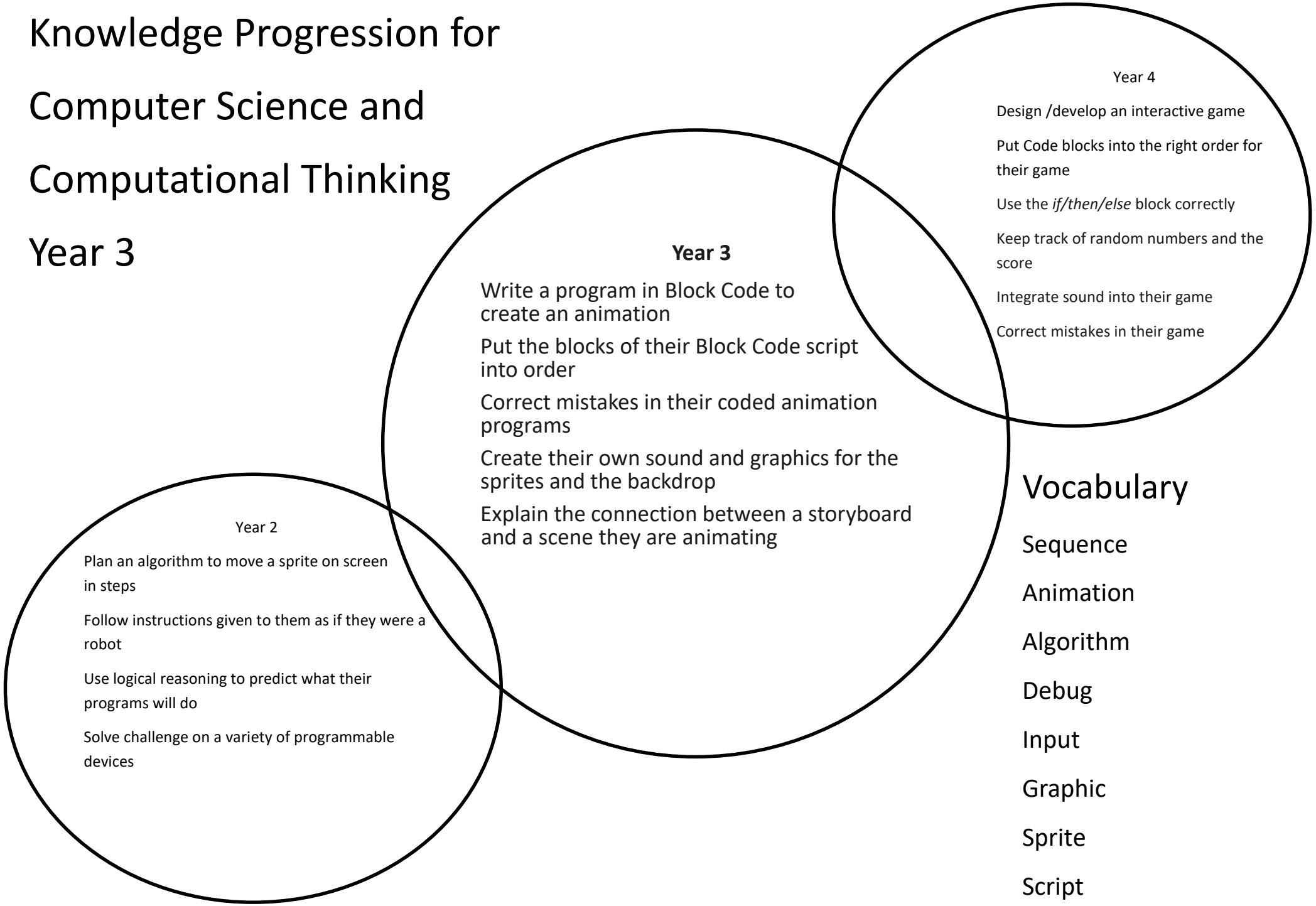
Knowledge Progression for Computer Science and Computational Thinking Year 3



Vocabulary

Sequence

Animation

Algorithm

Debug

Input

Graphic

Sprite

Script

Knowledge Progression for

Digital Literacy and Online Safety

Year 3

Year 2

Be aware of and observe age restrictions in commercial games

Know that they should tell their parents or carers if they are concerned about something in a computer game

Understand that playing computer games should be balanced with other activities

Reflect on what makes games enjoyable and sometimes addictive

Begin to understand the concept of online bullying and how to respond

Year 3

Can give some examples of things they should or should not do when using digital technology in a range of contexts

The child can use email to communicate with a classmate.

When given a list of web pages, the child can decide which they think will be most useful for their purpose or to answer a question they have.

Understand that Google results are based on the key words in its index of a copy of the web

Begin to understand that information shared online cannot always be controlled

Develop a deeper understanding of the consequences of online bullying

Understand the role of a bystander in online bullying.

Year 4

Can demonstrate that they can act responsibly when using technology, when developing computer games or prototype products or when using sampled music or creating a composition, including observing copyright and any terms and conditions.

They can contribute positively to a shared blog or wiki

Understand that online and peer pressure can be a positive and negative influence

Understand that although information posted on the internet might not always be true or accurate, it lasts forever.

Understand that virtual friends are still strangers that they do not know

Vocabulary

Acceptable behaviour

Email

Attachment

Bystander

Report

Permission

Online bullying

Keywords

Search

Knowledge Progression for Information Technology Year 3

Year 2

- Take photos using a digital camera, tablet or smartphone
- Take focused, sharp photos
- Apply adjustments and effects to digital photos
- Select their favourite photos for inclusion in a shared portfolio
- Find useful information and images on websites.
- Create short presentations or Information leaflets
- Save and retrieve their presentations; add images or other media as appropriate.
- Create charts to show data they collect
- Explore Google Maps or Google Earth to find a familiar location

Year 3

- Can use a range of programs on a computer or tablet
- Be able to research a topic efficiently
- Be able to find appropriate, Creative Commons licensed images using Google
- Design and record an effective PowerPoint presentation (or similar)
- Analyse existing video/film to learn how this is shot
- Record high quality footage
- Export the movie from e.g. an animation app or camera roll to a video editing app or software
- Edit clips and films
- Record a detailed, informative commentary or narrative
- Use email to work together on a joint project
- Collect data via the internet
- Move information between different applications e.g. add data collected to a chart or graph
- Analyse the data collected

Year 4

- Create a simple composition using sequencing software
- Record and combine samples to produce a piece of music
- Refine and develop their composition
- Find and read an article on Wikipedia
- Evaluate an article for trustworthiness
- Create content for a wiki /blog
- Edit their own and others content
- Edit the HTML for a web page
- Use weather measurement equipment safe
- Enter data into a spreadsheet to create simple charts
- Take digital photos
- Make predictions and present findings using presentation software

Vocabulary

Research

Presentation

Analyse

Edit

Narration

Survey

Data

Spreadsheet