



PLANTS ON A GOLF COURSE

 9-11 years  20-30 minutes per station

Introduction

The game of golf is played on land where many different types of plant grow. While the game is mainly played on managed turfgrass surfaces, trees, shrubs, and other plants are also present which serve as obstacles, hazards, backgrounds, aesthetic gardens, and habitat areas. Therefore, greenkeepers need to understand how to grow different types of plants and the impact of physical factors such as water, soil, air and sunlight on the health of plants. As a result, golf courses provide an excellent opportunity to study plants; their identifying characteristics, growth and development processes, management requirements and the interdependent relationships between plants and animals.

In this activity pupils will walk around the golf course looking for and identifying different plants.

Pupil Learning Objectives

By the end of the session pupils will be able to

- » identify and name five different plants
- » identify the main parts of a plant
- » classify plants into 4 groups
- » state what a plant needs to grow
- » name the different types of grassed areas on a golf course

What is needed for the session

Item	Who will provide it
Laminated lists of the plants that can be found on the golf course	Golf course
Hi-visibility jackets for all pupils (not essential)	School
Pencil and clipboard for every pupil (not essential)	School
Printed worksheet for each pupil (only if using worksheets as agreed with school)	Golf course

What the greenkeeper needs to do

Prior to the visit, make a list of the many plants that can be found on the golf course so the pupils can use them to help them identify the plants they see as they walk around. Plan a safe walking route around the golf course to show pupils different plants and if possible show them examples of the 4 main plant groups; flowering plants, conifers, ferns, mosses.

Activity	Equipment	Questions to ask
1. Talk to the pupils about the importance of plants on a golf course. Give out the worksheets, clipboards and pencils (one between 2)	<ul style="list-style-type: none"> » Worksheet » Laminated list of the plants on the golf course for 2, 3 and 4 » Clipboard » Pencil 	Why are plants important on a golf course?
2. Walk the pupils around the course and point out, and name, some of the plants they will see. Get the pupils to write the names on their worksheet. As you go round the course also cover points 3 to 8 at appropriate points.	<ul style="list-style-type: none"> » Worksheet » Clipboard » Pencil 	How many different plants do you think there will be on the course?
3. Ask the pupils if they can name any of the parts of a plant. Explain that most plants consist of roots, stems and leaves, but some also have flowers.	<ul style="list-style-type: none"> » Worksheet » Clipboard » Pencil 	What are the 3 main parts of most plants?
4. Tell the pupils that plants need 5 things to survive — light, air, water, nutrients and space	<ul style="list-style-type: none"> » Worksheet » Clipboard » Pencil 	What do plants need to grow?
5. Explain what happens on a golf course when there is not enough water. Explain that greenkeepers may need to add water to some parts of the golf course to help the plants grow better.	<ul style="list-style-type: none"> » Identify some course sprinklers 	Can you see any examples of where plants have been watered?
6. Explain to the pupils that plants can be classified into 4 different groups based on some features: <ul style="list-style-type: none"> » Flowering — have flowers » Conifers — do not have flowers, but often have cones and small needle like leaves » ferns — do not have flowers and do not produce seeds » mosses - do not have roots and do not produce flowers. » Ask pupils to place the different plants they find into the correct category on the worksheet 	<ul style="list-style-type: none"> » See worksheet for the categories 	How can we classify plants?

Activity	Equipment	Questions to ask
7. Explain to the pupils that the most common plant on a golf course is grass and it is a flowering plant. If possible, show them a grass flower.		What category of plant is grass?
8. Look at the grass on the different parts of the golf course. Show the pupils the fairway, light rough, fringes and greens and explain that they are all cut to different lengths.	» Worksheet » Clipboard » Pencil	Can you name the grassed parts of a golf course? How are they different? Why do you not see grass flowers on the green area of a golf course?
9. Ask all pupils to complete their worksheet	» Worksheet » Clipboard » Pencil	Any questions about plants on the golf course?

Key words

You may have to explain some of these words as pupils will not be familiar with them. Check that pupils know their meaning before using them too much.

plants

fairway

green

fringe

stems

leaves

roots

ferns

mosses

nutrients

light rough

conifer

Lesson extension activities

Pupils could create their own system for classifying plants.

Support activities

Pupils could use an iPad or camera to take photographs of the plants that are seen.

Information for the teacher

National Curriculum links

England

- » Give reasons for classifying plants based on specific characteristics.

Wales

- » The environmental factors that affect what grows and lives, e.g. sunlight, water availability, temperature

Scotland

- » I can classify living things, including plants

Northern Ireland

- » We can identify plants according to their characteristics

Additional Resources that could be used to follow up the session

Click on the links below to access

- » [Plants roots and shoots – Hamilton](#)
- » [Turf troubles – Centre for Industry and education collaboration](#)
- » [Parts of a plant and their functions – Science & Plants for Schools](#)
- » [Living processes and what a plant needs to grow](#)



Worksheet: Plants on a Golf Course

Date Golf Course

Pupil Name

Please answer the questions below.

<p>Write down the names of 5 plants you have seen</p> <ol style="list-style-type: none"> 1. 2. 3. 4. 5. 	<p>What 5 things are needed for plants to survive?</p> <ol style="list-style-type: none"> 1. 2. 3. 4. 5.
<p>Name 3 parts of most plants</p> <ol style="list-style-type: none"> 1. 2. 3. 	<p>Name the grassed parts of a golf course and put them in the order of the length of grass. Longest to shortest.</p> <ol style="list-style-type: none"> 1. 2. 3. 4.



Write the names of the plants that you have seen into the correct category

Plants with seeds

Plants without seeds

Flowering plants

Conifers

Ferns

Mosses

Water is very important for plants. List any examples of where the greenkeeper has added extra water to plants? Why does the greenkeeper add extra water to some plants?

Risk Assessment:

These are suggested risks, you will probably want to add some of your own.

School Name School Representative

Golf Club Name

Greenkeeper Name Date of Visit

What are the hazards?	Who/what is at risk?	What needs to be done to avoid accidents?	Who is to action?
There will be moving cars in the car park	Pupils	<ul style="list-style-type: none"> » Inform pupils that they must follow instructions when leaving the minibus » All pupils to wear high visibility jackets whilst on the golf club (if the school requires) 	Teacher Greenkeeper
Pupils might get lost from the rest of the group	Pupils	<ul style="list-style-type: none"> » All pupils to wear high visibility jackets whilst on the golf club (if the school requires) » Teacher to count pupils in every time they move between areas 	Teacher
Being hit by a golf ball	Pupils Teacher Greenkeeper	<ul style="list-style-type: none"> » Inform pupils that there are some areas of the golf course that may be dangerous, therefore they need to avoid » All pupils to wear high visibility jackets whilst on the golf club (if the school requires) 	Teacher Greenkeeper
There will be other adults around the course	Pupils	<ul style="list-style-type: none"> » Pupils to be told to report to the teacher if they have any concerns 	Teacher Greenkeeper

