Use this space to jot down any scientific questions you can think of about how or why something happens.

WHAT?

HOM3

WHY?



After asking a question, scientists design an EXPERIMENT to TEST their ideas. Pick one of your questions, and scribble down ways you could test it, using the ideas on the right as inspiration.

OUESTION:

WAYS TO TEST IT:

Scientists call this the METHOD.

Then, if you can, try testing your question. Write down any notes and results here.

RESULTS:

CONCLUSION:

Do your results tell you anything? Go to every planet and see what lives there.

Beam signals into space and see if anything responds.

DO HEAVY THINGS FALL FASTER THAN LIGHT THINGS?

Drop heavy and light objects from the same height and see which lands first. Feather and rock dropped from a chair landed at same time.

Book and paper clip dropped from a table landed at same time.

For experiments to PROVE anything, they need to be done multiple times and get the SAME results again and again.

If you CAN'T test your question yourself, (e.g. search for aliens...) look it up online or in a book to see what other people think.

> Some questions can't be tested at all, so scientists do 'thought experiments'. Go to pages 72-73 for more.

> > 7



## **Usborne Activities**