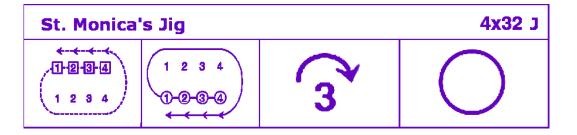
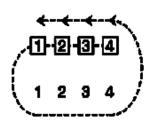
# Programming St. Monica's Jig



## Formation 1

St Monica's Jig has 4 formations. In the first formation second, third and fourth girls all follow the first girl dancing across the set, down behind the line of four boys back across to their own side and the up the side to their original place.

Think about the first girl's path on screen for the first formation.



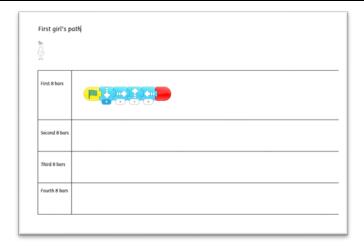
To start with she needs to move down for two skip change of step, go right for four skip change of step, go up for two skip change of step and the go right for four skip change of steps.

Steps in Scratchjr are very short so the dancer will need to take 2 Scratch steps for every skip change of step.

The code blocks in Scratchjr look like this

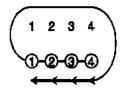


1. Use stickers to show the first girl's path on her worksheet.



- 2. The other girls will need to move in a similar pattern but they will need to move left along the girls' side of the dance before crossing over and dancing down the boy's side.
- 3. Use stickers to add each of the girl's paths to their worksheets.
- 4. One of the group can now start programming this into Scratchjr. They should look at the worksheet called Setting up a project in Scratchjr. The rest of the group should plan how to programme Formation 2.

#### Formation 2



Once the girls have danced the first formation, we need think about the next formation.

This time the boys dance.

The boys don't start dancing at the beginning of the dance. They start dancing after the first formation is finished.

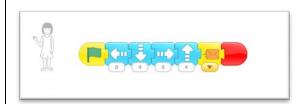
They need something to tell them when to start.

The last girl can send them a message to tell them when she finishes dancing.

Use the message block



to get the last girl to send an orange message.



Once the boys get the message they can start dancing. They will dance to the top of the set, dance across, behind the girls and back to where they started.





This is the first boy's path. Use stickers to add the path to his worksheet.

- 2 Work out the other boys' paths and use stickers to add them to each boy's worksheet.
- 3 Remember to get the last dancer (boy 4) to send a message to let the other people know he has finished.
- 4 When you have finished planning Formation two, swap who is using the iPad. Let someone else enter the coding for Formation 2 while the rest of the group works out the code for Formation 3.

#### Formation 3

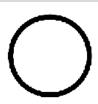


In this formation the first boy and girl start. They listen for the message to say that the last formation has finished, then turn away from each other and dance down three places behind their own line to the end of their set.

Once they get there everyone takes two steps sideways, back up towards the top of the set.

- 1. Add the code blocks for formation 3 to each dancer worksheet.
- 2. When you are finished swap roles again so that another person adds this formation to the Scratchjr project on the iPad while the others work out the path for Formation 4.

### Formation 4



The formation is a circle. All eight dancers join in. They dance to the left for eight steps and then back to the right.

Add stickers showing this to each dancer's worksheet.

Let the fourth person in the group add this code to the Scratchjr project. Now you have worked each dancer's path for the whole dance. Check that the program works.