Module 4

Module 4

<u>Suggested Duration of Module</u>

4 Hours

<u>Objectives</u>

Module 4 will cover:

Internet Safety and Cyberbullying

Scoilnet and World Book Online

Quizzes in Scratch

Scratch and External Devices

Discussion Time

N.B. If you have an iPad or an Android tablet please bring it in tomorrow to explore the ScratchJr app.

Internet Safety and Cyberbullying

The purpose of this section is to provide an overview of internet safety and its importance in the classroom context. It also looks at the issue of cyber bullying.

Webwise

The Webwise Primary School programme has been developed for primary school teachers who wish to introduce internet safety into their teaching of the Social Personal and Health Education (SPHE) curriculum.
The first part of the resource focuses on skills needed for surfing the web such as effective and safe searching, downloading images and determining what online content can be trusted.
The second section deals with the skills required to safely and effectively communicate online or by text message. It deals with issues relating to sharing personal information online, treating others with respect, cyberbullying, responding to media, in particular digital media and dealing with spam.
The Webwise programme utilises a range of teaching methodologies with particular emphasis on active learning, the principal learning and teaching approach recommended for SPHE.

Webwise's newest resource, "HTML Heroes", introduces 3rd and 4th class pupils to the internet with the help of two USB characters (Archie and Ruby)
The animations and supporting lessons were launched as part of Webwise's work to raise awareness of Safer Internet Day 2019 and to promote the importance of online safety with parents, teachers and young people.
The HTML Heroes Programme comprises of eight lessons and three specially designed animations for use in the classroom. The resource introduces students to the internet, explains how it works and addresses key online safety topics including privacy, cyberbullying and evaluating information online. The resource also addresses growing concerns about technology and the use of devices such as screen time, online gaming, online advertising and social media.

The MySelfie anti-cyberbullying programme: provides opportunities for cross-curricular integration in particular with Drama, Language and Visual Arts.

It is made up of paper-based classroom activities and digital interactive lessons. The interactive cartoons are designed to be used as a whole-class activity using a whiteboard or digital projector. The activities may also be set up for a pair, an individual, or a small group to use at a classroom computer.

Useful Links

Webwise
http://www.webwise.ie

Webwise – MySelfie
http://www.webwise.ie/teachers/myselfie

Webwise
https://www.webwise.ie/html-heroes/

Social Media Advice for Teachers
https://www.webwise.ie/teachers/social-networking-advice-for-teachers-2/

Common Sense Media
http://www.commonsensemedia.org/educators/cyberbullying-toolkit

Better Internet For Kids
https://www.betterinternetforkids.eu/web/portal/resources

Childnet International resources
http://www.childnet.com/RESOURCES

Age appropriate lessons on internet safety
https://www.thinkuknow.co.uk/

Cybersmile - Advice on Cyberbullying
http://www.cybersmile.org/advice-help

The Scratch Community Guidelines for the scratch.mit.edu website and community can be viewed here: http://scratch.mit.edu/community_guidelines/

Scoilnet and World Book Online

Tutors will introduce some of free digital technology resources available, which may be useful in the context of Scratch and are developed or supported by PDST Technology in Education.

Scoilnet https://www.scoilnet.ie/

World Book http://www.worldbookonline.com/

Quizzes in Scratch

Quizzes are a useful way of integrating Scratch across the curriculum. For example, when pupils finish a task in history, ask them to create a quiz for their peers. While developing the children's coding skills, this task also demonstrates their knowledge of the history topic. Please check out this example quiz at http://scratch.mit.edu/projects/18742762.

Participant Activity

1. Decide on a topic for your quiz. This example is based on capital cities.
2. Select a sprite as your quizmaster.
3. Choose a background.
4. Because the quiz requires user input, we must use the blue "ask" block and the blue "answer" block. These are in the Sensing Palette.
5. When the code runs it should ask the question and wait for the answer. It should then react to signify if the answer is correct or incorrect.

Variable can be omitted for younger children.

6. The code for any further questions follows the same pattern.

Right click on the code and select duplicate. You can then edit the sections that are different in each question.

7. The quiz can have any amount of questions. To end the game, you can display the user's score or you could change backdrop.

```
when [flag] clicked
set Score to 0
ask What is the capital of Ireland? and wait
if < answer = Dublin > then
    say Correct for 2 seconds
    change Score by 1
else
    say Hard Luck for 2 seconds
broadcast question 2
```

```
when I receive question 2
ask What is the capital of France? and wait
if < answer = Paris > then
    say Correct for 2 seconds
    change Score by 1
else
    say Hard Luck for 2 seconds
broadcast question 3
```

```
when I receive question 3
ask What is the capital of Scotland? and wait
if < answer = Edinburgh > then
    say Correct for 2 seconds
    change Score by 1
else
    say Hard Luck for 2 seconds
broadcast Game Over
```

```
when I receive Game Over
think join Your final score is Score for 5 seconds
```

8. Increase the challenge by repeating questions that are answered incorrectly. Add in sound effects when questions are answered. Change backdrops for each question.

