Sustainable Scarecrows

* This resource has been developed to run over 8 weeks with 1 lesson (approximately 60 minutes) each week. However this can be adapted to suit the individual class.

Weekly topic	Outcomes	Suggested Lesson Plan	Resources
Week 1: Exploring the assessment task and identifying the need/problem for the task.	Students will: ➢ Begin to understand the requirements of their assessment task – to design and build a scarecrow that keeps pests away from the school vegetable garden. ➢ Begin to understand that the design and development of products meets a need and/or addresses a problem.	➢ Students will be introduced to assessment task. ➢ As a class, talk through the task and task requirements. ➢ Discuss that there is always a need for designing a product and/or a problem it addresses. ➢ Discuss and identify the need/problem for the assessment task as a class – what the purpose of a scarecrow is, and what specifically, the purpose is of our Year 2 scarecrows – to keep pests away from the school vegetable garden. ➢ Students will be allocated into their technology groups. ➢ In their groups, students will individually brainstorm and write in their technology books, what they think are their own personal strengths, and how they can best help their group – eg. they might think they are a good leader, a good team listener, someone who can delegate tasks to everyone etc. Students then share their ideas with the rest of their group. ➢ In their allocated groups, students individually complete the design need or problem page in their guided portfolio.	➢ Sustainable Scarecrows guided portfolio ➢ Pencils ➢ Rubber ➢ Butchers paper

| **Week 2:** Exploring sustainability and how recycling/re-using materials contributes to less waste and is helpful to our environment. | Students will:
➢ Begin to understand what sustainability is.
➢ Begin to understand that using recycled materials or re-using materials reduces waste/rubbish, and therefore contributes to a more sustainable future.
➢ Think about the suitability of materials, in relation to scarecrow designs.
➢ Draw and label their initial scarecrow design. | ➢ Begin with whole class discussion on what sustainability is – caring and looking after our earth and environment so we have a sustainable future.
➢ Class discussion on recycling and re-using materials/products and how this reduces waste/rubbish and contributes to a more sustainable future. Use the various factsheets ('Recycling fact sheet', 'Paper and cardboard fact sheet', 'Plastic recycling fact sheet', 'Steel and aluminium fact sheet') to start discussion, and prompt students knowledge and ideas.
➢ View scarecrow images using 'Scarecrow Images' PowerPoint and discuss as a class what materials can be seen and are used.
➢ Talk about materials that weren't seen in the images, but could be used in scarecrow designs.
➢ Emphasise and reinforce to class what their scarecrows are to do – keep away pests/birds. Have class discussion – what materials can we use that can help us do this? Shiny materials eg. CD disks, alfoil would reflect and help scare birds away. Materials that could be used to move/flap about in the wind? Fabric hanging from the arms of the scarecrow? Could the actual scarecrow move eg. his arms/legs? What materials could be used to create noise to scare pests away? Jar lids, cans, materials that can 'clunk' together. Write a list on whiteboard of materials discussed, and add students' further suggestions.
➢ Model drawing and labelling a scarecrow design on whiteboard. | ➢ 'Sustainable Scarecrows' guided portfolio
➢ Pencils
➢ Rubber
➢ Scarecrow Images PowerPoint
➢ Whiteboard
➢ Whiteboard pen and rubber
➢ Butchers paper
➢ 'Recycling fact sheet' file
➢ 'Paper and cardboard fact sheet' file
➢ 'Plastic recycling fact sheet' file
➢ 'Steel and aluminium fact sheet' |

		➢ Students draw and label their own, individual scarecrow design in their technology books first, and then when it has been checked, they can draw it into their guided portfolio.	
Week 3: Designing a 'criteria for success' and evaluating scarecrow designs that have been produced.	Students will: ➢ Create, list and order a 'Design Criteria for success'. ➢ Evaluate their group members' individual scarecrow designs.	➢ Discuss to class they will need to create a criteria for success – a list of main design decisions/choices/non-negotiables that will ensure the scarecrow's success eg. think about materials – Re-usable/recyclable products? Reflective? Create noise? Move about in wind? Design choices – arms/legs/head that move? ➢ Model writing a criteria for success on board when discussing as class, include students' suggestions. ➢ In their groups, students collaboratively write their criteria for success on big planning paper. Once criteria has been finalised, students can individually write it in their guided portfolio. ➢ Using their established criteria for success, groups collaboratively analyse and evaluate the designs produced by each member of their group.	➢ 'Sustainable Scarecrows' guided portfolio ➢ Pencils ➢ Rubber ➢ Whiteboard ➢ Whiteboard pen and rubber ➢ Butchers paper
Week 4: Deciding upon materials and tool to be used in final design, drawing final group design,	Students will: ➢ Write a list of materials and tools/equipment to be used in final group design and justify choices	➢ Groups draw and label their final scarecrow design on big planning paper that meets their criteria for success. Students can then individually copy their final group design into their guided portfolio page. ➢ Collaboratively, groups list materials eg. cans, straw/hay, old clothes, alfoil, CDs etc, and	➢ 'Sustainable Scarecrows' guided portfolio ➢ Pencils ➢ Rubber ➢ Whiteboard

and writing a sequence of production steps for creating the scarecrow.	in relation to sustainability. ➤ Draw and label final group design. ➤ Write and/or draw a sequence of production steps for building their scarecrow.	tools/equipment that will be needed to build design eg. hammer, steel pegs, wood, nails, scissors, duct tape etc. on big planning paper and discuss as a group why they are appropriate choices, in relation to sustainability. Students can then individually copy their materials and tools lists into their guided portfolio. ➤ Discuss and model to class drawing and/or writing a sequence of production steps needed to make their scarecrow designs. ➤ Students collaboratively discuss and draw/write steps as a group on big planning paper. Students then individually copy steps into their guided portfolio.	➤ Whiteboard pen and rubber ➤ Butchers paper
Week 5: Creating the scarecrow in groups.	Students will: ➤ Use materials and tools/equipment to build their group scarecrow design in their technology groups.	➤ Students work in their groups to build their scarecrows. ➤ Remind students to be referring back to their design criteria for success and their design plan during construction of the scarecrows. ➤ Remind students about teamwork. Before beginning construction, allow a short amount of time for teams to work out what part of the scarecrow each person will be working on for the lesson, or how they will help.	➤ Materials/tools needed for scarecrow designs
Week 6: Creating the scarecrow in groups.	Students will: ➤ Use materials and tools/equipment to build their group scarecrow design	➤ Students continue working in their groups to build their scarecrows. ➤ Continue to remind students to be referring back to their design criteria for success and their design plan during construction of the scarecrows. ➤ Remind students about teamwork again. Allow another short amount of time for teams to work out what part of the scarecrow each person will be working on for the lesson, or how they will help.	➤ Materials/tools needed for scarecrow designs

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Week 7 & 8: Evaluating the final scarecrows produced in groups.	Students will: ➢ Evaluate their group's final produced scarecrow and its effectiveness.	➢ Groups finish building scarecrows and set them up for use in the vegetable garden. ➢ Groups observe/watch their scarecrows to see if they are successful in keeping the pests away. ➢ Groups discuss and collaboratively answer the questions from the evaluation page of their guided portfolio on big planning paper. ➢ Students individually copy down the group's responses into their guided portfolio. ➢ Students complete any unfinished pages in their guided portfolio.	➢ Materials/tools needed for scarecrow designs ➢ 'Sustainable Scarecrows' guided portfolio ➢ Pencils ➢ Rubber ➢ Butchers paper