## The work of a MEDIEVAL MASON

The year is 1348. Edward III is king of England, and strange rumours are spreading of a deadly plague spreading across Europe from the east. However, you have other things to worry about.

You are a stonemason living in the county of Norfolk - an area made rich by the wool trade. Bales of wool and cloth from Norfolk are being sold across England and Europe, and gold and silver are flowing back into the area as a result. In many Norfolk villages this new wealth is being spent on building new churches. Magnificent new buildings to reflect the devotion and wealth of the local people.

You have been employed by the village of Pudding Norton to rebuild their church for them in the very latest style. As the 'master mason' you are expected to not only oversee the building works, but also design the church yourself. But there is a problem. You have never designed a church before, and the only tools you have to do this are a set square, and a pair of compasses or dividers...

The compass can be used to draw accurate circles, but to build a church you will need to be able to create a number of other very accurate shapes. This includes a rectangle with exactly 90 degree corners, a right-angle triangle, and a diamond shape. How are you going to make a rectangle from a circle? We've given you a starting point on the next page.

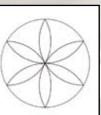
If you get it wrong your church will fall down, you won't get paid, and you and your family will probably starve to death next winter... if the plague doesn't get you first... so no pressure...

The design skills of a medieval Master Mason, known today as 'geometry', were a closely guarded secret. The Master Mason would teach his apprentices, and when they eventually became 'masters of their craft', they in turn would teach their own apprentices. Some of the compass drawn designs we find amongst the church graffiti may well have been made by a mason teaching his apprentice the 'secrets' of geometry.

Equipment:

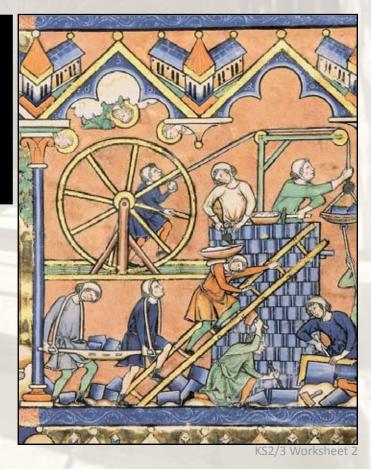
Pencil

Paper
A pair of compasses

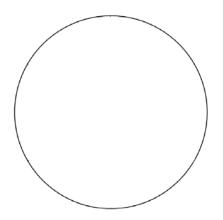




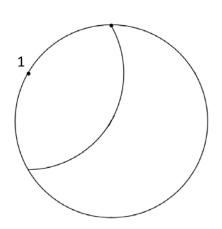




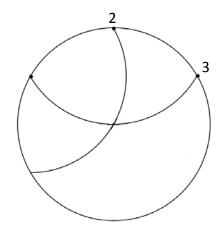
Because we don't really want you to starve to death next winter we will help you get started...



Stage 1: Place the point of the compass firmly on the paper and draw a circle.



Stage 2: Place the point of the compass on the edge of the circle (1) and draw an arc.

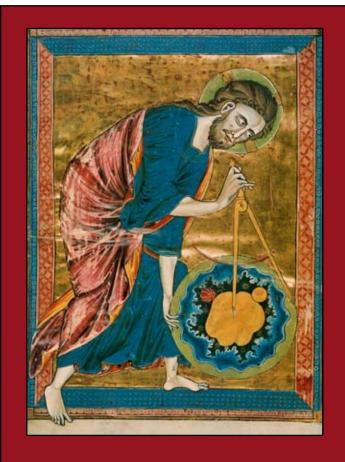


Stage:3
Move the point of the compass to where the arc meets the edge of the circle (2) and draw another arc.
Repeat for point 3 etc.

Stage :4

... ... I'm afraid that's all the help we are going to give you, but there are other clues hidden in this worksheet.

A reminder - what you need to make is a rectangle, a right-angle triangle, and a diamond. If you succeed then the villagers of Pudding Norton can look forward to a splendid new church. Yes, it is a real place - and there is still a church today at Pudding Norton. Why not look it up?



## Amasons fate...

In the Middle Ages there were no such people as architects, who design modern buildings. The Master Mason was expected to be able to design the building himself, as well as oversee the project, and organise the other masons who worked for him. It wasn't an easy job, and it wasn't without dangers. In 1178 the Master Mason working on the rebuilding of Canterbury Cathedral, William of Sens, fell from the scaffolding whilst inspecting the work of his masons. Although he luckily survived the fall he was paralysed for the rest of his life.

The life of a mason was hard, working outside in all weathers, but it was also one of prestige - with even God sometimes depicted as a mason - the architect of the world. In an age when most people's chances to better themselves were limited, a talented mason could make a small fortune. Or die in a fall from a scaffold...