Branching databases

Year 3 Computing | Knowledge organiser

Use yes/no questions to sort objects into groups and identify one particular object.

Words to know

Data: facts collected about something.
Attribute: a property of an object, such as colour.
Value: what an attribute is, such as red.
Database: an organised collection of data.
Branching database: data arranged in a tree using questions with yes/no answers.
Identify: work out which object something is.

Ask useful yes/no questions

Base each question on an attribute you can check.
Try starting with **“Is it…?”** or **“Does it…?”**

Useful: Is it red? Does it have wings?
Needs changing: What colour is it?
This has many possible answers, rather than yes/no.

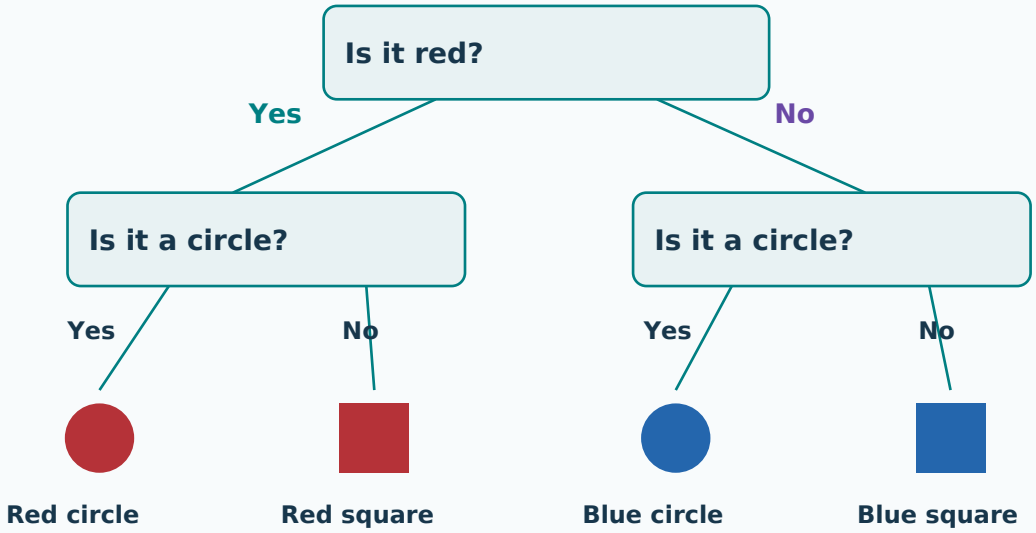
Structure matters

Choose questions that split objects into similarly sized groups where possible. This can help identify an object using fewer questions.

Keep splitting each group until every object can be identified on its own.

Follow the branches

Example: four shapes with two attributes.
Answer each question and follow yes or no.



A blue square follows: **No → No → Blue square.**
Each answer narrows down the possible objects.

Plan, create and test

Choose objects and check their attributes.
Plan a tree on paper, then create it on screen.
Test every object with a partner. Fix wrong routes.
Use branching databases to identify things such as plants, animals or dinosaurs.

Remember: every question needs a yes/no answer, and every object needs its own final branch.

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