

Spires the
Spider

Learning at
the Churches
Conservation
Trust

Church Architecture

Family Activities

- The Strength of Arches
- Compass Points Exploration
- House of Cards
- Church Conservation Colouring Sheet



GET
HANDS
ON

with Spires the Spider



**THIS DOCUMENT SHOULD BE USED IN CONJUNCTION WITH
THE FAMILY ACTIVITY ORGANISER'S MANUAL.**

Church Architecture

Family Activities

Overview:

These four activities were created for Heritage Open Days 2025: Architecture, but they will make great additions to any community event. They are low cost and low effort to set up and have a S.T.E.M (Science, Technology, Engineering, and Mathematics) focus.

Activity 1: The Strengths of Arches

Overview: Visitors discover why arches are used in buildings to support weight. Buildings and bridges often have arches to make them stronger and more stable. The shape allows any load to be spread outwards along the curve of the arch.

Age range: 3+ (Be aware that young children can choke on small objects and so should be closely supervised).

Materials:

- Two equal piles of books/ cardboard/ blocks.
- A piece of card or thick paper.
- Paperclips or other small objects.

Step 1: Balance the piece of card between the two equally sized piles of books/boxes.



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Step 2: Visitors add paperclips to the piece of paper one by one, making note of how many paperclips can be added before the paper collapses.



Step 3: After the paper has collapsed, take away the paperclips and reorient the paper so it is bent into an arch between the two piles. Again, the visitor adds the paperclips one by one and observes how many more objects can be supported by the paper in this stronger shape.



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Activity 2: Compass Points Exploration

Overview: Visitors discover how the compass points influence church buildings.

Age range: 5+

Materials:

- Compass Exploration Worksheet
- Pencils
- Clipboards
- Compass (Can use phone compass):
 - [Eurohike Orienteer Compass](#)

Activity 3: House of Cards:

Overview: Visitors have three attempts to test out different structures of cards to see which shapes allow them to build the tallest house of cards. Encourage children to use the worksheet to draft their ideas and plan how to make their structure even taller. You can also create a leaderboard to see which visitors build the tallest structure of the day!

Age range: 3+

- House of Cards Worksheet
- Pack of Cards
- Ruler/ tape measure
- Pencils

Activity 4: Church Conservation Colouring Page

Overview: Visitor colour in the church and can add properties to help the building (for example, drawing a bat box on the side of the church or pieces of wood to patch up the cracks).

Age range: 3+

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Hazards to add to your risk assessment: PLEASE CONSULT THE LEARNING EVENT ORGANISER'S MANUAL FOR FULL LIST OF POSSIBLE HAZARDS.

Hazards Identified	Risk (How people may be harmed)	Precautions / Control measures	Likelihood	Severity	Risk Rating	Further precautions necessary
Pens/ Pencils/ Colouring Pens and Pencils	Poking to eyes, ears, nose, mouth etc.	Children not to be left unattended and asked to be respectful and sensible with the resources. Broken pencils replaced immediately.	P	L	2	Do not leave children unattended signage.
Paperclips and other small objects.	Choking hazard.	Children not to be left unattended and asked to be respectful and sensible with the resources.	U	L	1	Do not leave children unattended signage.
Broken Compass	Cuts from broken glass/ plastic.	Children not to be left unattended and asked to be respectful and sensible with the resources. Broken compass to be removed immediately.	U	L	1	Do not leave children unattended signage.
Playing Card in the eye	Scratched cornea.	Children not to be left unattended and asked to be respectful and sensible with the resources.	U	M	2	Do not leave children unattended signage.

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Mascot:

The Churches Conservation Trust has six learning mascots each with their own colour and area of interest! These activities are part of the 'Get Hands On with Spires the Spider' series.



**GET
HANDS
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with Spires the Spider

Spires the Spider uses her eight legs to explore the church by touch! She loves to learn all about building materials, craftsmanship and architecture. Spires also likes to make her own creations out of clay, wood, stone and more!

