Holly Leaf Investigation

Holly is a great plant to investigate. It is one of the few plants that shows significant variation within a species and can tolerate children picking its leaves. Holly is either male or female. Both have flowers but only the female has berries. Holly can be poisonous but leaves and berries can be handled if careful handwashing is emphasised.

Children imagine how many prickles on a holly leaf.
Lay out a number line on the ground (0-30).
Children pick 10 leaves, count prickles and lay on appropriate place on the number line, to make an on-the-ground bar chart showing the range of prickles on leaves.

Discuss;
How many leaves are there in total?
Where did the leaves come from? (high or low on the tree etc)
Which is the longest line?
Which is the most / least prickly leaf?
What shape is the graph?
What does this tell us about holly leaf growth this year?
Do all holly leaves have odd / even number of prickles?
If there is an odd number of prickles, are the two sides balanced?
If there is an even number of prickles, which side has more prickles?
Is it a fair test?
Consider making charts by picking leaves from the ground only
leaves from different trees
leaves from male and female trees

Alternatively, make a bar chart along a wooden fence - chalk a number line along the bottom and staple the leaves to the fence in the correct place.