

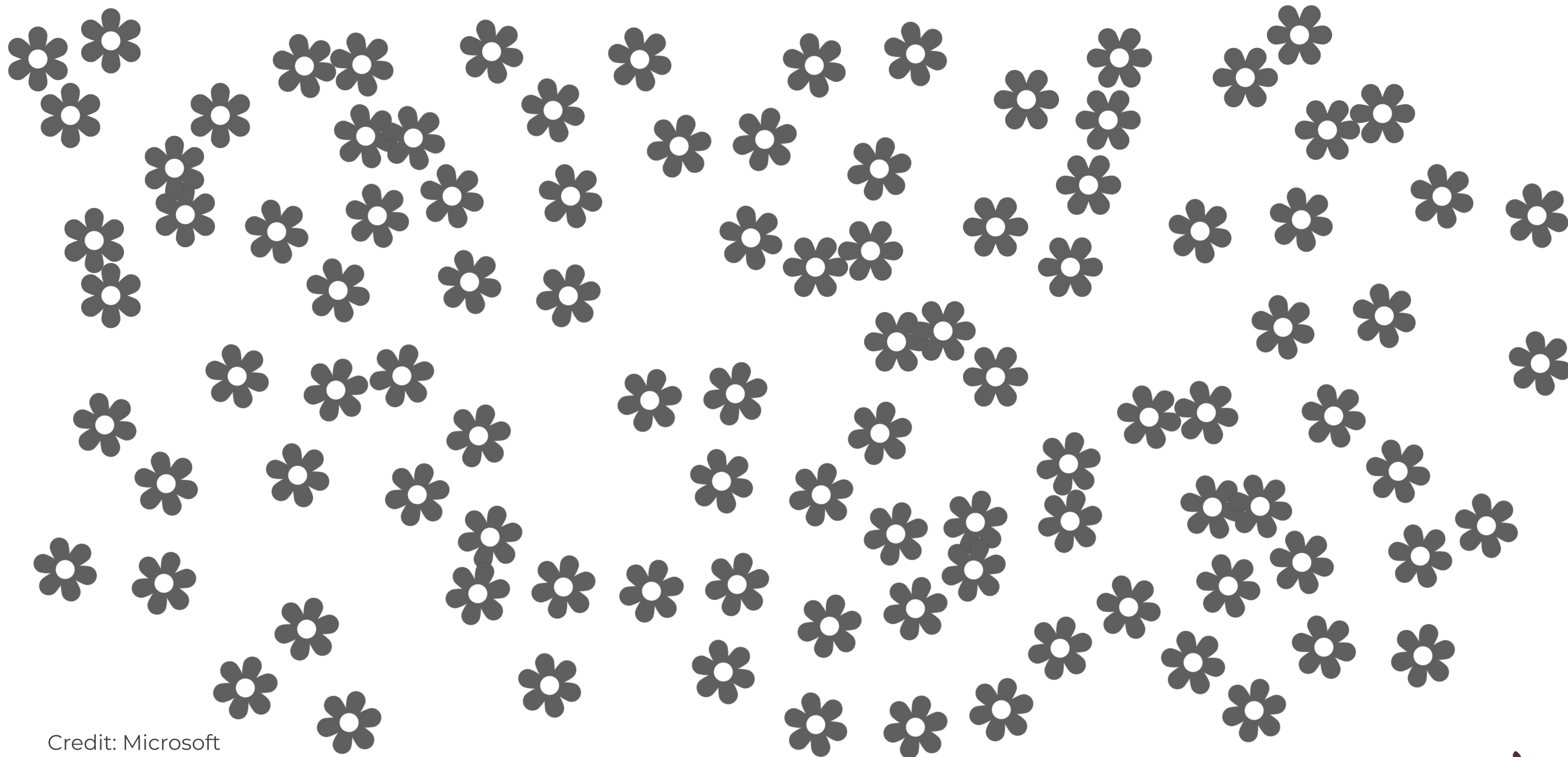
Ecological relationships and classification

Lesson 5 - Random Sampling

Biology - Key Stage 3

Miss Lewis





Credit: Microsoft



Writing a method

How to begin a lesson...:

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Writing a method

Write a method for the practical using quadrats:

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Fill in the blanks

1. Measure the area of the sampling site using a _____.
2. Use a random number _____ to select coordinates from the grid.
3. Place your _____ on the field at the coordinates.
4. _____ and record the number of daisies inside the quadrat.
5. Repeat this at least _____ more times by placing the quadrat in a different random position each time.
6. Calculate the _____ by dividing the total of all the _____ by the number of quadrats use.



Task

Miss Lewis **divided the field into a grid** and used a **random number generator** to place **10 1m² quadrats** in **random positions**.

