

# **Lowerhouse Junior School Computing Overview Sheet**



# **Year 3 – Branching Database**

National Centre for Computing Education

Rationale: During this unit, learners will develop their understanding of what a branching database is and how to create one. They will gain an understanding of what attributes are and how to use them to sort groups of objects by using yes/no questions. The learners will create physical and on-screen branching databases. Finally, they will evaluate the effectiveness of branching databases and will decide what types of data should be presented as a branching database.

**Progression:** This unit progresses students' knowledge and understanding of presenting information. It builds on their knowledge of data and information from key stage 1. They continue to develop their understanding of attributes and begin to construct and interrogate branching databases as a means of displaying and retrieving information.

### **Overview:**

Lesson 1: I can investigate questions with yes/no answers Lesson 2: I can select an attribute to separate objects into groups Lesson 3: I can select objects to arrange in a branching database Lesson 4: I can create yes/no questions using given attributes Lesson 5: I can select a theme and choose a variety of objects Lesson 6: I can explain what a pictogram tells me

# **Subject Knowledge**

**Lesson 1:** During this lesson, learners will start to explore questions with yes or no answers, and how these can be used to identify and compare objects. They will create their own yes or no questions before using these to split a collection of objects into groups.

**Lesson 2:** During this lesson, learners will continue to develop their understanding of using questions with yes or no answers to group collections of objects. They will learn how to arrange objects in a tree structure and will continue to think about which attributes the questions are related to.

**Lesson 3:** During this lesson, learners will continue to develop their understanding of ordering objects/images in a branching database structure. They will learn how to use an online database tool to arrange objects into a branching database, and will create their own questions with yes or no answers. The learners will show that their branching database works through testing.

**Lesson 4:** During this lesson, learners will continue to develop their understanding of how to create a well-structured database. They will use attributes to create questions with yes or no answers and apply these to given objects. The learners will be able to explain why questions need to be in a specific order

**Lesson 5:** During this lesson, learners will independently create a branching database that will identify a given object. They will continue to think about the attributes of objects to write questions with a yes or no answer, which will enable them to separate a group of objects effectively. The learners will then arrange the questions and objects into a tree structure

**Lesson 6:** During this lesson, the learners will compare two ways of presenting information. They will demonstrate their ability to explain what information is shown in a pictogram and a branching database. The learners will begin to compare the two ways of presenting information.

### **Assessment/Key Skills**

## **Summative assessment rubric**

Please see the assessment question and answer documents for this unit.