

## Eerie Engineering KS2 Lesson Plan

### Secret Spaces (priest holes)

Time	Learning objective	Abbreviations	Materials needed
1 hour 30 mins	To understand the importance of building design.	<ul style="list-style-type: none"> <li>• Chn: Children</li> <li>• TA: Teaching Assistant</li> <li>• CT: Class Teacher</li> <li>• TTYP: Talk to Your Partner</li> </ul>	printouts, cardboard, glue, lolly sticks, scissors, balsa wood, paper, foil, [Lego] figures to hide.
<b>Steps to success</b>		<b>Curriculum links</b>	
<ul style="list-style-type: none"> <li>• To discuss what an architect does.</li> <li>• To be able to spot hiding places through assessing design features.</li> <li>• To create your own building design with hidden features.</li> <li>• Challenge: to understand how you might retrofit an old property.</li> </ul>		<ul style="list-style-type: none"> <li>• D &amp; T: use research and develop design criteria to inform the design of innovative structures.</li> <li>• History: a study of changes over time.</li> <li>• PSHE: develop an understanding of ideas of community and supporting each other.</li> </ul>	
Lesson part	Activities		
<b>Hook</b> (5 mins)	Today you're going to be taking a dive back into a bit of eerie engineering history. See also <a href="#">Eerie Engineering</a>	Ask chn to sit under their desks. Is that a comfortable space? How long do you think you could sit under there for? [NB some chn (may have sensory issues) may not want to do it, if they just want to sit at desk/ put heads down [or opt out] this is fine] Has anyone ever hidden anywhere really weird for a game of hide and seek?	TTYP and then take answers and share ideas. Chn to sit back at tables.

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<p><b>Intro</b> (10 mins)</p>	<p>Why did we try that? Because about 500 years ago some incredibly brave people were hiding priests in tiny, secret spaces, some of them even smaller than the space under your tables, in houses to keep them safe. Why?...let's find out.</p>	<p>Over 500 years ago England's Queen Elizabeth I outlawed Catholicism (this is back when people had to be the same religion as the king or queen). - this means that it was made High Treason for a Catholic priest to live in the country. High treason means you are being disloyal to the king or queen, and you would be put to death in some fairly gruesome ways for this. Anyone that was found helping a priest would also be punished. Now these priests still existed, as many families in England were still Catholic. Elizabeth created a set of 'Priest hunters' who had to go and collect information and find any secretly practising priests. But people were very clever and to keep the priests safe they built hiding places in their homes! They found spaces in fireplaces, attics and staircases. Sometimes other building alterations would be made at the same time as the priest holes so they didn't arouse suspicion. Most were built between the 1550s and the gunpowder plot in 1605. Why in a lesson about the built environment am I talking to you about history? Because these old buildings would have to be designed very cleverly to keep the priest holes secret. This is why today our learning objective is: to understand the importance of building design. Priest-hunters would be measuring the house from the outside and the inside to see if they were the same: they'd count the windows outside and again from the inside to make sure there was no hidden room, they'd tap on the walls to see if they were hollow, and they would rip up floorboards to search underneath them.</p>	
<p><b>New learning</b> (15 mins)</p>	<p>A lot of people who helped to hide the priest were women! Many Catholic widows used their houses to hide priests and outwit the priest hunters, and the majority of them were very successful in hiding the priests! People came together to form secret networks and helped to keep them safe.</p>	<p>Lots of these priest holes have been found in old buildings - for example Baddesley Clinton in Warwickshire - one priest managed to live there for 14 years! One famous builder of priest holes was Nicholas Owen, who was incredibly creative when it came to concealing hiding places in houses like Baddesley [Use examples of the hiding places on web page OR]</p>	<p>Owen made some amazingly clever spaces. Some examples that are particularly ingenious are:</p> <ul style="list-style-type: none"> <li>• in the roof space above a closet off a bedroom - just 3' 9" high. [Show chn how tall that is in real life]</li> <li>• in the corner of the floor of the kitchen - if you go there today</li> </ul>

	<p>Why do you think people did so much to try to protect others?</p> <p>TTYP and feedback [emphasise humanity, empathy etc].</p>	<p>Show chn <u>handout image 1</u> of Harvington Hall- where might someone be hiding in this space? What structures stand out to you?</p> <p>Chn to spend 5 mins guessing the spot and then feedback - get them to give reasons why it is a good structure to use as a hiding spot.</p>	<p>you can see through to the medieval drain where Father Garnet was hidden. To get to this hiding place priests had to go through the garderobe (a medieval toilet!).</p> <ul style="list-style-type: none"> <li>• under the library floor - to get to it you had to go through a fireplace in a bigger room.</li> </ul>
<p><b>Design task</b> (10 mins)</p>	<p>These clever spaces needed architects like Owen to be incredibly creative. If you like lessons like art, DT, maths or science, or have a creative brain then you would make a great designer of priest holes. Jobs in the built environment don't just involve the actual construction element, but range from architects, technology specialists, planners and surveyors. To design buildings and work with spaces takes all sorts of skills!</p>	<p>In the next task you are going to create your own model with a hidden priest hole, but first we need to think about the best ways to disguise these places. Chn might consider the following while designing:</p> <p>Which elements are the easiest to build? What do you think are the most effective structures? How small can the place be to fit your figure? Can you build any distractions into the room that might confuse the other teams off?</p> <p>Use <u>handout 2</u> of hiding places [Harvington Hall, Baddsley e.g.] to aid group work.</p> <p>Put chn in mixed ability groups of 3 or 4 [CT to organise]</p> <p>Chn to design one large room [roof optional] with at least one hiding space concealed in there. Have Lego figures for chn to hide in their "room" to hide</p>	<p>Support chn to think creatively about the space.</p> <p>Other groups will come round after they have finished constructing and try to find their Lego person so make sure you include some decoy spaces to try to trick the priest hunters!</p> <p>Get chn to think about the materials they will use for each element - why do some materials suit different purposes?</p> <p>Surveying link - if you like this task you might consider becoming a quantity surveyor.</p>