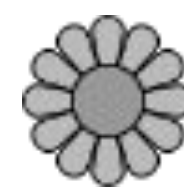
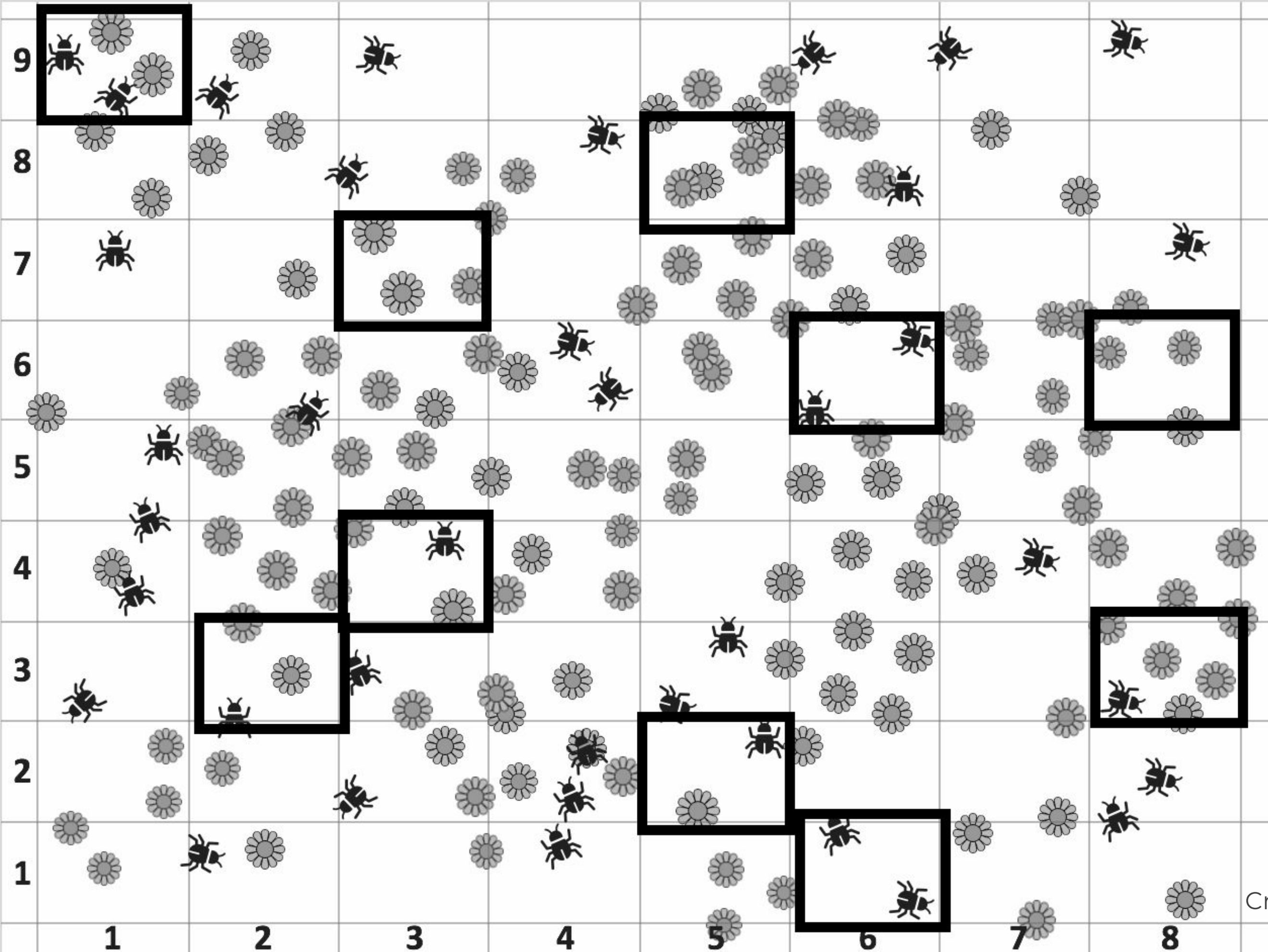
You need to complete the investigation by:

1. counting the **number** of organisms in **each quadrat**
2. calculating a **mean**
3. find out which organisms has the **highest population per m²**

Dandelions =

Beetles =





= dandelions



= beetle

Credit: Miss Lewis



Task

A student wants to calculate the mean number of buttercups in the school playground.

This is the method used.

1. Throw a quadrat over your shoulder.
2. Count the number of clover plants inside the quadrat.
3. Repeat step **1** and step **2** four more times.

How could this method be improved?



Task

How could this method be improved?

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