP PLAN: WEAVING ON A CARDBOARD LOOM

TIME NEEDED	ACTIVITY SUMMARY	STUDENT EXPERIENCES AND OBJECTIVES	TEACHER SUPPORT
25 minutes	Students to weave	Students will explore how to weave for themselves.	<p>Be led by your students to help facilitate their learning. Encourage them to explore and investigate for themselves as groups and individually.</p> <p>Resources: Cardboard looms, Scissors, Cardboard shuttle, malleable materials</p>

### IN DETAIL:



When you have finished weaving with a yarn, remember to weave in your tail end, before beginning your next yarn. Your new yarn (white) should copy your tail end, going in the same direction and copying the same over/under pattern. In our example the white yarn begins by going 'over' the first warp thread. This looks 'wrong' as it is the same as your tail end, however once you have reached the other side of the loom you will notice you have one complete row alternate to the last whole complete row of weaving

## WORKSHOP PLAN: WEAVING ON A CARDBOARD LOOM

### IN DETAIL:

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Ideally, you want to weave in any tail ends as you go along so that your weaving is secure and so all the ends are left at the back of your piece of weaving so they cannot be seen.

The image shows how to change the colour of your yarn whilst also remembering to weave in the tail ends of your yarn. You can see a section of weaving, with the tail end of the first yarn being woven in. There is then a complete row of the second colour (white), with the tail end being woven in, followed by two full complete rows of weaving.

### TOP TIP

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To retain straight edges when weaving and an even width across the work help students with their tension. They may need to either relax the yarn or pull the yarn in more after each row.

Differentiation:

Encourage students who need a challenge to:

- See if they can work out how to change the materials they are weaving with for themselves or demonstrate the technique to students who would benefit from more guidance;
- Combine different materials. They may wish to explore weaving with more than one yarn at a time;
- Investigate using different colour combinations and textures;
- Identify their own mistakes within their weaving. This means they are learning and understanding the technique.

## WORKSHOP PLAN: WEAVING ON A CARDBOARD LOOM

TIME NEEDED	ACTIVITY SUMMARY	STUDENT EXPERIENCES AND OBJECTIVES	TEACHER SUPPORT
5 minutes	Tying off the ends	Students will understand how to safely secure their weaving.	Demo how to cut the warp threads on the back of the loom and tie the ends of the warp threads to secure the weaving. Then help students to achieve this for themselves.  Resources: Cardboard looms, Scissors
5 minutes	Summary	Students will have the opportunity to reflect on what they have achieved, as well as what they could develop in the next workshop.	Help students to reflect on what they have achieved as well as discuss the challenges they faced and how they overcame them. This will then help preparation for the next workshop.  Resources: Post-it notes, sketchbooks, pencils

### IN DETAIL:

You may not want to cut all weaving off the cardboard looms, if students have used chunky materials or created very loose weaving it may be more secure to leave the weaving on the looms. It is also important to have double knots as they can easily come undone with only a single knot.

## WORKSHOP PLAN: WEAVING ON A CARDBOARD LOOM

### EXTENSIONS

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If you would like pupils to explore creating different patterns you will need to ensure that the warp threads are closer together, otherwise the patterns will not be clearly defined.

It may be easier at first to explore different patterns using strips of paper that are the same width, to help see a pattern clearly. You often need the warp and weft threads to be of similar thickness.

(Don't worry about not knowing a range of weaving patterns yourself, learn together with your students as a team).

Think about links you could make with other teachers within the school and cross-curricular links which could be made. Weaving lends itself well for exploration across the STEAM subjects.

## REFLECTIONS: WEAVING ON A CARDBOARD LOOM

WHAT WENT  
WELL?

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WHAT WAS  
CHALLENGING?

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WHAT EVIDENCE DO  
YOU HAVE?

Record observations,  
conversations or quotes from  
students. Have learning  
outcomes been achieved?

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WHAT DO YOU NEED  
TO CHANGE OR  
PREPARE FOR THE  
NEXT WORKSHOP?

## WORKSHOP PLAN: SUPPORTING RESOURCES

### GLOSSARY OF WEAVING TERMS

**Loom:** The device on which you create your weaving, whether an industrial piece of machinery, table loom or cardboard loom.

**Malleable:** A material which can be manipulated without breaking, in this case over and under warp threads.

**Shuttle:** The tool which helps travel the weft thread through the warp threads, whether that is a wooden shuttle or a piece of cardboard.

**Warp:** The yarn you add to your loom before you begin weaving, often in a vertical direction. Think of the warp threads as the ones providing the structure, which you will then weave into.

**Weaver:** The person who is creating the piece of weaving.

**Weft:** The weft threads run in a horizontal direction and are the ones that you add to create your piece of weaving by going over and under the warp threads.

**Yarn:** Used to refer to a thread that is made from any type of material, manmade or natural or those which are a blend of the two.

### WEAVING MATERIALS

Warp threads: you need to ensure that this yarn is strong and will withstand different weft threads going over and under repeatedly. It is also important to ensure that this yarn is not fluffy so your weft threads do not get caught.