		<p>- give to chn while they are designing so they can plan how big the hiding place needs to be. How many people will you try and hide?</p> <p>Chn to use print outs to try and design their own room.</p>	
<p><b>Creative Construction task</b> (10 mins)</p>	<p>Chn to create their room with at least one hidden space. Have a range of materials for chn to use - lollsticks, cardboard, foil etc. Have shoeboxes for chn for time saving purposes, or who may need more of a scaffold. Help chn to create.</p>		
<p><b>Testing task</b> (10mins)</p>	<p>Once the rooms are complete, teams are going to rotate round the room and try to find the other groups priest holes.</p>	<p>Keep one person from each group at the station with the house to make sure that the priest hunters are behaving.</p> <p>The other two members go around the rest of the room and try to consider where the priest hole is. They get ONE guess, so it has to be good.</p>	<p>Chn can come up to the front of class and demonstrate where they priest hole is at the end of the task and whether it was effective - did their Lego person get found? If yes, what would they try next time? If no, congratulations!</p>
<p><b>Plenary</b> (5 mins)</p>	<p>If you liked this lesson then: Did you know that there are teams of people in the built environment that go round really old buildings like this, to see how we can conserve these spaces. They are basically doing what Nicholas Owen did and trying to find places in houses that can be improved and made better. Did you know that construction makes up 39% of carbon emissions? So modern day Building surveyors and structural engineers will assess properties and see how they can adapt them to make old buildings more sustainable. This is a huge question for current built environment professionals and you all, who hopefully will grow up and go into these problem-solving professions! [Show chn webpage for more info and retrofit graphic <a href="#">Eerie Engineering</a>]</p>		<p>Remind chn that whatever lessons they love or are good at that there are careers in the built environment for them, and that they can access the resources online at home to share with siblings, carers or pets!</p>

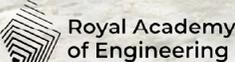
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## Handout 1:

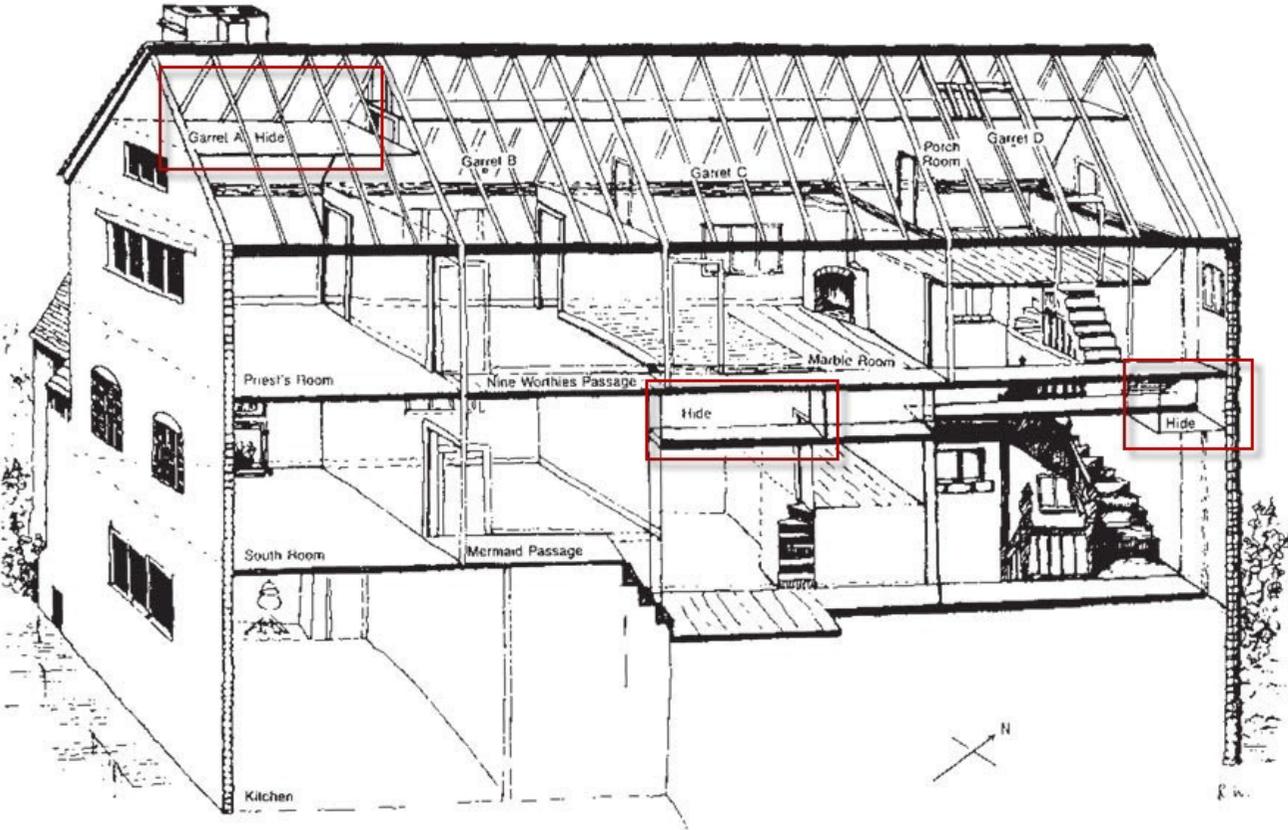


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Answer to handout 1:



## Handout 2: images of hiding places to support design task



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Built Environment  
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