CHURCHES CONSERVATION TRUST

Compass Points in the Church Exploration

Grab your compass and check our church is laid out correctly!

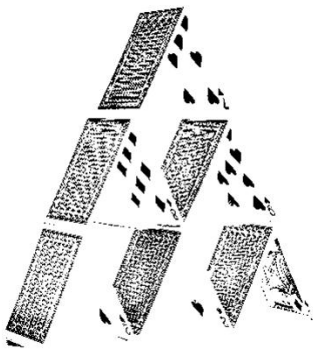
Did you know?

The vast majority of churches in Great Britain point East, which means the altar is found in the East end of the church. This is because these buildings were built as a place to worship Christianity. Jesus was born in the small town of Bethlehem, and he died in Jerusalem. These places are found East of Great Britain. Therefore, churches face East so Christians can pray facing the direction of their holy land. Other religious buildings also face specific directions. For example, British Muslims also pray facing East toward Mecca in Saudi Arabia.

Use your compass to explore the church and then circle the correct answer:

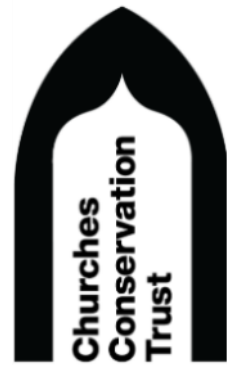
Where in the church is the altar found?	N	E	S	W
Fonts are often placed in the West end of a church. Where is the font in this church?	N	E	S	W
Some churches have a door in the North end of the church so that evil spirits can escape! Does this church have a North Door?	Yes		No	
Stained glass windows look best when the sunlight is streaming through and so are often on the East and West walls of Churches. Which walls in this church have stained glass windows?	N	E	S	W





House of Cards Challenge

How tall can you go?
You have three chances!



Attempt 1:

Blueprint/ Ideas <i>(Squares or triangles? How wide will you make the base?)</i>	Height:
	How do I improve my design?

Attempt 2:

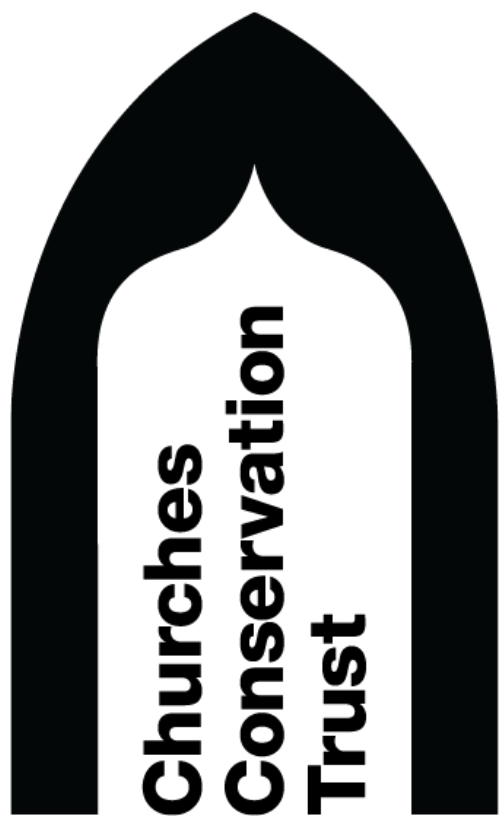
Blueprint/ Ideas <i>(Squares or triangles? How wide will you make the base?)</i>	Height:
	How do I improve my design?

Attempt 3:

Blueprint/ Ideas <i>(Squares or triangles? How wide will you make the base?)</i>	Height:
	Which attempt was the tallest?



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Church Conservation

The Churches Conservation Trust protects over 350 historic churches from all sorts of trouble!



Can you restore this church?

Add colour and protect it from danger!



Find out more about the Churches Conservation Trust: visitchurches.org.uk

Share your experience on social media:

 @ChurchesConservationTrust
 @thechurchesconservationtrust