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| Suitable for Lower KS2 | | |
| **Follow My Direction** | | |
| **Learning Objectives:** | **Curriculum Links:** | **Resources:** |
| * To use directional vocabulary to create algorithms. * To identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle * To identify and describe the key features of a church. * To work with a partner and discuss ideas. | **Maths** - To use mathematical vocabulary to describe position, direction and movement, including movement in a straight line, and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).  Pupils to move in right angles and create directions / instructions  for other pupils on how to move around the church, and to program robots using instructions given in right angles.  **Computing –**  To create algorithms by designing, writing and debugging programs that accomplish specific goals, including controlling.  **RE –** To identify the key features of a church. | * R1 (Directional vocabulary) * R3 Cards / photos of the key features of a church (see QR quotes) * R2 Church plan / floor map * QR codes and tablets * The website gallery * Pencils |
| **Teacher’s Notes** | | |
| **Before your visit** | | |
| * Children will need understand the terms: left, right, forwards, backwards, quarter turn, half turn, and full turn, clockwise, anti-clockwise, and practised using these terms by giving a partner direction around the classroom or playground. * Have looked at a map of a church and taught that many church plans are in the form of a cross (see gallery photos). * To know the key features of a church to include font, altar, pulpit, lectern, stained glass, memorials etc (see QR code information). * Children will need to have discussed where these features commonly are in churches and how they are used. | | |
| **During your visit** | | |
| **Introduction *(15 mins)*:**  Introduction to the church building.  Discuss - Where are we? What is this building used for? Who is likely to use the building? How does the building make you feel? What can you see in the building?  Walk around the church, inside and outside, and explore. Can you identify any of the key features you have talked about at school? Use the QR codes to identify the different features and recall previous learning. Play a game of eye spy linked to the key features of the church. For example: ‘I spy with my little eye something that people are baptised in?’ | | |
| **Main activity *(30 mins)*:**  Explain to the children that today we are going to be thinking about how we could give directions to find the key features within this church. What vocabulary can we use to direct someone to the altar from where we are standing? Show the children prompt sheet 1 (Directional vocabulary) Discuss in pairs and then share/model the suggestions.  Challenge: Working in small groups – give each group a key feature card and a church floor plan. Can you create and write a set of directions (an algorithm) of how to get from the main church door to your key feature? Test your directions on each other to ensure you have used the correct vocabulary and that they are easy to follow. Record your directions on your church floor plan.  If time, choose another card and create a set of instructions on how to move to the next key feature. Continue to create your own map of the church. | | |
| **Plenary:**  Ask the children to share their floor maps with the other groups. Test out some different groups directions. Are the directions correct / easy to follow? If they need changing (debugging), add notes to help the group improve their directions to the floor map. If there is time, the children could sketch the key features of the church and add them to their maps. | | |
| **After your visit** | | |
| * Back at school - working in the same groups - use the maps and directions (algorithms) to create a map in the shape of a cross for a robot to follow using a logo/ scratch program. * Add photos of the key features of the church onto the cross in the correct places and work out how many spaces the robot would need to go forward, backwards, turn left or right quarter turn, half turn, full turn, clockwise, anti-clockwise and what degrees. * Share the finished maps with the other groups / classes in the school. You could turn your map into a treasure map. Can you find the hidden treasure in the church? | | |
| **Examples** | | |
| [Related image](https://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&ved=0ahUKEwiW_Lm04NDYAhUJvxQKHbTEDZcQjRwIBw&url=https://www.freepik.com/free-photos-vectors/direction&psig=AOvVaw0Zk57NSZD7Gq39SgrO4UTv&ust=1515789035324997)  [Image result for scratch logo](http://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwjY6vCFqvHYAhUE7BQKHSJDDb8QjRwIBw&url=http://kclr96fm.com/carlow-school-national-coding-final/scratch-logo/&psig=AOvVaw3LmEao5wmhHs34w1ZkIDdX&ust=1516908329068115) | | |