Weft threads: any material that is malleable enough to manipulate under and over your warp threads can be used to weave with. Experimenting with a range of different materials can produce exciting results. Remember to think about texture as well as colour when gathering materials to work with.

### WEFT MATERIALS TO TRY

- Wool
- Yarn
- Ribbon
- String
- Fleece
- Pipe cleaners
- Paper yarn
- Lace
- Wire
- Sticks and twigs
- Cord
- Plastic carrier bags
- Raffia
- Fabric material
- Paper
- Foil
- Tissue paper
- Crepe paper
- Old computer cables
- String
- Twine
- Leaves
- Leathers
- Newspapers

## WORKSHOP PLAN: SUPPORTING RESOURCES

### CHEAP MATERIAL SOURCES

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**School and Students:** weaving is a great project for using up those ends of materials that you have had left over from previous projects. See what you can find from around your own classrooms. You could also challenge students to bring in some materials if appropriate for your class.

**Charity Shops:** these can often have remnants of balls of yarn, providing you with lots of different colours and textures relatively cheaply as well as fabric that can be cut into lengths to weave with as well.

**Scrap Stores:** found across the UK, Scrap Stores sell a huge range of different materials, donated by different businesses to prevent their waste products going to landfill. There are always new materials to find that would be perfect for weaving.

**Local Community:** if you have ties to any local community groups you could ask them if anyone has any materials they could donate. Knitting groups may be able to help. Knitters often keep any leftover yarn from projects they have made and some may be happy to donate scraps to help your project. You only need a couple of donations to provide plenty of possibilities.

## WORKSHOP PLAN: SUPPORTING RESOURCES

### ARTISTS TO LOOK AT

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Humans have been manipulating materials and weaving fibers for thousands of years, in countries around the world. There are many exciting examples of different textile practices and artists throughout history, as well as many contemporary practitioners to research. This is a small list to help kick start your research, but you and your students are sure to find many more interesting examples that link in to your specific projects.

#### **Dovecot Tapestry Studio (1912 - Present)**

<https://dovecotstudios.com>

This studio was established in 1912 and has had many talented weavers and artists collaborate together to create beautiful tapestries including: Pause on the Landing created with Patrick Caulfield, The Caged Bird's Song with Chris Ofili, Diagrams of Love: Marriage of Eyes with Linder, Day's Eye with Garry Fabian Miller, and The Perse School Rug with Victoria Morton.

#### **Ann Sutton (1935 - Present)**

<http://annsutton.org>

British artist and designer, awarded an MBE for services to textiles in 1991, has always experimented within her practice and continues to do so.

#### **Melissa Cody (1985- Present)**

<https://craftcouncil.org/magazine/article/clear-focus>

Melissa Cody is a fourth-generation Navajo weaver who adapts traditional techniques to create vibrant contemporary pieces.

#### **Akosua Afriyie-Kumi (? - Present)**

<https://www.aaksonline.com/about/>

Ghanaian Akosua studied at Kingston University London and has since founded her own business A A K S. She is currently based in Ghana, where local women weave handbags using raffia and leather, which are then sold across the globe, including in Anthropologie and Urban Outfitters.

#### **Rosuljon Mirzaakhmedov (1973 - Present)**

<https://www.wanderingsilk.org/meet-the-makers-uzbek-ikat>

Mirzaakhmedov is a 9th generation weaver and UNESCO award winning Master Weaver. He lives in Margilan, Uzbekistan and was responsible for reviving the production of the velvet ikat technique.

(Ikat - the process of creating a resist on areas of a warp before the yarn is then dyed.)

## WORKSHOP PLAN: SUPPORTING RESOURCES

### ARTISTS TO LOOK AT

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#### **Judith Scott (1943 - 2005)**

<http://judithandjoycescott.com/judith.shtml>

Internationally renowned American fibre artist Judith Scott. After observing a fibre artist she began to create unique sculptures. Binding, weaving and entwining threads. She created over 200 sculptures which can now be found within permanent museum collections around the world.

#### **Gunta Stölzl (1897 - 1983)**

<https://www.bauhaus100.de/en/past/people/masters/gunta-stoelzl/>

German textile artist who became director of the weaving workshop at the Bauhaus in Dessau as well founding a hand weaving company.

#### **Thomas Wardle (1831 - 1909)**

[http://www.bbc.co.uk/stoke/content/articles/2009/08/10/thomas\\_wardle\\_feature.shtml](http://www.bbc.co.uk/stoke/content/articles/2009/08/10/thomas_wardle_feature.shtml)

Spent considerable time exploring the process of dying, his travels to India influenced his work. He collaborated with William Morris in Leek, where they experimented with dyes and printing, developing textile manufacturing.

#### **Ardabil Carpet (1539 - 1540)**

<https://www.vam.ac.uk/articles/the-ardabil-carpet>

We do not know who worked on weaving this rug but it is thought up to 10 people may have worked on it at a time and that it would have taken several years to complete, it was made in Ardabil in north-west Iran. It can be found on display in the Jameel Gallery in the Victoria and Albert Museum, London.