



# 01 Activity Guidance and Instructions

## GEOCACHING

**1** A geocache or 'cache' is a small waterproof treasure box hidden outdoors.

Geocachers seek out these hidden goodies guided by a GPS enabled device which uses coordinates, or 'waypoints' downloaded from the geocaching.com website or you can download a free geocaching app for Android or iPhone. **2**

**3** How to stay safe during the recent pandemic when Geocaching. <https://bit.ly/30Bd1ab>

## KEEPING SAFE

Appropriate online behaviour. Ask an adult before logging on to or using any online platform and ensure you know what to do if you feel unsafe when using technology.  

As Geocaching uses GPS, the app can drain your battery quicker than usual. Be mindful of data usage, such as when examining details of a (geo)cache. Have a backup device, or a physical map, in the event your device isn't functioning as expected. 

Wear suitable clothing and footwear. 

Take suitable, food, drink and equipment (including a first aid kit and a mobile phone). Make sure you tell someone where you're going and when you expect to return. 

The National Trust has guidance on exploring the outdoors: <https://bit.ly/2XQUIMj> 

# 02 Computer Science\*

## EVALUATION

Evaluation is the process that allows us to make sure our computing solution does the job it has been designed to do and to think about how it could be improved.

## LOGICAL REASONING

There is almost always more than one solution to a problem. Logical reasoning is used to predict the outcomes of the algorithms that are designed to solve a problem, to help select the best solution.

## RESILIENCE

Resilience is the ability to cope when things go wrong. Bouncing back after difficult times. Dealing with challenges and still holding your head up. Giving things a go or trying your best. Being strong on the inside.

## COLLABORATION

If there are "problems" to solve and computers are used as tools to solve the problems; the people in the group bring creativity to the project and work together to solve the problem.

# 03 IT Skills\*

## GPS

GPS is a system of 30+ navigation satellites circling Earth. We know where they are because they constantly send out signals. A GPS receiver in your phone listens for these signals. Once the receiver calculates its distance from four or more GPS satellites, it can figure out where you are.

## BEING PART OF AN ONLINE COMMUNITY

Online communities allow us to share details of our interests, such as our Geocaching adventures and to contribute positively to an Internet based platform, which allows us to use appropriate online behaviour.

## INTERNET

The internet is made of computers connected to each other around the world. Words and pictures can be sent from one computer to another. You can look at words and pictures from a computer on the other side of the world. When you use websites and some apps, you are using the internet.

How the internet works?  
<https://bbc.in/3fdY3uN>

## USE OF TECHNOLOGY

When Geocaching we might use a mobile phone, tablet or GPS device when outside, along with further devices, such as a laptop, to plan and record details of our adventures. This allows us to see how the digital devices function and can be used to complete different tasks.

## SERVICES PROVIDED BY THE INTERNET

The Internet enables us to use a vast range of services, including the WWW, email, Instant messaging and streaming video. Geocaching enables us to combine many of these online services, whilst developing our understanding of how the Internet functions, to take part in a real world treasure hunt.

## DATA

A structured set of numbers, possibly representing digitised text, images, sound or video, which can be processed or transmitted by a computer.

## SERVER

A server is a powerful computer that often acts as a central hub for services in a network, eg emails, internet access and file storage. Each computer connected to a server is called a client.

\* Some definitions taken from:  
- Quick Start Computing Guide <https://bit.ly/3cQD3sE>  
- BBC Bitesize <https://bbc.in/3cSOCzt>

# 04 Links to additional resources and activities

**A** COMPUTING AT SCHOOL HOME LEARNING  
<https://www.computingatschool.org.uk/homelearning>

**B** BAREFOOT COMPUTING (including unplugged activities involving networks)  
<https://www.barefootcomputing.org/>

**C** GEOCACHING  
Geocaching website - <https://www.geocaching.com/play/search>

Geocaching apps <https://www.geocaching.com/play/mobile>

Choosing the best Geocaches for children <https://bit.ly/2C0COyx>

Top tips for Geocaching with kids <https://bbc.in/2MPahOq>