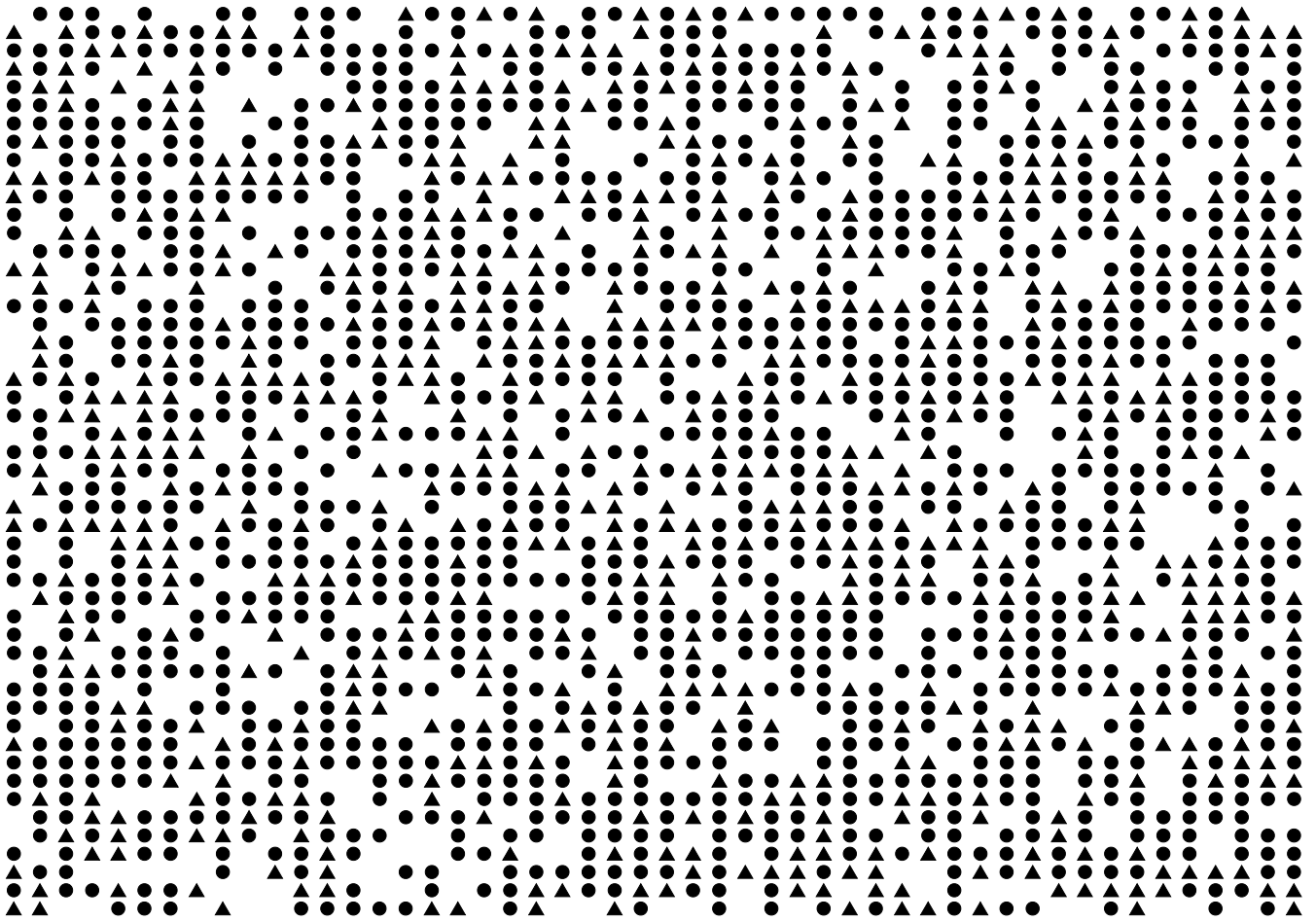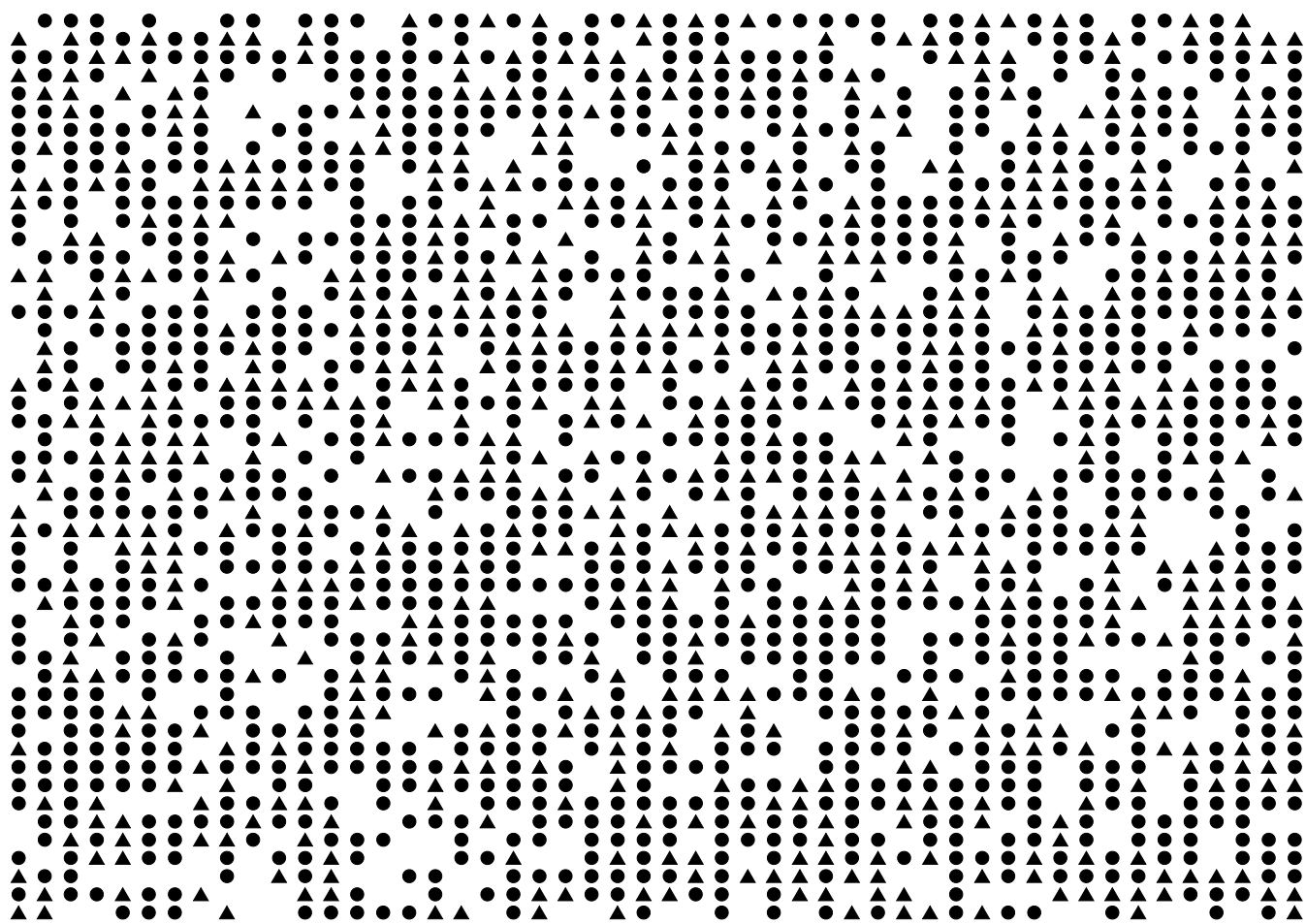# COUNTING TREES

This diagram shows some trees in a tree farm.

The circles ● show old trees and the triangles ▲ show young trees.

Tom wants to know how many trees there are of each type, but says it would take too long counting them all, one-by-one.

1. What method could he use to estimate the number of trees of each type? Explain your method fully.

2. On your worksheet, use your method to estimate the number of:

   (a) Old trees

   (b) Young trees

COUNTING TREES WORKSHEET

	Counting Trees	Points	Section points
1.	Explains that a small representative section could be selected. Then the number of old trees in that section could be counted The number of young trees in that section could be counted. These numbers could be used to make an estimate for the whole area. *Partial credit* For a partially correct explanation.	1 1 1 1 (2)	4
2.	Accept different organised sectioning methods. For example: The total area is 17.5 x 12 sq cm For example if we select an area 2cm x 2cm. Counting the number of old trees, we get 28 Counting the number of young trees, we get 11. An estimate of the number of old trees is 28 x 17,5 x 12 ÷ 4 = 1470 approximately **1500**. Accept values in the range 1200 to 1600 An estimate of the number of young trees is 11 x 17,5 x 12 ÷ 4 = 577 approximately **600**. Accept values in the range 500 to 700	 1 1 1 1 1 1	6
	Total		10