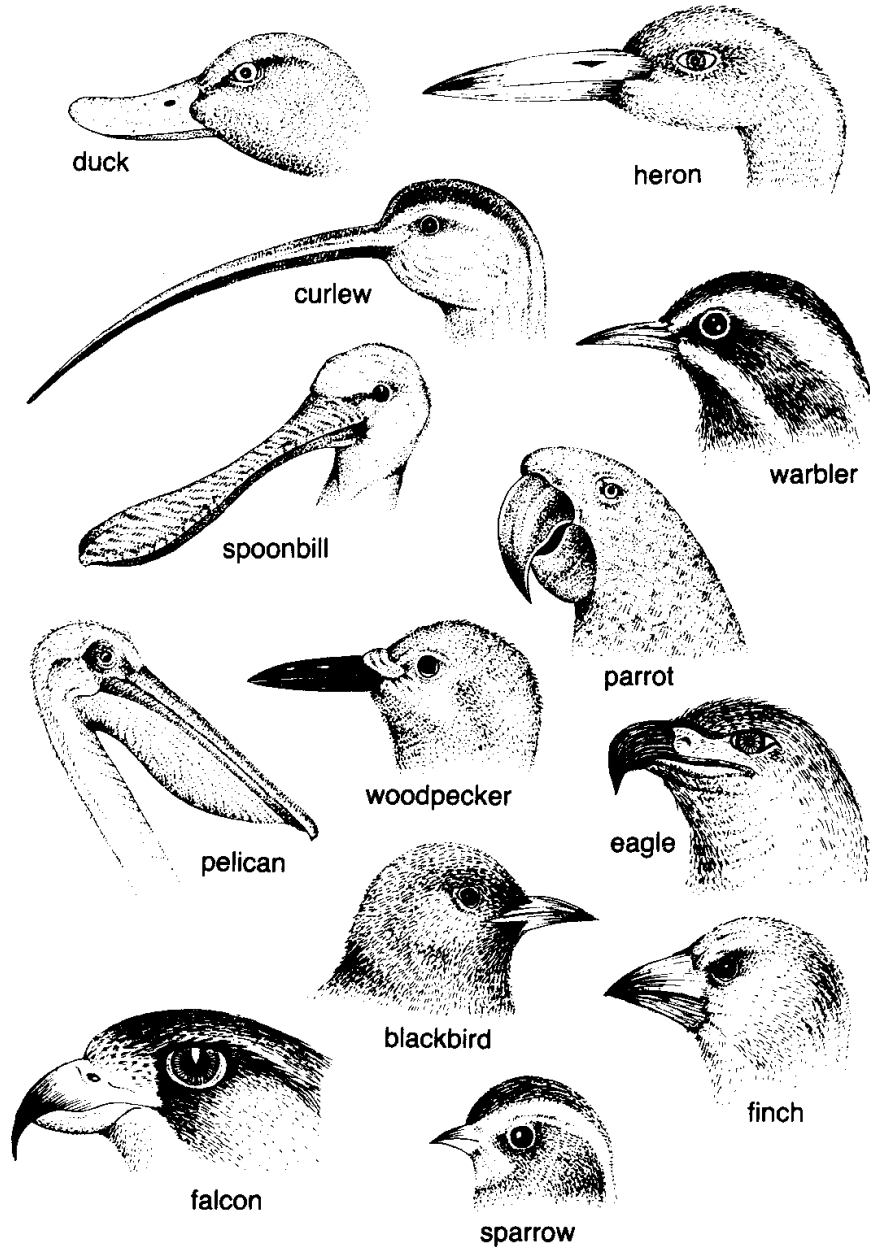


Brilliant Bird Beaks

An experiment to understand animal adaptation



Name: _____

Knowledge Chart

Prior knowledge about birds	New knowledge about birds

Investigation Planner

What are you going to investigate?

What do you predict will happen? Why?

(Write as a question - what happens to the dependent variable when we change the independent variable?)

(try to give scientific explanations for your prediction)

To make this a fair test, what things (variables) are going to change?

Change?

Measure?

Keep the same?

(Change only one thing)

(What would the change affect?)

Which variables will you control?

What equipment will you need?

Describe how you will set up your investigation.

