



Careers activity

Traditional skills challenges

1. Brick bond building
2. Tools for the job

Main learning points:

- The heritage sector needs a range of traditional skills to look after historic sites
- There are several careers you can have using traditional skills
- Specific tools and skills are needed for the roles involved in traditional skills



Introduction: What are traditional skills?

Ask participants what kind of jobs might be needed to look after, repair and conserve historic sites.

Explain that a range of jobs are needed e.g

- stonemasons
- painters
- joiners
- slaters
- thatchers
- plumbers
- blacksmiths
- electricians

Explain that historic buildings were built using different materials and building techniques to modern buildings, so their repair needs a wide variety of specialist craft techniques.

It's vital that these skills are passed on so buildings can be repaired with the skill and attention they deserve and in ways which don't harm them.

One traditional skill is bricklaying. Bricks can be laid in different ways and the patterns are called bonds. This requires skill, attention to detail and accuracy.

Challenge 1

Brick bond building

Resources required:



- Wooden building blocks, LEGO bricks or mini model bricks
- **Activity instructions** (p4)
- **Stanley Mills brickwork** resource, printed (p3)

Activity:



- Set out suitable, standard sized building resources (e.g. LEGO, wooden play blocks), and print outs of the **brickwork example**.
- Provide participants with the **activity instruction sheet**. They choose a type of bond and build a mini wall in that pattern. Once built, participants try building a mini wall in another type of bond.
- Participants discuss which was easier to build and what skills they think they used.



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Challenge 2

Tools for the job

Resources required:



- **Job, Tools, Skills challenge cards** (p5-6)
- **Activity instructions** (p7)
- **Activity explanation** (p8)

Activity:

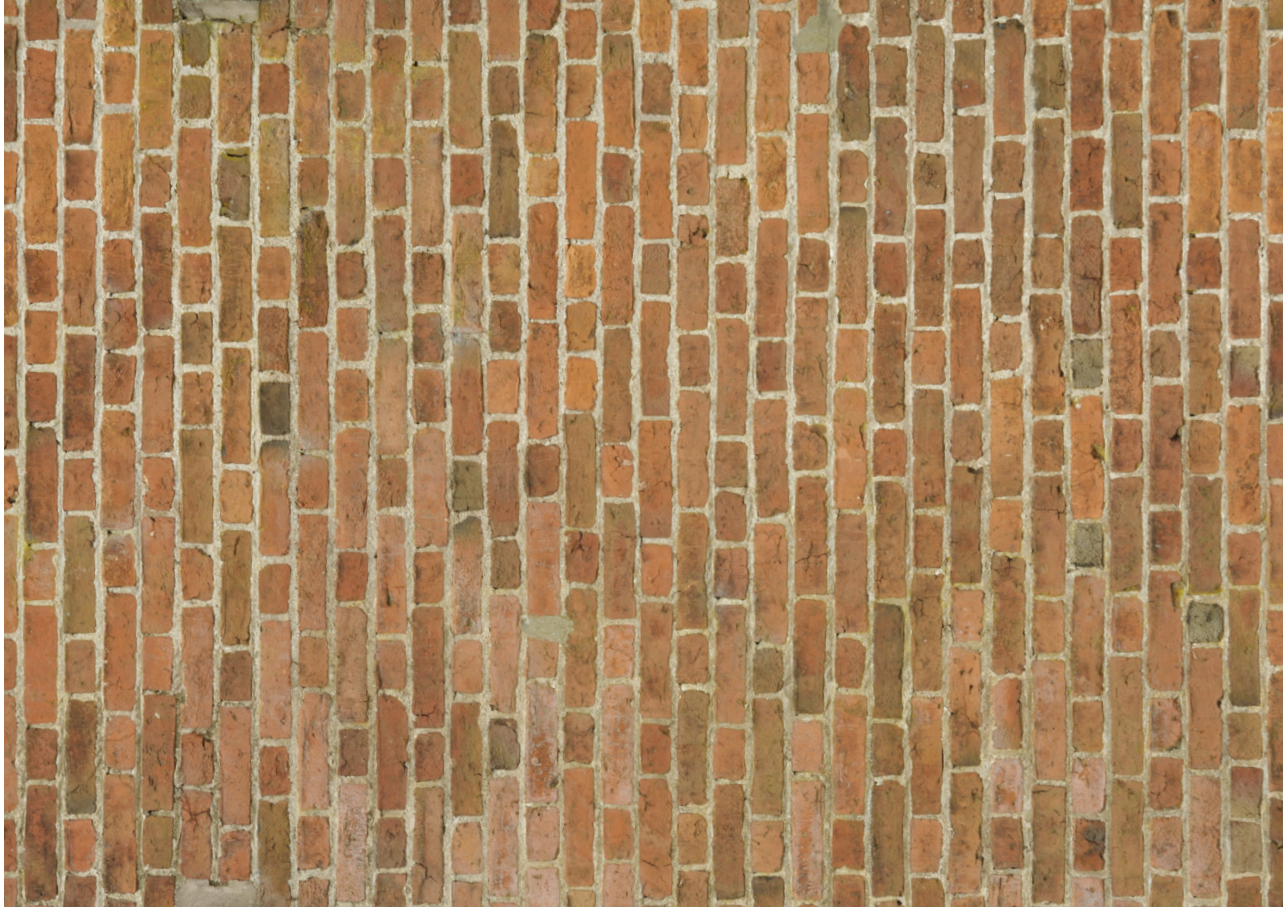


- Print and cut the **Jobs, Tools and Skills** cards.
- Mix them up, then lay them out randomly, face up, on a table.
- Provide participants with the **activity instructions**.
- Ask them look at the cards and match up the **job** with the right **tool** for that job, and the **skill** they think is needed to do that job.
- Provide participants with the **activity explanation** once they have completed the activity.
- Participants discuss
 - what job(s) they think they would be good at
 - what job(s) they have the skills for.





Stanley Mills 18th century cotton mill



Close up of brickwork showing Flemish bond

Challenge 1: Brick bond building Stanley Mills brickwork

Activity instructions

Brick bond building

You will see lots of different types of brick bonds in Scotland. A brick bond is the pattern in which bricks are laid to create a wall. Bricks can be laid in two different ways: **stretcher** and **header**.

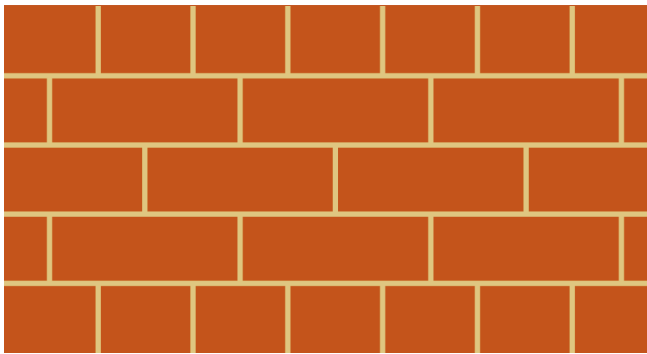
- 1 Have a look at the examples below of different types of brick bonds. Choose one and build a small wall in that pattern.
- 2 Once you have finished, try building another.
- 3 Discuss which one was easiest to build.
- 4 What skills do you think would be needed to do this job?

