

Flooding Nuisance- instructions

The game

Raingardens are designed to slow the flow of water to reduce flooding and damage to the environment. This game is designed to slow demonstrate to pupils what happens when we build on land which would once have coped with rainwater. This game can easily be chalked out on school grounds for classes to play themselves. However, floor mats will be required to act as areas that can take water percolation, i.e. green roof and raised bed areas the pupils stand on these mats when they become available and step off them when the building is introduced.

This game will be placed on the Cumbernauld Living Landscape website under Resources with examples and instructions. The game is designed for a single class of pupils.

Set up

Draw a square on the ground in chalk, within this square create an L shape (house) and two smaller rectangles (garage and garden). Floor mats are arranged in groups of 1, 2 and 4's representing the habitats of trees, flowers, ponds and grassland, see image below.



Flooding nuisance – game script



Blue text = instructions, black text = delivery

Invite the children to stand on a mat (1 child per mat) inform them that they are rain drops and get them to notice how well spread out they are, explain how the soil can absorb the rain. In the set up in the photography the mats can take a class size of 21, spare children can be assistants to the leader to add or remove mats, alternatively they can be added to a group mat (4) but stress that if any more rain falls this area could flood very quickly.

“Welcome to my lovely mixed habitat, here you can find woodland, meadows, ponds and grasslands. It’s a lovely space with lots of growing plants and I get so many animals visiting.

I like it that much that I think I will build a house, a big L shaped house will let me look on these habitats, but I will have to remove some to be able to build the house. “

Remove all the mats in the L shape area and get the rain drops to squish into the remaining habitats.

“Now that’s better but I can see that there is more rain building up in my garden area and I would like my car to be close to the house so that I don’t get wet by having to walk far in the rain. I know what I can do, I can build a garage to keep my car and me dry!”

Remove the mats in the rectangle close to the house L shape and squish the raindrops (children) even closer together

“Oh, dear my garden is taking on too much water, what do you think could be causing that?”

The children should respond it’s because of the house and garage see if they make the link. All the children should now be squashed into one small rectangular area, this represents flooding!

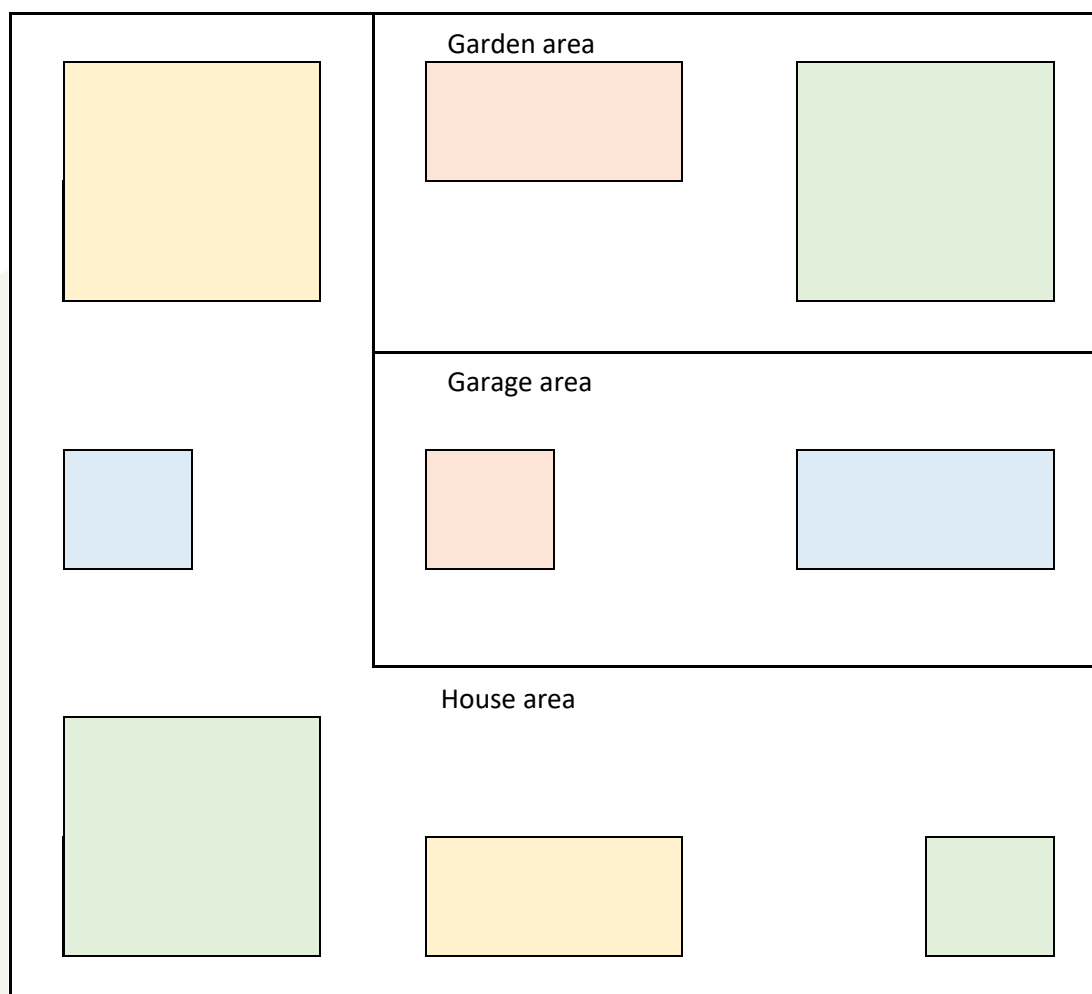
“Ok, now I must change this as my prize flower bed and lovely tree will get badly damaged what can I do to fix this?”

The children should respond that adding a green roof/walls/ raised beds/rain chain/ water butt etc each time they answer replace some mats to allow the spread of the raindrops (children). If they don’t remember the terms help the children out... so if I add a green roof what will that do? Give terms but get the children to describe them

Wrap up game

“So now we have seen what happens when we don’t think about the design of a building properly and how badly it can affect the surrounding area, if we work with nature and add it to designs of buildings we can reduce flooding and still create habitats for people and wildlife.”

Game layout



Suggested habitat schemes

