

Computing 22-23

Year 3 – Branching Databases

Sticky Knowledge

Key vocabulary

By the end of this unit children must be able to:

- I can investigate questions with yes/no answers
- I can make up a yes/no question about a collection of objects
- I can select an attribute to separate objects into groups
- I can select objects to arrange in a branching database

attribute	structure
value questions table	compare
objects	order
branching database	organize
questions	questioning
equal even separate	selection

National curriculum:

- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- use technology safely, respectfully and responsibly

Features

i2data Pictogram, Branch, and Database tools <https://www.i2e.com/jit5#branch>

Learners will develop their understanding of what a branching database is and how to create one. They will use yes/no questions to gain an understanding of what attributes are and how to use them to sort groups of objects. Learners will create physical and on-screen branching databases. To conclude the unit, they will create an identification tool using a branching database, which they will test by using it. They will also consider real-world applications for branching databases.

Learning objective

Lesson outline

Lesson 1 Yes or no questions

LO- To use yes and no questions

Sticky Knowledge

- I can investigate questions with yes/no answers
- I can make up a yes/no question about a collection of objects

Learners will start to explore questions with yes/no answers, and how these can be used to identify and compare objects. They will create their own yes/no questions, before using these to split a collection of objects into groups.

Lesson 2 Making groups

LO- To sort objects according to their attributes.

Sticky Knowledge

- I can select an attribute to separate objects into groups

Learners will develop their understanding of using questions with yes/no answers to group objects more than once. They will learn how to arrange objects into a tree structure and will continue to think about which attributes the questions are related to.

Lesson 3- Creating a branching database

LO- To create a branching database

Sticky Knowledge

- I can select objects to arrange in a branching database

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/no answers. Learners will show that their branching database works through testing.

Lesson 4 Structuring a branching database

LO- To create a branching database with specific questions

Sticky Knowledge-

- I can compare two branching database structures

Learners will continue to develop their understanding of how to create a well-structured database. They will use attributes to create questions with yes/no answers, and will apply these to given objects. Learners will compare the efficiency of different branching databases, and will be able to explain why questions need to be in a specific order.

Lesson 5- Planning a branching database

LO- To plan a branching database

Sticky Knowledge-

- I can independently create questions to use in a branching database

Learners will independently plan a branching database by creating a physical representation of one that will identify different types of . They will continue to think about the attributes of objects to write questions with yes/no answers, which will enable them to separate a group of objects effectively. Learners will then arrange the questions and objects into a tree structure, before testing the structure.

Lesson 6- Assessment

Children to complete a task to display and review their skills of branching databases.

Teachers to complete the assessment checklist

Working towards

End of Unit Assessment

Working at a greater depth

Working at Age related expectations

--	--	--