Stretcher: long side of a brick

Header: short end of a brick



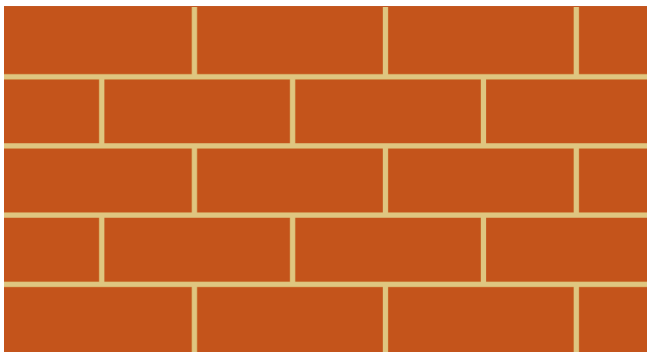
Brick bonds (patterns)



Scottish bond

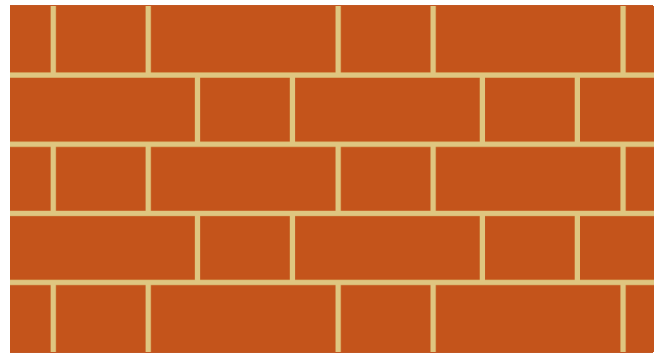
One course (layer) of headers to every three, four or five courses of stretchers.

This is usually the quickest bond to construct.



Stretcher bond

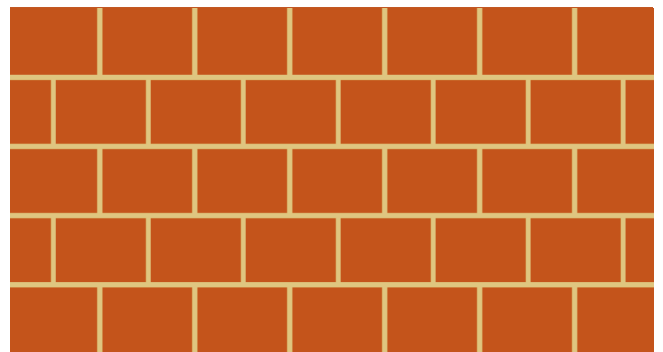
Stretchers are used for the whole of each course. Headers are only used as cornerstones (quoins) to help a wall stay structurally sound.



Flemish bond

Alternate between stretchers and headers across each course.

This looks nice, but how strong do you think it is?



Header bond

All the bricks are laid as headers.

This is the best bond to use if you want to make a curved wall.