Lists in Scratch

A list or array is a way of storing several variables. It can be used in many ways but here we will use it to create a quiz. Lists can be quite challenging and therefore more suited to older classes.

Participant Activity

1. Select a sprite

2. Select a topic for your quiz *e.g.* young animals. Decide on your questions. It is better if your question has a one word answer as users must get it exactly correct.
3. Create a list. Give it a meaningful name *e.g.* Questions.
4. For the list just enter the part of the sentence that changes. For example, instead of entering "What is a young sheep called?", "What is a young cow called?" simply enter "sheep", "cow".

Each time you start the program it will add all the items to your list. This block deletes previous questions so that you don't have duplicate questions.
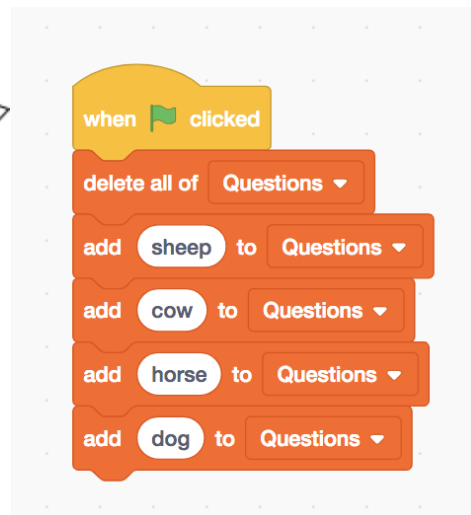
5. Create a second list called Answers. Enter the solutions to your questions. It is very important that the order of the two lists matches *e.g.* if sheep is your first question, lamb must be your first answer.

Untick these boxes to prevent the lists appearing on the stage
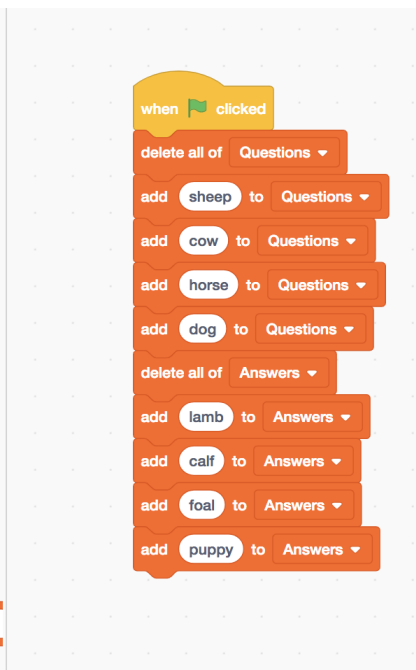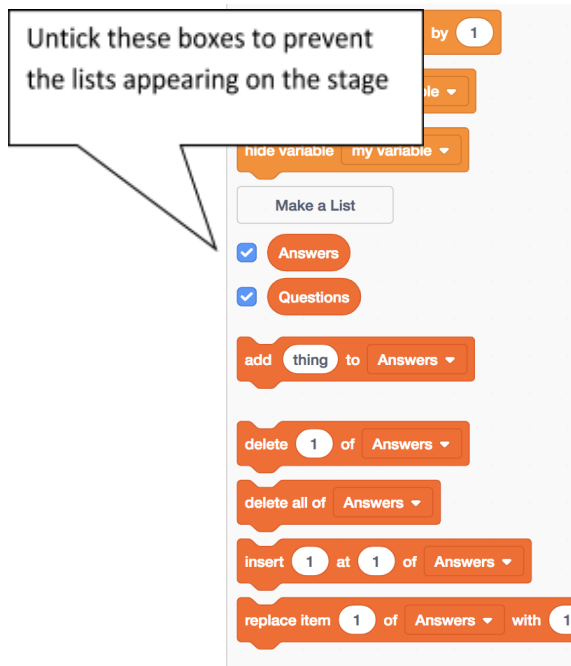
6. Now we must code to ask the question and to ensure the programme associates the question with its correct answer. We will create a variable index used to access particular elements in the list.
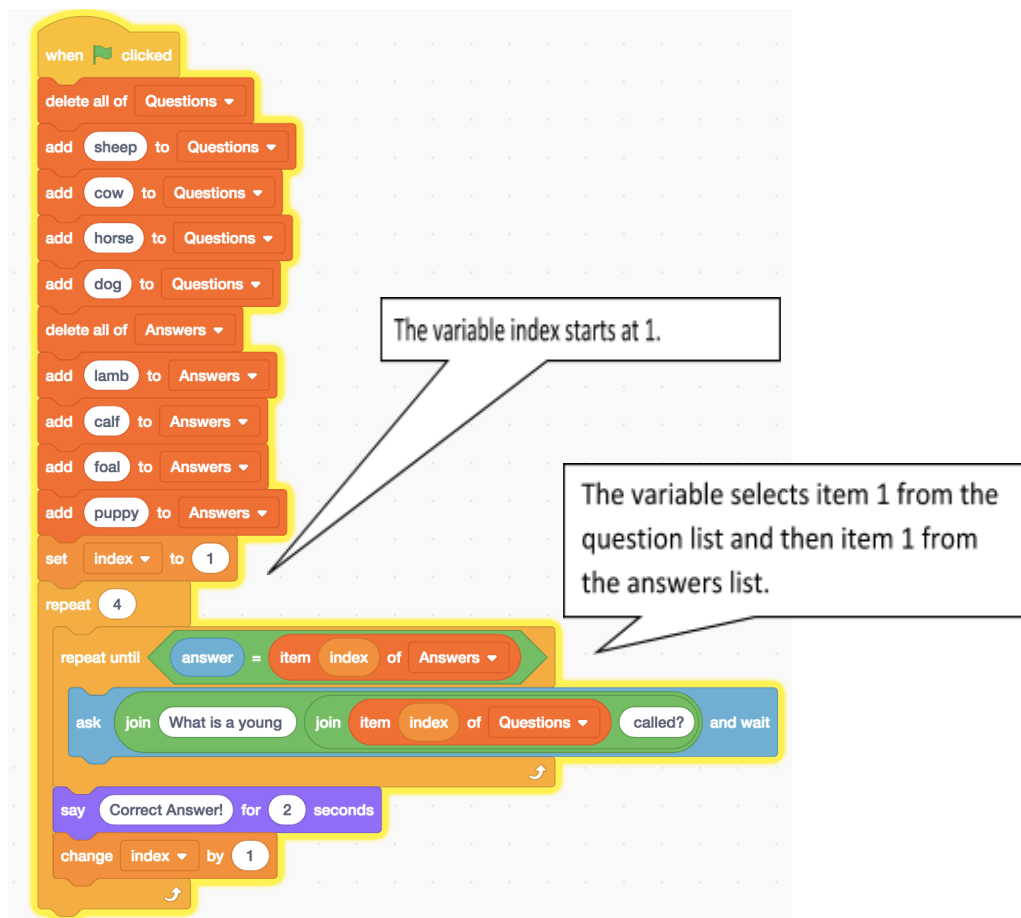
Scratch and external devices

