

Bird Scarers

You need

- ★ 2 types of plastic bags
- ★ twine

TECHNOLOGY

People sometimes adapt objects or materials to perform new tasks. This is often a cost-effective way to solve a problem.

Activity One

Isabella and Eseta are curious about the plastic bags flying from poles along the edge of a local vineyard. Their teacher tells them that the movement and noise scare birds away.



Won't they rip easily? Let's test some first.

Bags might keep the birds off our school apple tree!



A good bird scarer must be tough. Eseta and Isabella each choose a type of bag, tie 7 of them to a netball pole, and record how many days each lasts before the first rip appears.

Number of Days before Bags Rip		
Bag	Eseta's supermarket bags	Isabella's bin liners
1	6	7
2	7	8
3	5	9
4	15	2
5	7	5
6	6	6
7	3	8

1.
 - a. Draw dot plots showing the results for each type of bag. (Use the same scale for both types of bag.)
 - b. Evaluate the following statements:
 - i.
 - ii.

Bin liners last longer than supermarket bags.

All the supermarket bags lasted longer than the worst bin liner.

- c. Which type of bag do you think was the stronger? Explain your answer.

An outlier is a data value that is very different from all the other values. Outliers can lead to false conclusions.

We do get strong winds ...

2.
 - a. Which bags could be outliers? Explain your answer.
 - b. Should Isabella and Eseta include or ignore these outliers when deciding which type of bag to use?

Activity Two

1. Carry out Isabella and Eseta's investigation at your school.
 - a. Choose 2 types of plastic bag. Tie at least 3 of each type firmly to a pole. Check the bags daily to see how long each one lasts before a rip appears.
 - b. What else might you think about when choosing a bird-scarer bag?
 - c. Which type of bag would make the best bird scarer at your school?

Focus

Basing decisions on observational data