

## Guide to the Sport and Fitness topic

Club members learn about blogging, vlogging, the Internet of Things and wearable tech in our new Sport and Fitness topic.

Three Digital Badges for members to gain by working through the online challenges.

- Sports Blogger
- Sports Vlogger
- Fitness Tech



### How a TechFuture Girls topic works

Within each topic – chosen to be particularly interesting to girls – there are three or more challenges for members to complete. Each challenge has an online e-learning module, which explores key concepts within a topic, with embedded quiz questions to assess understanding along the way. Members who score 80 percent or more automatically receive a Digital Badge, which appears in their profile once earned.

Alongside the online challenge, an offline challenge document is provided which asks members to go further with the topic. This is supported with sets of how2 documents that help build skills as the offline challenge is completed.

Online challenges can take between 30 and 45 minutes. Offline challenges can typically take longer, usually over several sessions. The offline challenges also lend themselves to team work and collaboration.

### The online challenge format

The online challenges are built as e-learning. They are a series of screens that often include hotspots, where clicking on images or markers bring up more information. In most cases, all the hotspots have to be checked before the 'next' button appears. So if one of your members/students can't see the next button, it is because there is an unchecked hotspot!

In the screenshot on the right, each of the four images is a hotspot. Clicking on these open up more information on (in this case) WordPress for blogging.



### The challenges in the Sport and Fitness topic

There are three challenges in Sport and Fitness.

#### Challenge 1: Sports Blogger

In this challenge, Blogger and WordPress are introduced as potential blogging sites where young writers can start to produce their blog posts in an environment where privacy settings can ensure only chosen readers can see their writing.

As well as exploring Blogger and WordPress and how they work, the challenge covers how to make the blogs private and how to create the best blog posts with images, headings, bullets and other features that are suitable for writing for the web.

Both Blogger and WordPress can be used free of charge (for a basic account) but will need members to create accounts to access the blogging platform. Google accounts can be used for both (and can also be used for the Sports Vlogger challenge which uses YouTube).

The offline challenge supports members to create their own blog site, add a design, and start to blog within the sports theme. They are also encouraged to blog even if they are not an active participant in sport, through the commentator or spectator route.

### **Challenge 2: Sports Vlogger**

The second challenge in Sport and Fitness introduces members to vlogging – video blogging – using YouTube as a channel. They are guided through how to set up YouTube, using a Google account (as with Google Blogger) and create their own channel. Importantly, they are shown how to make their YouTube channel private so only chosen people can view their vlogs.

They are also introduced to using smartphones for vlogging, and briefly how to edit the video before posting it.

Again, the topic is sport – as a participant, commentator or spectator.

The offline challenge supports members to create their own YouTube channel and their first sports vlog. The set of how2s helps them to set up the channel, make it private (visible to selected people only) and create their first vlog with a smartphone. Reference is made to the BBC Academy where very relevant content on Smartphone Journalism is available.

### **Challenge 3: Fitness Tech**

The third challenge in Sport and Fitness introduces members to technology that has developed to support exercise and fitness, including apps and wearable fitness devices. They find out about some popular apps that have been created to make exercising more fun and motivational, and the fitness devices that can monitor exercise and diet.

This is associated with an introduction to the Internet of Things, and its potential to connect many other measurable devices together (including collars on cows, slippers, contact lenses and nappies). Bluetooth connection is covered, with reference to the pairing of devices (headphones, computer peripherals and smart watches and devices) to smartphones.

Reference is made to the need for the Internet of Things and its connected devices to be cyber secure.

The offline challenge supports members to design either an app or a wearable device that could help a user with exercise and fitness. Some ideas are provided in the accompanying how2s.

### **Going further**

Members and facilitator/teachers of TechFuture Girls now have access to additional content on TechFuture Classroom. At the bottom of each topic page, there are links to do more. For this topic, a link is provided to the Wearable Tech with O2/Telefonica, where more about the Internet of Things is provided alongside a challenge to create a wearable device using an iBeacon. There is also a link to the AppShed

project on TechFuture Classroom, where members can learn more about using AppShed to create mobile applications, including the AppShed Basics Course linked to three more Digital Badges.

## How2s included in this topic

Each challenge has a set of how2s – guides on skills and concepts – to help members complete the offline challenges and build on knowledge acquired in the online challenges. The table below shows all the how2s in the Sport and Fitness topic.

