

Data From an Experiment

Elaboration 3 · Collecting data by trying something many times

ELABORATION FOCUS

Acquiring data through experiment by repeating a trial many times, sorting each result into a category, and recording the outcomes as they happen.

LEARNING INTENTION I can run a trial many times and record every result.

Trial

Repeat

Result

Record

Compare

1

Set It Up

Step 1: decide what you will do each turn. Step 2: name the possible results.

2

Do It Again

Step 3: repeat the same trial many times. Step 4: change nothing in between.

3

Record Each One

Step 5: tally each result as it happens. Step 6: total them at the end.

MODEL · TWENTY COIN TOSSES

Each toss is tallied as it happens, and the two totals add back to the number of trials.

Result	Tally	Total
heads		11
tails		9
trials		20

More trials give a clearer picture, as long as every trial is done the same way.

TEACHER MODELLING ROUTINE I do → We do → You do

WATCH FOR

Stopping after a few tries, or changing the method partway through.

REMEMBER

Say it to students as: "Did you do it the same way every single time?"

MATERIALS

Coins, dice, spinners, counters in a bag, tally sheets, timers.

Teacher note: ten trials is rarely enough to see a pattern. Pool the results across the class so students can see how a larger set of data steadies the picture.