



# Wildfire escape!

**Time needed for activity** 20 minutes plus

**Location** Indoors or outdoors

## Context

This activity will encourage learners to work as a team, problem solve and think critically to guide 'creatures' through a habitat that is under threat from wildfire.

Natural Resources Wales' purpose is to pursue sustainable management of natural resources in all of its work. This means looking after air, land, water, wildlife, plants and soil to improve Wales' well-being, and provide a better future for everyone.

## Curriculum for Wales

### Health and Well-being

- **What matters -** Our decision-making impacts on the quality of our lives and the lives of others.

### Humanities

- **What matters -** Our natural world is diverse and dynamic, influenced by processes and human actions.

### Science and Technology

- **What matters -** The world around us is full of living things which depend on each other for survival.

### Mathematics and Numeracy

- **What matters -** Statistics represent data, probability models chance, and both support informed inferences and decisions.

## Objectives

Learners will be able to:

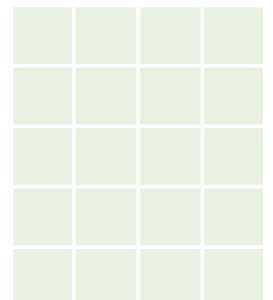
- Effectively collaborate as a team to meet a challenge.
- Think creatively to solve the problem and successfully complete the task.
- Develop empathy for wildlife caught up in wildfires.

## Resources and equipment

- Paper
- Clipboards
- Pencils
- Something to mark out a grid on the floor or on a tarpaulin (e.g. chalk, sticks or tape)

## What to do

1. Create a 4 by 5 square grid on the floor. Each square should be large enough for one learner to stand inside, e.g. 1 metre square. The grid could be made several ways including using chalk on a yard, tape on the floor/tarpaulin or even by laying out sticks.





2. Explain to your learners that the grid represents a habitat that is susceptible to natural or deliberate wildfire, e.g. grassland, forest, peatland, and so on.
3. Each of your learners will represent a wild creature that lives within the habitat. Discuss the creatures that are native to the chosen habitat and choose a species to represent for this activity. Discuss what tactics wild animals might try to use to escape from wildfire, particularly the represented animal from the activity.
4. The aim of the activity is to get as many of the native creatures from one side of the environment to the other. However, there are 'wildfires' spread across the area that could be lethal to them. Directly encountering a wildfire (standing in a square where there is a wildfire raging) will result in death.
5. Before starting the game, your learners need to agree on a set of rules about how each creature may travel across the grid. For example:
  - moving one square at a time.
  - only move to a square adjacent to the one they are currently on (i.e. cannot skip or jump over a square).
  - traveling forwards, backwards or side to side but not diagonally.
6. Divide your learners into 2 groups and give each group a clipboard and sheet of plain paper. If you are working with a large group, you could consider having 2 grids and dividing into 4 groups or using a larger grid.
7. Each group will need to draw a 4 x 5 grid on their paper.
8. Instruct the groups to:
  - insert a set number of X onto their grid - explain these represent wildfires spread across the habitat.
  - have one less wildfire than the number of members in the opposing group (i.e. for a group of 6 they would need to place 5 wildfires).
  - include a safe route that the creatures can travel through without encountering a wildfire.
9. Each group must aim to get as many creatures as possible across the habitat (grid) without being killed by stepping on, or wandering into a square which has a wildfire (X).
10. Taking it in turns, group one will cross the grid while group two follows their progress. Each group member has one attempt to cross the grid. The group scores one point for every member who successfully crosses the grid without walking into a wildfire.
11. The first creature from group one will begin to cross the grid one square at a time. If they walk into a square marked X the opposite team shout "wildfire!". This creature is now out of play.
12. The next group member will then attempt to cross the habitat, trying to avoid the locations of the wildfire (these remain in the same location for the duration of the game). They will need to try to remember the known wildfire hotspots.
13. After each member has had a turn, both groups trade places and the second group try to get across the first group's grid. The winners are the group with the most creatures safely across.

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## Suggested key questions

- What type of habitats are affected by wildfire?
  - What types of animals are affected in a wildfire?
  - How do animals behave in a wildfire situation?
  - What would you do to keep yourself and others safe in a wildfire?
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## Adapting for different needs/abilities

### More support

- Have a worksheet with the grid already drawn on it so that the group only need to decide where to place the wildfire X.
- Task each group to place less wildfires on the grid.
- Have less squares on the grid initially and increase the number of squares once they have got the hang of it.

### More challenge

- Use a larger grid and allow each team to place more wildfires X.
- Use grid references or coordinates to move around squares.
- Blindfold the 'creatures' and ask group members to give them verbal instructions using mathematical vocabulary such as "turn 90 degrees to the right".
- Ask the group trying to negotiate the wildfire to create their own grid and keep a note as to which squares were safe and which weren't to help get more of their group across.
- Tell the opposing group how many 'wildfires' there are close to the square they are considering standing in so they can problem solve.

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## Follow up activity/extension

Why not try our:

- [Activity plan - Wildfire evacuation plan](#)
- [Activity plan - Catch a wildfire setter](#)
- Wildfires can occur naturally and certain plants have evolved to adapt and tolerate fire. Ask your learners to investigate and find out more.
- Ask your learners to investigate what do wild animals do when wildfire strikes? Wildfire can hurt some animals yet some will escape. A variety of photographs can be found on the internet showing how animals are affected by wildfire. Warning - these could be upsetting.
- Recreate and code this activity using smart devices.

## Learning in, learning about, and learning for the natural environment.

### Looking for more learning resources, information and data?

Please contact: [education@naturalresourceswales.gov.uk](mailto:education@naturalresourceswales.gov.uk) or go to <https://naturalresources.wales/learning>

Alternative format; large print or another language, please contact: [enquiries@naturalresourceswales.gov.uk](mailto:enquiries@naturalresourceswales.gov.uk) 0300 065 3000

