

# Maths Detective Trail Y.5/6

Name .....

## The Abbey Church



Use your map to find the church. Go inside to the tower. It was built in the reign of Henry VIII. It is named after the abbot at the time, Abbot Huby.

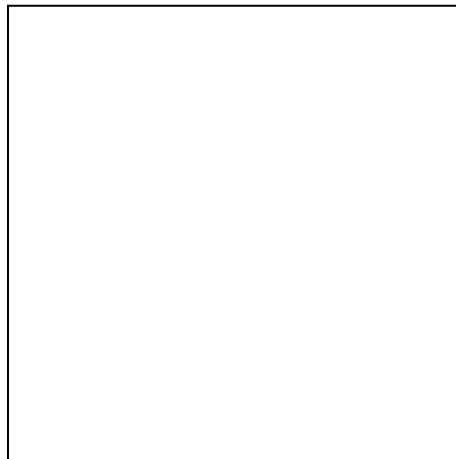
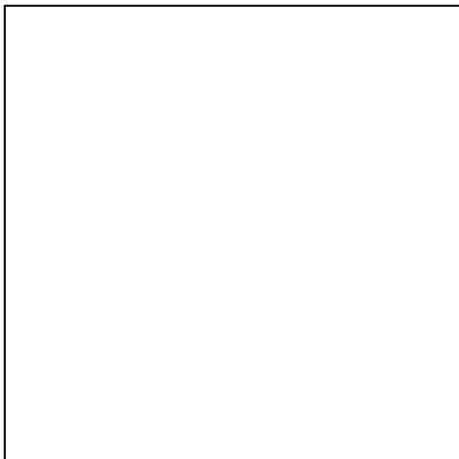
**Estimate** the height of Huby's Tower. .... metres

The church floor would have been tiled. Find the tiles at the site of the high altar. These are original tiles that were re-laid over 200 years ago.



**Draw a tile pattern in each box.**

**Mark on your patterns any lines of symmetry.**



**Be a detective.**

Look at the walls in the church.

**What single colour were the walls?**

.....

(Hint: Look carefully for any lime-wash paint)

Now use your map to get to the **Chapter House.**

**Measure the length and width of the floor to the nearest metre.**

Length ..... metres. Width ..... metres.

**Now work out the floor area to the nearest metre<sup>2</sup>.**

The monks sat on the stone seats for their daily meetings.

**Measure the length of the stone seats to the nearest metre.**

..... metres



**Estimate how many monks would have fitted on 1 row of seats. .... monks**

(you may need to sit down with some friends to try to work this out – remember to leave a space between you like the monks would have!)

**Now look for the many different masons' marks on the wall above the seats.**

**In the Cloister**



**What do you think the big stone trough in the middle of the Cloister was used for?**

The Cloister once had a covered area around it. The square holes are where the roof supports would have been.

**Approximately how high would the roof have been? ..... metres**

Go to the wall outside the **Refectory**. This is the **Lavatorium** where the monks washed their hands before their meals.

**Measure the length of the Lavatorium. .... metres**

Now sit on it and **look** at the end of the church above the Chapter House to see the lines where a roof used to be.



**Draw the shape in the box.**

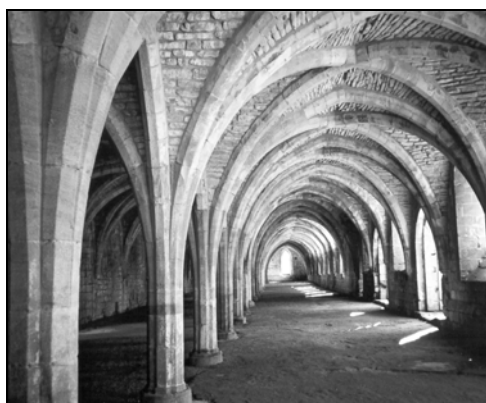
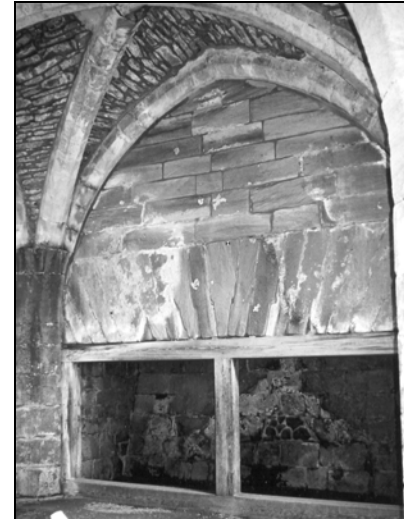
Now go into the **Warming House**. Imagine what this room would have been like when there were fires lit in both the big fireplaces. (The fireplaces are side by side, but one fireplace has been blocked up.) If we wanted to open up the blocked fireplace we'd need to add wooden supports like the other one.

**How long would the pieces of wood need to be?**

**Width pieces ..... Height pieces .....**

**Estimate how many monks could warm themselves in front of one.** (You may need to borrow some friends to work this out!) ..... monks

Do go inside the fireplace and look up.



**The Cellarium**

When the monks lived here the river end was a big dining room for the Lay-brothers. The other end was divided into separate storerooms for food.

**Measure the distance between 2 columns to find the size of a storeroom. How can you work out if all the storerooms were the same size?**

**Were they all the same size? Yes / No**

There are 2 shapes of windows in the Cellarium, pointed and rounded arches.

**Estimate                      Measure**

The width of a rounded arch window.

The width of a pointed arch window.

**If the windows had glass in them, which shape window would need the most glass?                      rounded arch / pointed arch**