**Table 1: The How2 documents provided in this topic**

Challenge	How2
Sports Blogger	How2 start blogging safely
	How2 set up a blog in Google Blogger
	How2 apply a theme to a blog in Google Blogger
	How2 add images to a blog post in Google Blogger
	How2 set privacy settings in Google Blogger
	How2 set up a blog in WordPress
	How2 apply a theme to a blog in WordPress
	How2 add images to a blog post in WordPress
	How2 set privacy settings in WordPress
	How2 write for the web
Sports Vlogger	How2 set up your own YouTube channel
	How2 make your vlogs private on YouTube
	How2 share your vlogs with friends on YouTube
	How2 film yourself vlogging on a smartphone
	How2 get good sound in your vlog
	How2 edit your vlog video
Fitness Tech	How2 design an app to make fitness easier and more fun
	How2 design a wearable fitness device

## Learning Outcomes and curriculum mapping for the Sport and Fitness topic

The table below displays the learning outcomes for each topic and their relevance to the Programmes of Study for Computing (Key Stages 2 and 3).

It is also the case that topics are relevant to other subject areas. In this topic, members will gain skills in writing for an audience and for a purpose, as well as using organisational and presentational devices in structuring their text for the reader. These are all relevant for the English Programmes of Study.

**Table 2: Learning outcomes and Computing PoS mapping**

Challenge	Learning Outcomes	Programmes of Study for Computing
Sports Blogger	Understand how to set up a blogging platform using either Blogger or WordPress	<p><b>Pupils should be taught to:</b>  <b>Select, use and combine</b> a variety of software (including internet services) ... to design and create a range of programs, systems and <b>content that accomplish given goals, including collecting</b>, analysing, evaluating and <b>presenting data and information</b> (<i>Key Stage 2</i>)</p> <p>Use technology safely, respectfully and responsibly (<i>Key Stage 2</i>)</p> <p>Undertake creative projects that involve <b>selecting, using and combining multiple applications</b>... to achieve challenging goals, including collecting and analysing data and <b>meeting the needs of known users</b> (<i>Key Stage 3</i>)</p> <p>Understand a range of ways to use technology safely, respectfully, responsibly and securely, <b>including protecting their online identity and privacy</b> (<i>Key Stage 3</i>)</p>
	Understand how important it is to apply privacy settings to a blogging platform	
	Understand how to lay out an effective blog post, including images, bullets and headings	
	Understand how to write appropriately for the web	
Sports Vlogger	Understand what vlogging is and its potential in social communication	<p><b>Pupils should be taught to:</b>  <b>Select, use and combine</b> a variety of software (including internet services) ... to design and create a range of programs, systems and <b>content that accomplish given goals, including collecting</b>, analysing, evaluating and <b>presenting data and information</b> (<i>Key Stage 2</i>)</p> <p>Use technology safely, respectfully and responsibly (<i>Key Stage 2</i>)</p> <p>Undertake creative projects that involve <b>selecting, using and combining multiple applications</b>... to achieve challenging goals, including collecting and analysing data and <b>meeting the needs of known users</b> (<i>Key Stage 3</i>)</p> <p>Understand a range of ways to use technology safely, respectfully, responsibly and securely, <b>including protecting their online identity and privacy</b> (<i>Key Stage 3</i>)</p>
	Understand how to set up a YouTube channel	
	Understand the importance of making vlogs private and how to do it	
	Understand how to use a smartphone effectively to create a vlog	
	Understand best practice in creating good quality video with sound with a smartphone	
	Understand the potential of smartphones in the world of journalism and news production	
Fitness Tech	Understand how tech has changed fitness and exercise through the use of apps and devices	<p><b>Pupils should be taught to:</b>  <b>Select, use and combine</b> a variety of software (including internet services) ... to</p>

Challenge	Learning Outcomes	Programmes of Study for Computing
		design and create a range of programs, systems and <b>content that accomplish given goals, including collecting</b> , analysing, evaluating and <b>presenting data and information</b> ( <i>Key Stage 2</i> )
	Understand how wearable fitness devices work and what data they can collect	<b>Understand computer networks including the internet</b> ; how they can provide multiple services, such as the worldwide web; and the <b>opportunities they offer for communication and collaboration</b> ( <i>Key Stage 2</i> )
	Understand how fitness devices connect through the Internet of Things	Use technology safely, respectfully and responsibly ( <i>Key Stage 2</i> )
	Understand what the Internet of Things is and what it can do	Undertake creative projects that involve <b>selecting, using and combining multiple applications...</b> to achieve challenging goals, including collecting and analysing data and <b>meeting the needs of known users</b> ( <i>Key Stage 3</i> )
	Understand how important it is for devices connected to the Internet of Things to be secure	Understand the hardware and software components that make up computer systems and how they <b>communicate with one another and with other systems</b> ( <i>Key Stage 3</i> )
	Understand how to think about the user and his/her requirements when designing a wearable device or app	Understand a range of ways to use technology safely, respectfully, responsibly and securely, <b>including protecting their online identity and privacy</b> ( <i>Key Stage 3</i> )

***If you require any help setting up your TechFuture Girls club, wish to use the resources, and TechFuture Classroom, in school, or have any questions about our platform, email us at [helpdesk@techfuture.com](mailto:helpdesk@techfuture.com) and we will respond to your request within 48 hours.***