Challenge 2: Job cards



Job

Blacksmith

Creates and shapes objects from iron

Job

Stonemason

Cuts and carves stone

Job

Drystone waller

Builds stone walls in a traditional way

Job

Thatcher

Creates traditional roofs using straw

Job

Craft painter

Prepares and paints specialist surfaces

Job

Gardener

Grows and manages plants

Job

Joiner

Works with, cuts and joins wood

Job

Roof slater

Builds and repairs roofs made of slate

Challenge 2: Skill cards



Skill
Stamina

Skill
Measuring

Skill
**Problem
solving**

Skill
**Manual
dexterity**

Skill
**Working
at height**

Skill
Precision

Skill
Artistic

Skill
Patience

Challenge 2: Tool cards



Tool



Wall hammer

Breaking and placing stones

Tool



Hand fork

Weeding and preparing soil for planting

Tool



Slate axe

Cutting and making holes

Tool



Mahl stick

Keeping your arm steady

Tool



Tongs

Holding hot metal

Tool



Legget

Paddle used for smoothing

Tool



Mell

Soft headed hammer

Tool



Saw

Cutting wood

Activity instructions

Challenge 2: Tools for the job

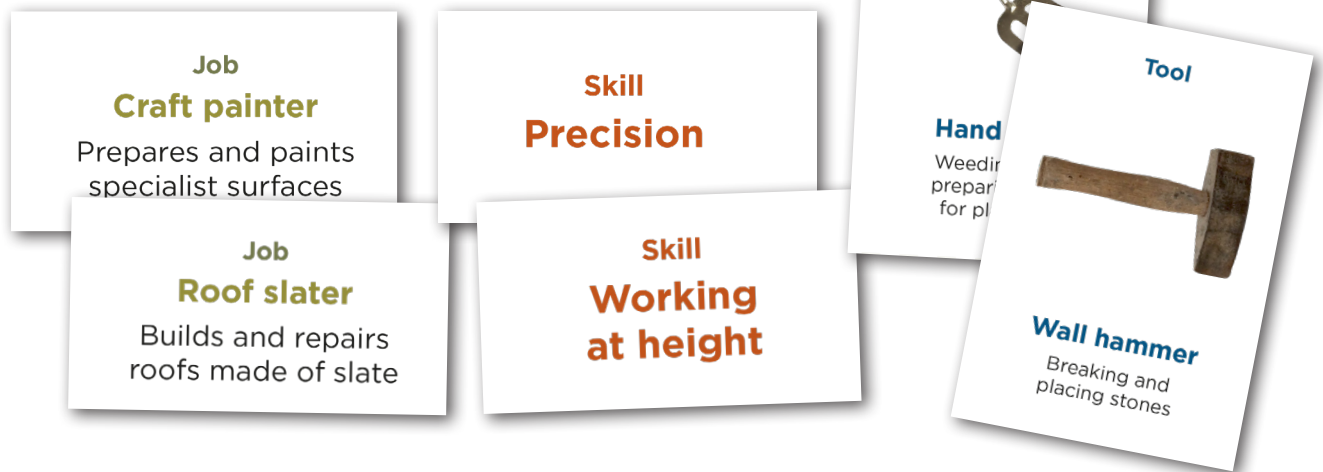
Different materials and techniques were used to build historic buildings compared to modern buildings. So, to repair them, we need lots of different specialist craft techniques.

It's really important that these skills are passed on so buildings can be repaired with the skill and attention they deserve and in ways which don't harm them now or in the future.

Many of the jobs involved in looking after historic buildings are known as **traditional skills** jobs.

What to do:

- 1 **Look through the cards on the table.**
There are three sets:



One set has the different **traditional skills jobs**.






The second set has a **skill** you need to do a job.

The third set has a **tool** needed to do a job.

- 2 **Match the job with the tool and skill needed.**
Try to match up the job with the right tool and skill you think is needed. Beware! Some skills might be needed by more than one job.
- 3 **Check your answers.**
Ask your group leader for the **activity explanation** to see how many you got right.
- 4 **Discuss in your group:**
 - ? Which job do you think you would be good at?
 - ? Do you have any of the skills needed to do those jobs?
 - ? Which skills do you have?

Activity explanation

Challenge 2: Tools for the job

| Job | Skills | Tool | Tool image |
|-----------------|--|---|---|
| Blacksmith | <ul style="list-style-type: none"> • Stamina • Precision | Tongs For gripping the piece of metal being worked on |  |
| Joiner | <ul style="list-style-type: none"> • Measuring • Precision | Saw For cutting wood |  |
| Stonemason | <ul style="list-style-type: none"> • Precision • Patience | Mell Type of hammer used with a metal chisel to cut stone |  |
| Thatcher | <ul style="list-style-type: none"> • Patience • Working at height | Legget A flat headed paddle used to comb traditional thatch like straw |  |
| Gardener | <ul style="list-style-type: none"> • Manual dexterity | Hand fork For weeding and breaking up earth |  |
| Roof slater | <ul style="list-style-type: none"> • Working at height • Measuring | Slate axe For cutting and making holes in slates |  |
| Craft painter | <ul style="list-style-type: none"> • Artistic | Mahl stick Stick with a padded head used to support the hand holding the paintbrush |  |
| Drystone waller | <ul style="list-style-type: none"> • Problem solving • Patience | Walling hammer For shaping and putting stones in place |  |

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