(Dot point list)

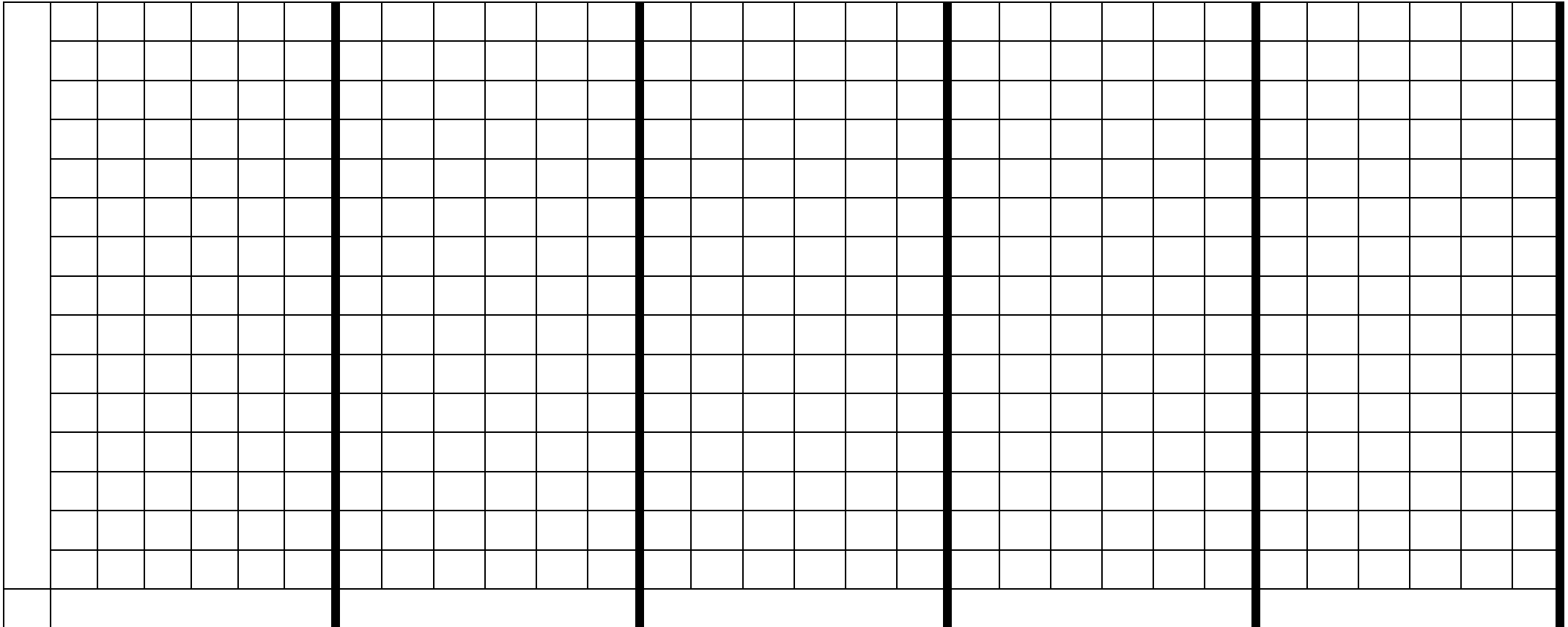
(Labelled diagram)

Data Table

Beak Type (independent variable)	Amount of rice collected in 30 sec	Amount of marshmallows off a string collected in 30 sec	Amount of sunflower seeds collected in 30 sec	Amount of string from soil collected in 30 sec	Amount of embedded seeds collected in 30 sec	Amount of confetti in water collected in 30 sec
tweezers						
chop sticks						
pliers						
spoon						
strainer						

Graphing Data

Comparing Beaks



SCALE

- rice 1 square = _____ grains
- marshmallows on string 1 square = _____ mmw
- sunflower seeds 1 square = _____ seeds
- string from soil 1 square = _____ pieces of string
- embedded seed 1 square = _____ seed
- confetti from water 1 square = _____ confetti

Analysing Data

Use the evidence from the results table and the column graph to explain **what happened to the dependent variable (the food)** when you changed each of the **independent variables (beaks)**.

Independent Variable Comparison

Beak 1 _____	Beak 2 _____	Beak 3 _____	Beak 4 _____	Beak 5 _____

Write a statement to summarise your findings.

Which type of bird beak was able to eat the most food particles?

Which type ate the least?

Which food was the most difficult to eat?

Which bird is most likely to survive in the broadest range of habitats?

Was this outcome different from your prediction? Explain.

How could you improve this investigation, e.g. fairness, accuracy?

Design Brief

Take notes from the information about bird feet.

Take notes from the information about bird feathers.

Draw and label/annotate a bird that would suit our local environment.

