

DT LESSON PLAN KS1/2

DESIGN AND BUILD STRUCTURES TO PROTECT CROPS FROM PESTS

Edible
Playgrounds

LESSON OBJECTIVES

- To design, test and build a structure which will protect crops from birds and other pests
- To communicate design ideas to classmates through persuasive writing and presentation

CURRICULUM LINKS

DT, Science, Literacy and Math

RESOURCES

- Bamboo canes, netting, plastic sheeting, hula-hoops, string, tape measures, scissors and any additional structure building materials you can find
- *Heroes & Villains game*
- *Example images of crop protection structures*

KEY VOCABULARY

pests, protection, structure, functional, accessible, secure

INTRODUCTION (10 MINS)

Check pupils understanding of garden pests. What wildlife comes into the garden? What damage do they cause?

Warm up game –Heroes & Villains. Refresh knowledge of garden wildlife and the impact on the garden.

MAIN ACTIVITIES (45 MINS)

Show children some images of crop protection structures/materials & recycled materials they can use to build.

Adapt the following to suit your class and support provisions:

Activity 1: Design crop protection structure

Working in teams give each group of children a photo of a garden pest prominent in the garden i.e. birds, caterpillars, foxes, mice or slugs. Ask teams to come up with ways to protect their crops from these pests using available building materials and create a design with annotations.

Activity 2: Consult class on their designs

Children prepare a short speech/presentation describing their design and function. After all teams present, the class vote on their favorite design.

Activity 3: Building structures

Gather class outside to measure beds and collect appropriate materials. Assign roles to pupils (i.e. measurers, material collectors, design consultants, builders etc). Once pupils have the materials they need and have measured the space, they can start constructing their crop protection in/on their chosen bed.

PLENARY (5 MINS)

Pupils safely and sensibly tidy materials and tools away.

Recap: can children give description of what they have created and why, what worked well, could it be improved, how?

EXTENSION

Visit the garden the following day/week to see if the structure is functioning well. Do the designs need tweaking? Is it still secure? Are there any signs of pest damage? Write up an account of the pest damage and how the class have been able to solve this problem.