If you are using the online version of Scratch it is possible to connect external devices to Scratch via the usb port and allow these to interact with the sprites. The devices can be used to operate the sprites but the sprites can also be used to operate the devices. The extensions that Scratch offer support for are Lego WeDo2.0, Lego Mindstorms EV3, micro:bit and Makey Makey. The tutor will demonstrate a video that shows Scratch interacting with Lego WeDo kits. If a kit is available the tutor will show a brief demonstration of how to connect Lego WeDo with Scratch.
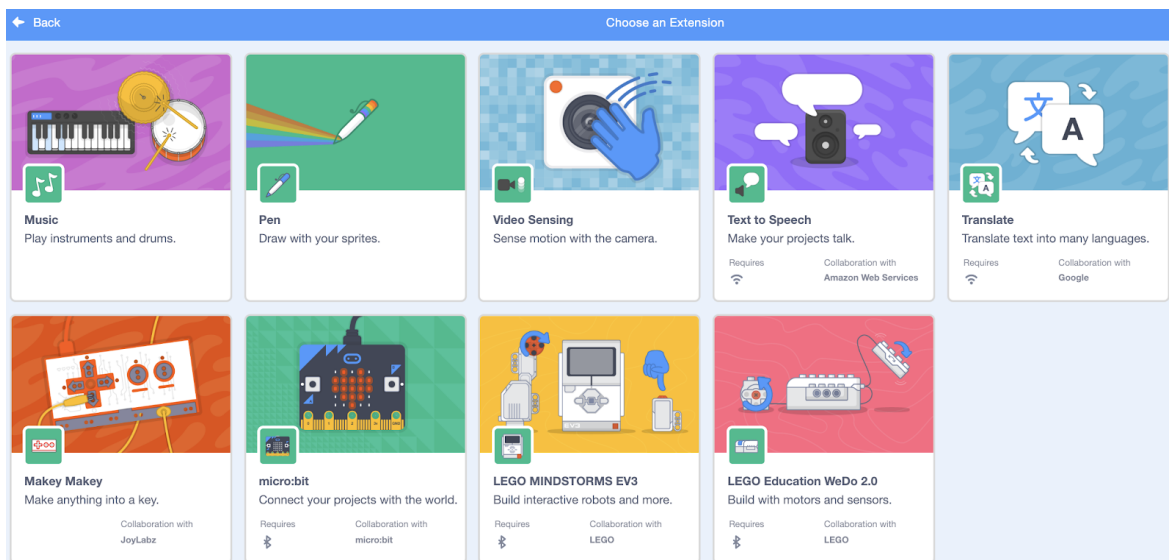
Further information about using Lego WeDo with Scratch can be found here: https://en.scratch-wiki.info/wiki/LEGO%C2%AE_WeDo_Construction_Set

Participant Activity

If Lego WeDo kits are available in your venue, create a Scratch project that interacts with a combination of the motor, distance sensor and tilt sensor.

Discussion time

Today's objective was to cover:

Internet Safety and Cyberbullying

Scoilnet and World Book Online

Quizzes in Scratch

Discussion Time